

DOCKETED

Docket Number:	87-AFC-01C
Project Title:	COMPLIANCE-Luz Solar Electric Generating System Cogeneration AFC (150 MW) Units III-VII.
TN #:	232225
Document Title:	SEGS III - VII 2019 Annual Compliance Report
Description:	N/A
Filer:	Glen T King
Organization:	NextEra Energy
Submitter Role:	Applicant
Submission Date:	2/25/2020 12:42:34 PM
Docketed Date:	2/25/2020



NextEra Energy Operating Services, Inc., 41100 US Highway 395,
Boron, CA 93516
760-762-5562

February 25, 2020

Mr. John Heiser
Compliance Project Manager (87-AFC-1C)
California Energy Commission
1516 Ninth Street (MS-2000)
Sacramento, CA 95814-5512

Dear Mr. Heiser:

Please find attached the Annual Compliance Report for the calendar year 2019 for operations at the Kramer Junction site, SEGS III-VII. The specific compliance conditions addressed are noted within the report.

Sincerely,

Glen T. King
Environmental Specialist
Agent for
LUZ Solar Partners III - VII

cc: file

2019 COMPLIANCE REPORT

SEGS III-VII

I. CURRENT PROJECT STATUS

Performance of SEGS III-VII was generally good during 2019. The annual gross solar-derived electrical production was about 133,462 MWh. The insolation levels averaged 96% compared to TMY (typical meteorological year). Usage of natural gas was below 25.0% of total energy conversion, as calculated per the procedure approved by FERC. The average gas usage ratio was 0% at SEGS III-V. The SEGS VI and VII facilities were placed into cold layup in the fourth quarter of 2019 and the SEGS III – V facilities were placed in cold layup October 31, 2019.

The SEGS VI and SEGS VII facilities were placed in cold lay up in October 2018 and November 2018, respectively, per Cold Lay Up Plan submitted to the California Energy Commission (CEC). The SEGS III – V facilities were placed in cold lay up in October 2019 per the updated Cold Lay Up Plan submitted to the CEC.

Renewed AQMD permits were received on 2/4/2020, and copies are attached to this report, per COC 1-16 and 1-35.

II. Compliance Condition Reports

Condition 1-11

AQMD Rules

The SEGS III-VII projects have maintained compliance with all applicable rules and regulations of the MDAQMD during 2019.

The CEC-CPM has been provided copies of all agency correspondence, where required by Conditions of Certification.

Condition 1-12

CFR Rules

Audits of the CEMS were performed during the first through third quarters of 2019 at the SEGS III – V facilities. SEGS III – V currently have a source testing extension from the Mojave Desert Air Quality Management District (MDAQMD) until such time as the boilers are again operated. The results of each audit showed that all performance criteria were satisfied. The Monitoring Plan reports were submitted for each calendar quarter, which included CEMS results, outages, drift and exceedence reports.

Conditions 1-19, 11-14

Malfunctions/Spill Reports

During 2019, there were 68 shipments of hazardous waste from the site. All transporters and disposal facilities are certified, and appropriate manifests were submitted.

The solid wastes were transported to Clean Harbors Buttonwillow, CA, and US Ecology Beatty, NV. A total of 137.18 tons of contaminated debris and broken mirror glass were transported in the shipments.

The liquid wastes were transported to the recycling facility at Demenno/Kerdoon Compton, CA and Asbury Environmental Fontana, CA. The shipments consisted of used oil, HTF / water and Antifreeze/water, with a combined total of 1149.55 tons.

Condition 1-24

Compliance Tests

Annual emission compliance tests for SEGS III - V were not performed due to a source test extension from the MDAQMD.

Condition 1-25

Natural Gas Source

The auxiliary heaters have used only commercial grade natural gas fuel. The gas was purchased from NextEra Power Marketing and delivered through Pacific Gas and Electric (PG&E).

Condition 1-29

Emissions Monitoring Report

Reports of all Monitoring Plan reporting requirements were submitted to MDAQMD within 30 days following the end of each calendar quarter, with copies provided to CEC-CPM, EPA and CARB.

Condition 1-33

Diesel Fuel Usage

Diesel fuel usage amounts, BTU content, and sulfur content are included with this report.

Condition 6-2

Evaporation Pond Monitoring

Monitoring reports have been submitted to LRWQCB on a semi-annual basis, as is required per the conditions of the permit issued April 3, 1997. Copies of these reports were submitted under separate cover.

Condition 11-1, 11-8 **Waste Disposal Verification**

Pursuant to all applicable Laws, Ordinances, Regulations and Standards (LORS), Luz Solar Partners III - VII is handling and disposing of all wastes (hazardous and non-hazardous) within all known compliance parameters.

Applicable hazardous waste manifests were submitted to Cal-EPA Department of Toxic Substances Control as per requirements. Submittal of copies of these manifests to CEC is no longer required, per verbal communication with CEC-CPM June 13, 1991. A summary of waste generation is shown in tabular form per Condition 11-6.

Condition 11-6

Waste Summary Report

Non-Hazardous Wastes

Sanitary Wastes

No significant amount of wastes from chemical toilets was disposed of off-site.

Approximately 300,000 gallons of wastewater from flush facilities were discharged to on-site leach fields.

Municipal Wastes Approximately 1,100 cubic yards of uncompacted rubbish were disposed of off-site.

Hazardous Wastes

Liquid Wastes 1149.55 tons of liquid waste materials were removed for off-site recycling at a permitted hazardous waste recycling facility.

Solid Wastes 137.18 tons of solid waste materials were removed for disposal at permitted Class 1 landfills.

Condition 11-10

HTF Accounting

The table that follows represents an accounting of heat transfer fluid (Therminol VP-1 and Dowtherm A) at each of the SEGS Units III through VII. The inventory figures are based on data collected over the reporting period. The inventory volumes are corrected to the HTF density at 100°F. Due to variations in the temperature profile of each solar field and interpretation of level indicators, the numbers presented here are subject to a possible error of 2.5% or more as can be seen by the very large variation year over year in the table. It is a practice to periodically transfer HTF between SEGS units; therefore, a site total inventory is shown.

Reportable Spills are incidents in which more than 20 gallons are spilled onto the soil and/or a significant vapor release occurs. Non-reportable spills are either incidental amounts or are completely contained.

HTF INVENTORY					
December 31, 2018 - December 31, 2019					
<i>(Quantities Shown in Gallons)</i>					
SEGS	Inventory December 2018	Inventory December 2019	HTF Purchased	Reportable Spills (gal.)	Non-Reportable Spills (gal.)
III	117,122	53,700*	0	0	56
IV	117,873	51,450*	0	0	18
V	124,350	63,000*	0	0	42
VI	111,349	0*	0	0	0
VII	108,937	0*	0	0	0
Storage	0	0	0	---	---
Site Totals	579,631	168,150	0	0	116

* December 2019 estimated inventory amounts reflect shipments made to World Oil for recycling from all five plants. During the May - June timeframe, SEGS VI shipped 83,224 gallons and SEGS VII shipped 73,019 gallons to World Oil and SEGS III - V. During the November - December timeframe, SEGS III shipped 55,533 gallons, SEGS IV shipped 37,966 gallons, and SEGS V shipped 68,575 gallons to World Oil.

Condition 12-9

Fire Program Examination

The mutual aid agreement between the San Bernardino County Fire Department and KJC Operating Company (KJC OC) was renewed in April 2002. This agreement was cancelled in 2010 by the new site owners.

Condition 14-1

SCE T-Line Inspection

A letter requesting a copy of the most recent Sungen/Kramer transmission line annual inspection report was submitted to Southern California Edison July 17, 1990. The reply received July 27, 1990 stated that SCE does not provide such records to any outside agency or organization. The letter did describe SCE's inspection procedure. A copy of this letter was attached to the annual report submitted August 1991.

Condition 14-4

Induced Voltage Complaints

There have been no complaints to date from property owners or the public regarding problems due to induced voltage on vehicles, irrigation equipment, or any other objects within the power line right-of-way. Therefore, there are no records from which to gather a summary.

Condition 14-5

Radio Interference Complaints

There have been no complaints of, nor does Luz Solar Partners III - VII know of, any occurrences of radio and television interference attributed to our transmission line facilities. Therefore, there are no case files from which to compile a summary of corrective actions.

Condition 14-6

Transmission Line Inspection

The Kramer site transmission lines were inspected December 2019 and were found to be free of waste material, rubbish and significant vegetation. The inspection included transmission lines both inside and outside of the site perimeter fence.

Condition 19-1, 19-2

Production Data Report

A report of the required production data for 2019 is attached.

Condition 23-5

AVEK Water Deliveries (Acre-Feet)

MONTH	2018	2019
January	10.00	10
February	41.00	17
March	50.00	36
April	68.00	42
May	97.00	36
June	159.00	88
July	159.00	80
August	142.00	100
September	105.00	50
October	45.00	38
November	16.00	3
December	17.00	3
Total Acre Feet	909.00	503
Gallons (millions)	296.20	163.90

2019 AVEK Water Deliveries (Acre-Feet)						
Month	SEGS III	SEGS IV	SEGS V	SEGS VI	SEGS VII	Total
January	1.79	3.39	4.82	0.00	0.00	10
February	4.54	5.13	7.32	0.00	0.00	17
March	12.39	10.75	12.32	0.23	0.31	36
April	13.56	12.63	15.81	0.00	0.00	42
May	11.35	11.87	12.78	0.00	0.00	36
June	26.39	27.58	34.03	0.00	0.00	88
July	28.17	23.47	28.36	0.00	0.00	80
August	36.02	29.15	34.83	0.00	0.00	100
September	18.35	13.23	18.42	0.00	0.00	50
October	14.45	9.87	13.67	0.00	0.00	38
November	0.96	0.58	1.47	0.00	0.00	3
December	2.49	0.00	0.51	0.00	0.00	3
Total	170.48	147.65	184.33	0.23	0.31	503

Condition 24-1

Transportation Permits

Luz Solar Partners III - VII did not obtain or receive any transportation permits during the 2019 calendar year.

Luz Solar Partners III - VII does not independently transport hazardous or oversized loads over public highways; therefore, Luz Solar Partners III - VII has not applied, nor intends to apply, for a permit of this type. All loads received or commissioned to be delivered to our facilities, which are subject to such D.O.T., Cal-Trans or Highway Patrol permits, are obtained by and are the responsibility of the transporter providing that service.

III. FUTURE COMPLIANCE ACTIVITIES

There are no compliance activities planned for the 2020 calendar year beyond the normal monitoring and reporting.

IV. AGENCY SUBMITTALS

Correspondences with other governmental agencies are listed below. For those items where the Conditions of Certification require that copies be provided to the CEC, copies have already been provided or a copy is attached (denoted as “att.”).

DATE	TO	FROM	SUBJECT
Jan 19	LRWQCB	LSP III - VII	Pond Monitoring Report
Jan 19	LRWQCB	LSP III - VII	Bioremediation Report
Jan 19	MDAQMD	LSP III - VII	Emission Monitoring
Apr 19	MDAQMD	LSP III - VII	Emission Monitoring Report
May 19	MDAQMD	LSP III - VII	Title V Report
Jul 19	LRWQCB	LSP III - VII	Bioremediation Report
Jul 19	LRWQCB	LSP III - VII	Pond Monitoring Report
Jul 19	MDAQMD	LSP III - VII	Emission Monitoring Report
Sep 19	MDAQMD	LSP III - VII	Emission Compliance Test Report
Oct 19	MDAQMD	LSP III - VII	Emission Monitoring Report
Nov 19	MDAQMD	LSP III - VII	Title V Compliance certification
Dec 19	MDAQMD	LSP III - VII	Title V Report
Jan 20	LRWQCB	LSP III - VII	Bioremediation Report
Jan 20	LRWQCB	LSP III - VII	Pond Monitoring Report
Jan 20	MDAQMD	LSP III - VII	Emission Monitoring Report

Abbreviations

LSP III - VII	Luz Solar Partners III - VII
LRWQCB	Lahontan Region Water Quality Control Board
MDAQMD	Mojave Desert Air Quality Management District
SBC Fire	San Bernardino County Fire Department

PRODUCTION DATA

III

	FERC Solar Energy Input (MMBtu)	Natural Gas Energy Input (MMBtu)	Total Energy Input (MMBtu)	Net Electrical Production (MWh)	Monthly Capacity Factors			Plant Availability
					On-Peak	Mid-Peak	Off-Peak	
Jan	5,210	0	5,210	158	N/A	N/A	N/A	45%
Feb	32,346	0	32,346	1,380	N/A	N/A	N/A	100%
Mar	68,284	0	68,284	3,297	N/A	N/A	N/A	100%
Apr	66,751	0	66,751	3,258	N/A	N/A	N/A	99%
May	71,254	0	71,254	3,626	N/A	N/A	N/A	100%
Jun	83,355	0	83,355	4,577	N/A	N/A	N/A	74%
Jul	126,475	0	126,475	6,822	N/A	N/A	N/A	100%
Aug	138,213	0	138,213	7,603	N/A	N/A	N/A	100%
Sep	85,643	0	85,643	4,305	N/A	N/A	N/A	100%
Oct	70,919	0	70,919	3,216	N/A	N/A	N/A	99%
Nov	0	0	0	0	N/A	N/A	N/A	100%
Dec	0	0	0	0	N/A	N/A	N/A	100%
Year	748,449	0	748,449	38,240				
	100.0%	0.0%						

IV

	FERC Solar Energy Input (MMBtu)	Natural Gas Energy Input (MMBtu)	Total Energy Input (MMBtu)	Net Electrical Production (MWh)	Monthly Capacity Factors			Plant Availability
					On-Peak	Mid-Peak	Off-Peak	
Jan	12,859	0	12,859	426	N/A	N/A	N/A	68%
Feb	31,549	0	31,549	1,340	N/A	N/A	N/A	100%
Mar	60,735	0	60,735	3,095	N/A	N/A	N/A	100%
Apr	73,178	0	73,178	3,676	N/A	N/A	N/A	100%
May	75,195	0	75,195	3,890	N/A	N/A	N/A	100%
Jun	119,106	0	119,106	6,427	N/A	N/A	N/A	100%
Jul	141,161	0	141,161	7,858	N/A	N/A	N/A	100%
Aug	139,903	0	139,903	7,854	N/A	N/A	N/A	100%
Sep	83,046	0	83,046	4,176	N/A	N/A	N/A	99%
Oct	68,424	0	68,424	3,123	N/A	N/A	N/A	100%
Nov	0	0	0	0	N/A	N/A	N/A	100%
Dec	0	0	0	0	N/A	N/A	N/A	100%
Year	805,155	0	805,155	41,863				
	100.0%	0.0%						

V

	FERC Solar Energy Input (MMBtu)	Natural Gas Energy Input (MMBtu)	Total Energy Input (MMBtu)	Net Electrical Production (MWh)	Monthly Capacity Factors			Plant Availability
					On-Peak	Mid-Peak	Off-Peak	
Jan	11,835	0	11,835	404	N/A	N/A	N/A	45%
Feb	30,321	0	30,321	1,275	N/A	N/A	N/A	100%
Mar	54,849	0	54,849	2,538	N/A	N/A	N/A	100%
Apr	66,810	0	66,810	3,332	N/A	N/A	N/A	100%
May	67,108	0	67,108	3,379	N/A	N/A	N/A	100%
Jun	132,508	0	132,508	7,179	N/A	N/A	N/A	100%
Jul	141,698	0	141,698	7,904	N/A	N/A	N/A	100%
Aug	139,878	0	139,878	7,791	N/A	N/A	N/A	100%
Sep	85,621	0	85,621	4,423	N/A	N/A	N/A	100%
Oct	71,048	0	71,048	3,198	N/A	N/A	N/A	100%
Nov	0	0	0	0	N/A	N/A	N/A	100%
Dec	0	0	0	0	N/A	N/A	N/A	100%
Year	801,674	0	801,674	41,422				
	100.0%	0.0%						

VI

	FERC Solar Energy Input (MMBtu)	Natural Gas Energy Input (MMBtu)	Total Energy Input (MMBtu)	Net Electrical Production (MWh)	Monthly Capacity Factors			Plant Availability
					On-Peak	Mid-Peak	Off-Peak	
Jan	0	0	0	0	N/A	N/A	N/A	100%
Feb	0	0	0	0	N/A	N/A	N/A	100%
Mar	0	0	0	0	N/A	N/A	N/A	100%
Apr	0	0	0	0	N/A	N/A	N/A	100%
May	0	0	0	0	N/A	N/A	N/A	100%
Jun	0	0	0	0	N/A	N/A	N/A	100%
Jul	0	0	0	0	N/A	N/A	N/A	100%
Aug	0	0	0	0	N/A	N/A	N/A	100%
Sep	0	0	0	0	N/A	N/A	N/A	100%
Oct	0	0	0	0	N/A	N/A	N/A	100%
Nov	0	0	0	0	N/A	N/A	N/A	100%
Dec	0	0	0	0	N/A	N/A	N/A	100%
Year	0	0	0	0				
	#DIV/0!	#DIV/0!						

VII

	FERC Solar Energy Input (MMBtu)	Natural Gas Energy Input (MMBtu)	Total Energy Input (MMBtu)	Net Electrical Production (MWh)	Monthly Capacity Factors			Plant Availability
					On-Peak	Mid-Peak	Off-Peak	
Jan	0	0	0	0	N/A	N/A	N/A	100%
Feb	0	0	0	0	N/A	N/A	N/A	100%
Mar	0	0	0	0	N/A	N/A	N/A	100%
Apr	0	0	0	0	N/A	N/A	N/A	100%
May	0	0	0	0	N/A	N/A	N/A	100%
Jun	0	0	0	0	N/A	N/A	N/A	100%
Jul	0	0	0	0	N/A	N/A	N/A	100%
Aug	0	0	0	0	N/A	N/A	N/A	100%
Sep	0	0	0	0	N/A	N/A	N/A	100%
Oct	0	0	0	0	N/A	N/A	N/A	100%
Nov	0	0	0	0	N/A	N/A	N/A	100%
Dec	0	0	0	0	N/A	N/A	N/A	100%
Year	0	0	0	0				
	#DIV/0!	#DIV/0!						

Diesel Fuel Usage

Fuel Oil Purchased				
Date	Quantity Gal.	Sulfur Content ppm	BTU Content BTU/gal	Notes
1/18/2019	1100	15	134000	
1/18/2019	180	15	134000	
1/19/2019	248	15	134000	
1/19/2019	697	15	134000	
1/19/2019	565.4	15	134000	
1/19/2019	314.7	15	134000	
1/20/2019	210	15	134000	
1/20/2019	660	15	134000	
1/20/2019	476.4	15	134000	
1/20/2019	300.7	15	134000	
1/21/2019	580	15	134000	
1/21/2019	260	15	134000	
1/21/2019	492	15	134000	
1/21/2019	182	15	134000	
1/22/2019	575	15	134000	
1/22/2019	306	15	134000	
1/22/2019	598	15	134000	
1/22/2019	260	15	134000	
1/23/2019	590	15	134000	
1/23/2019	260	15	134000	
1/23/2019	531	15	134000	
1/23/2019	287	15	134000	
1/24/2019	828	15	134000	
1/24/2019	470	15	134000	
1/24/2019	565	15	134000	
1/24/2019	287	15	134000	
1/25/2019	668	15	134000	
1/25/2019	260	15	134000	
1/25/2019	636	15	134000	
1/25/2019	280	15	134000	
1/26/2019	405	15	134000	
1/26/2019	850.2	15	134000	
2/14/2019	1000	15	134000	
8/15/2019	360	15	134000	
9/27/2019	185	15	134000	

MDAQMD PERMITS-TO-OPERATE



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

B003051

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: JANUARY 2021

OWNER OR OPERATOR (Co.#277)

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

EQUIPMENT LOCATION (Fac.#941)

SEGS (III through VII)
41100 Highway 395
Boron, CA 93516

Description:

HTF ULLAGE SYSTEM (@ SEGS III) consisting of: System 9

EQUIPMENT

Capacity	Equipment Description
7.5	Ullage Vessel Pump P-116, 300 gpm at 160 psi
0	Ullage Condenser E-100, 180 psi at 735 deg Fahrenheit and 119,420 Btu/hr
0	Ullage Vessel V-101, 125 psi at 65- deg Fahrenheit and 575 gal

CONDITIONS:

1. This equipment shall be operated and maintained in strict accord with manufacturer's and/or supplier's recommendations and/or sound engineering principles.
2. If current non-criteria substances become regulated as toxic or hazardous substances and are used in this equipment, the owner/operator shall submit to the District a plan demonstrating how compliance will be achieved and maintained with such regulations.

Fee Schedule: 7 (i)

Rating: 1 device

SIC: 4911

SCC: 99999999

Location/UTM(Km):
450E/3874N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

By:


Brad Poiriez

Air Pollution Control Officer



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

B003052

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: JANUARY 2021

OWNER OR OPERATOR (Co.#277)

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

EQUIPMENT LOCATION (Fac.#941)

SEGS (III through VII)
41100 Highway 395
Boron, CA 93516

Description:

HTF ULLAGE SYSTEM consisting of: System 9 at SEGS IV, with three units.

EQUIPMENT

Capacity	Equipment Description
7.5	Ullage Vessel Pump P-116, 300 gpm @ 160 psi
0	Ullage Condenser E-100, 180 psi @ 735 deg F (110.42 MMBtu/hr)
0	Ullage Vessel V-101, 125 psi @ 650 deg F (575 gal)

CONDITIONS:

1. This equipment shall be operated and maintained in strict accord with the manufacturer's and/or supplier's recommendations and/or sound engineering principles.
2. If current non-criteria substances become regulated as toxic or hazardous substances and are used in this equipment, the owner/operator (o/o) shall submit to the District a plan demonstrating how compliance will be achieved and maintained with such regulations.

Fee Schedule: 7 (i)

Rating: 1 device

SIC: 4911

SCC: 99999999

Location/UTM(Km):
450E/3874N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

By:
Brad Poiriez

Air Pollution Control Officer



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

B003053

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: JANUARY 2021

OWNER OR OPERATOR (Co. #277)

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

EQUIPMENT LOCATION (Fac. #941)

SEGS (III through VII)
41100 Highway 395
Boron, CA 93516

Description:

HTF ULLAGE SYSTEM consisting of: System 9 at SEGS V.

EQUIPMENT

Capacity	Equipment Description
7.5	Ullage Vessel Pump P-116, 300 gpm @ 160 psi
46.8	Ullage Condenser E-100, 180 psi @ 735 deg. F (119,420 Btu/hr)
0	Ullage Vessel V-101, 575 gal and 125 psi @ 650 deg. F

CONDITIONS:

1. This equipment shall be operated and maintained in strict accord with the manufacturer's and/or supplier's recommendations and/or sound engineering principles.
2. If current non-criteria substances become regulated as toxic or hazardous substances and are used in this equipment, the owner/operator (o/o) shall submit to the District a plan demonstrating how compliance will be achieved and maintained with such regulations.

Fee Schedule: 7 (i)

Rating: 1 device

SIC: 4911

SCC: 99999999

Location/UTM(Km):
450E/3874N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

By:
Brad Poiriez

Air Pollution Control Officer



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

B009350

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: JANUARY 2021

OWNER OR OPERATOR (Co. #277)

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

EQUIPMENT LOCATION (Fac. #941)

SEGS (III through VII)
41100 Highway 395
Boron, CA 93516

Description:

PORTABLE IC ENGINE, DIESEL AIR COMPRESSOR 02 consisting of: Model Year 2010, Tier III Engine Family AJDXL04.5112

One John Deere, Diesel fired internal combustion engine Model No. 4045TF and Serial No. PE4045L109852, producing 85 bhp with 4 cylinders at 2500 rpm while consuming a maximum of 5 gal/hr. This equipment powers a Sullair Compressor Model No. 250PJD and Serial No. 2903, rated at 150 psi.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	0.158	lbs/hr
NOx	0.55	lbs/hr
PM10	0.043	lbs/hr
SOx	0.001	lbs/hr
VOC	0.029	lbs/hr

CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the

Fee Schedule: 1 (b)

Rating: 85 bhp

SIC: 4911

SCC: 20200102

Location/UTM(Km):
450E/3874N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

By:
Brad Poiriez

Air Pollution Control Officer

application for this permit.

2. This diesel ICE and its associated equipment cannot be operated at the same footprint (spot) for more than 365 consecutive days. (This system must be moved within this facility or moved to another facility annually.)

3. This unit shall only be fired on ultra-low sulfur diesel fuel, whose sulfur concentration is less than or equal to 0.0015% or 15 ppm on a weight per weight basis per CARB Diesel or equivalent requirements. (Title 17 CCR Section 93116.3(a))

4. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.

5. This engine shall not be operated for more than 3 hours in any calendar day (24 hour period) and more than 100 hours in any rolling 12 month year.

6. The o/o shall maintain a operations log for this unit current and on-site (or at a central location) for a minimum of three (3) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:

- a. Date of each use and duration of each use (in hours);
- b. Reason for use (testing & maintenance, emergency, required emission testing);
- c. Calendar year operation in terms of fuel consumption (in gallons) and total hours; and,
- d. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log).

7. The fleet under control of this o/o is subject to and shall comply with the weighted PM emission fleet averages expressed as grams per brake horsepower-hour (g/bhp-hr) by the listed compliance dates in Title 17 CCR Section 93116.3(c).

Fleet Standard Compliance;

Engines <175 bhp	Engines >175 to 749 bhp	Engines >750 bhp	
Date (g/bhp-hr)	(g/bhp-hr)	(g/bhp-hr)	
1/1/2013	0.3	0.15	0.25
1/1/2017	0.18	0.08	0.08
1/1/2020	0.04	0.02	0.02

Fleet is defined in Title 17 CCR Section 93116.2(16).

8. The o/o of this unit must submit a Statement of Compliance signed by the Responsible Official that the fleet standards are being achieved and a summary that identifies each portable engine in the fleet and the associated emission rate (g/bhp-hr) and other required information, see Title 17 CCR 93116.4(e)(2), (3), (4), (5), (6) and (7) for the following compliance statement submittal dates:

Weighted DPM Emission Fleet Average	Date Submit by
January 1, 2013	March 1, 2013
January 1, 2017	March 1, 2017
January 1, 2020	March 1, 2020

9. This portable equipment shall not be operated and/or located within 1,000 feet of a public or private school (kindergarten through 12th grade) of more than 12 students for more than 45 consecutive days without completing the notification required by Health and Safety Code \S\S 42301.6.

10. This unit is subject to the requirements of the Airborne Toxic Control Measure For Diesel Particulate Matter From Portable Engines Rated At 50 Horsepower and Greater (Title 17 CCR 93116). In the event of conflict between these conditions and the

ATCM, the more stringent shall govern.



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

B009352

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: JANUARY 2021

OWNER OR OPERATOR (Co. #277)

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

EQUIPMENT LOCATION (Fac. #941)

SEGS (III through VII)
41100 Highway 395
Boron, CA 93516

Description:

PORTABLE IC ENGINE, DIESEL AIR COMPRESSOR 06 consisting of: Year of Manufacture/Model Year 2002, USEPA Engine Family 2JDXL06.8016, Tier 1, EPA Certificate JDX-NR5-02-10, CARB EO U-R-004-0121.

One John Deere, Diesel fired internal combustion engine Model No. 4045DF and Serial No. PE 4045D187170, producing 85 bhp with 4 cylinders at 2400 rpm while consuming a maximum of 5 gal/hr. This equipment powers a Sullivan-Palatek Compressor Model No. D250QJDC and Serial No. 22079, rated at 100 psi.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
NOx	5.7	gm/bhp-hr

CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
2. This diesel ICE and its associated equipment cannot be operated at the same footprint (spot) for more than 365 consecutive

Fee Schedule: 1 (b)	Rating: 85 bhp	SIC: 4911	SCC: 20200102	Location/UTM(Km): 450E/3874N
---------------------	----------------	-----------	---------------	---------------------------------

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

By:
Brad Poiriez
Air Pollution Control Officer

days. (This system must be moved within this facility or moved to another facility annually.)

3. This unit shall only be fired on diesel fuel whose sulfur concentration shall be 0.0015% or 15 ppm per CARB Diesel or equivalent requirements. (Title 17 CCR Section 93116.3(a))

4. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.

5. The o/o shall maintain a operations log for this unit current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:

- a. Date and location (in UTM or Lat/Lon) of each use and duration of each use (in hours);
- b. Reason for use (testing & maintenance, emergency, required emission testing);
- c. Calendar year operation in terms of fuel consumption (in gallons) and total hours; and,
- d. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log).

6. The fleet* (engines <175 bhp) under control of this owner/operator is subject to and shall comply with the weighted Diesel Particulate Matter (DPM) emission fleet averages** expressed as grams per brake horsepower-hour (g/bhp-hr) of Title 17 CCR Section 93116.3(c) & (d) by the following dates:

Fleet Standard Compliance Date	Weighted DPM (g/bhp-hr)
January 1, 2013	0.3
January 1, 2017	0.18
January 1, 2020	0.04

* Fleet is defined in Title 17 CCR Section 93116.2(p) as one or more portable unit(s).

** The method used to calculate the Fleet Average is found in Title 13 CCR 93116.3(d).

7. The owner/operator of this unit must submit a Statement of Compliance signed by the Responsible Official that the fleet standards are being achieved and a summary that identifies each portable engine in the fleet and the associated emission rate (g/bhp-hr) and other required information required by Title 17 CCR 93116.4(e)(2), (3), (4), (5), (6) and (7) for the following compliance statement submittal dates:

Weighted DPM Emission Fleet Standard Compliance Date	Submit Statement of Compliance by
January 1, 2013	March 1, 2013
January 1, 2017	March 1, 2017
January 1, 2020	March 1, 2020

8. This unit is subject to the requirements of the Airborne Toxic Control Measure For Diesel Particulate Matter From Portable Engines Rated At 50 Horsepower and Greater (Title 17 CCR 93116). In the event of conflict between these conditions and the ATCM, the more stringent requirements shall govern.



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

B009447

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: JANUARY 2021

OWNER OR OPERATOR (Co. #277)

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

EQUIPMENT LOCATION (Fac. #941)

SEGS (III through VII)
41100 Highway 395
Boron, CA 93516

Description:

PORTABLE DIESEL IC ENGINE, AIR COMPRESSOR consisting of: Year of Mfg. 2003, USEPA Engine Family Name 3JDXL06.8046

One John Deere, Diesel fired internal combustion engine Model No. 4045DF and Serial No. PE4045D375589, producing 85 bhp with 4 cylinders at 2400 rpm while consuming a maximum of 5 gal/hr. This equipment powers a Sullivan-Palatek Compressor Model No. D250QJDC and Serial No. 23883, rated at 100 psi.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	2.823	gm/bhp-hr
NOx	10.235	gm/bhp-hr
VOC	0.318	gm/bhp-hr

CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.

Fee Schedule: 1 (b)

Rating: 85 bhp

SIC: 4911

SCC: 20200104

Location/UTM(Km):
450E/3874N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

By:


Brad Poiriez

Air Pollution Control Officer

2. This diesel ICE and its associated equipment cannot be operated at the same footprint (spot) for more than 365 consecutive days. (This system must be moved within this facility or moved to another facility annually.) [Title 13 CCR 93116.2(bb)]

3. This unit shall only be fired on diesel fuel whose sulfur concentration is less than or equal to 0.05% on a weight per weight basis, until September 1, 2006 when the sulfur concentration shall be 0.0015% or 15 ppm per CARB Diesel or equivalent requirements; or alternative diesel fuel or CARB diesel fuel utilizing fuel additives that has been verified through the Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines. [Title 13 CCR 93116.3(a)]

4. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time by January 1, 2012. [Title 13 CCR 93116.4(c)(2)(A)]

5. Prior to January 1, 2010, this portable diesel-fueled engine or its replacement engine shall be certified to meet a federal or California standard for newly manufactured nonroad engines pursuant to 40 CFR Part 89 or Title 13 CCR Section 2423 (that is, certified to Tier 1, 2 or 3 nonroad engine standards). Otherwise, use this portable diesel-fueled engine exclusively in emergency applications or portable diesel-fueled engine that qualify as low-use engine (operates 80 hours or less per calendar year) and commit to replacing this engine with a Tier 4 engine. (Tier 4 engines are phased in for engines manufactured beginning in 2011). (Title 17 CCR Section 93116.3 (b)(1))

6. The o/o shall maintain a operations log for this unit current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:

- a. Date, location (specific to the operating footprint), and duration of each use (in hours);
 - b. Reason for use (Regular use, testing & maintenance, emergency, required emission testing);
 - c. Calendar year operation in terms of fuel consumption (in gallons) and total hours; and,
 - d. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log).
- [Title 13 CCR 93116.4(c)]

7. The fleet* under control of this o/o is subject to and shall comply with the weighted Diesel Particulate Matter (DPM) emission fleet averages** expressed as grams per brake horsepower-hour (g/bhp-hr) of Title 17 CCR Section 93116.3(c) & (d) by the following dates:

Compliance Date	Weighted DPM (g/bhp-hr)
January 1, 2013	0.30
January 1, 2017	0.18
January 1, 2020	0.04

* Fleet is defined in Title 17 CCR Section 93116.2(p) as one or more portable unit(s).

** The method used to calculate the Fleet Average is found in Title 13 CCR 93116.3(d).

8. The o/o of this unit must submit a Statement of Compliance signed by the Responsible Official that the fleet standards are being achieved and a summary that identifies each portable engine in the fleet and the associated emission rate (g/bhp-hr) and other required information, see Title 13 CCR 93116.4(e)(2), (3), (4), (5), (6) and (7) for the following compliance statement submittal dates:

Weighted DPM Emission Fleet Average Date	Submit by
January 1, 2013	March 1, 2013
January 1, 2017	March 1, 2017
January 1, 2020	March 1, 2020

9. The o/o of fleets that are exempted from the requirements of section 93116.4 pursuant to section 93116.4 (a), the Responsible Official shall certify that all portable diesel-fueled engines in the fleet satisfy the requirements of section 93116.4(a). See Title 13

CCR 93116.4(f) for details.

10. Official of a fleet keep and maintain records for;

- a. Alternative-fueled portable engines used as part of a company's fleet average, except as provided in section 93116.4(d); and
- b. Portable diesel-fueled engines affected by the use of electrification; and
- c. Portable diesel-fueled engines qualifying as low-use engines; and
- d. Portable diesel-fueled engines used exclusively in emergency applications.

11. This unit is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Portable Compression Ignition Engines (Title 13 CCR 93116). In the event of conflict between these conditions and the ATCM, the requirements of the ATCM shall govern.

12. The equipment on this permit can be used at both Luz Solar Partners III - VII, SEGS III through VII (0277/00941) and Luz Solar Partners VIII & IX, Harper Lake Co. VIII & IX (0603/00975).



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

E001795

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: JANUARY 2021

OWNER OR OPERATOR (Co. #277)

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

EQUIPMENT LOCATION (Fac. #941)

SEGS (III through VII)
41100 Highway 395
Boron, CA 93516

Description:

DIESEL IC ENGINE, EMERGENCY GENERATOR (@ SEGS III) consisting of: Katolight Model D-600FRR4 is the Generator. Engine is: Perkins, Model CV121A-RG2, Serial CVM 12170-6.

CONDITIONS:

1. This emergency, stationary, compression-ignited, internal combustion engine shall be installed, operated and maintained according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR 63.6625(e) - Subpart ZZZZ - NESHAP for Stationary Reciprocating Internal Combustion Engines]

2. This unit shall only be fired on ultra-low sulfur diesel fuel, whose sulfur concentration is less than or equal to 0.0015% (15ppm) on a weight per weight basis per CARB Diesel or equivalent requirements.

3. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.

[40 CFR 63.6625(f)]

Fee Schedule: 7 (g)

Rating: 1 device

SIC: 4911

SCC: 20100102

Location/UTM(Km):
450E/3874N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

By: 
Brad Poiriez

Air Pollution Control Officer

4. This unit shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted. In addition, this unit shall be operated no more than 30 hours per year for testing and maintenance.
[Rule 204; 17 CCR 93115]

5. Owner/operator must meet the following requirements;

- a. Change oil and filter every 500 hours of operation or annually, whichever comes first. Owner/operator may utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend this requirement.
- b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; and
- d. Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[40 CFR 63.6603, table 2d]

6. The owner/operator shall maintain an operations log for this unit current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:

- a. Date of each use and duration of each use (in hours);
- b. Reason for use (testing & maintenance, emergency, required emission testing, etc.);
- c. Monthly and calendar year operation in terms of fuel consumption (in gallons) and total hours [17 CCR 93115]; and,
- d. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log) [17 CCR 93115].
- e. Records of the occurrence and duration of each malfunction of operation of equipment, including air pollution control and monitoring equipment, the maintenance performed during these malfunctions, and the corrective actions taken to minimize emissions and restore malfunctioning processes and air pollution control and monitoring equipment to its normal operation [40 CFR 63.6655(a)]; and,
- f. Maintenance performed on this equipment, inclusive of the requirements of 40 CFR 63, Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines as listed below.
[17 CCR 93115, ATCM for Stationary Compression Engines]

7. Engine may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.

[40 CFR 63.6640 (f)(1)(ii)]

8. This unit shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.

[Rule 204; 17 CCR 93115] District and State only

9. The daily emissions limits for SEGS III through VII includes the emissions from this equipment, reference permits B001793, B001802, B001805, B001882 and B001885.

10. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District. The owner/operator shall have such tests performed and the emission limits of 15.9 lb/hr of NO_x, 2.8 lb/hr of CO and 0.5 lb/hr of Particulate shall not be exceeded.

11. This unit is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines (17 CCR 93115) and 40 CFR Part 63, Subpart ZZZZ (NESHAP). In the event of conflict between these conditions and the ATCM or NESHAP, the more stringent requirements shall govern.



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

E001804

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: JANUARY 2021

OWNER OR OPERATOR (Co. #277)

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

EQUIPMENT LOCATION (Fac. #941)

SEGS (III through VII)
41100 Highway 395
Boron, CA 93516

Description:

DIESEL IC ENGINE, EMERGENCY GENERATOR consisting of: Engine G-503 at SEGS IV

One Perkins, Diesel fired internal combustion engine Model No. CV-121A-RG3 and Serial No. CVM 12171-3, producing 900 bhp with 12 cylinders at 1800 rpm while consuming a maximum of 40 gal/hr. This equipment powers a TBD Generator Model No. TBD and Serial No. TBD, rated at TBD.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
PM10	0.21	gm/bhp-hr

CONDITIONS:

1. This emergency, stationary, compression-ignited, internal combustion engine shall be installed, operated and maintained according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.

[40 CFR 63.6625(e) - Subpart ZZZZ - NESHAP for Stationary Reciprocating Internal Combustion Engines]

Fee Schedule: 7 (g)

Rating: 1 device

SIC: 4911

SCC: 20300101

Location/UTM(Km):
450E/3874N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

By:


Brad Poiriez

Air Pollution Control Officer

2. This unit shall only be fired on ultra-low sulfur diesel fuel, whose sulfur concentration is less than or equal to 0.0015% (15ppm) on a weight per weight basis per CARB Diesel or equivalent requirements.

3. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.
[40 CFR 63.6625(f)]

4. This unit shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted. In addition, this unit shall be operated no more than 30 hours per year for testing and maintenance.
[Rule 204; 17 CCR 93115]

5. Owner/operator must meet the following requirements;

- a. Change oil and filter every 500 hours of operation or annually, whichever comes first. Owner/operator may utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend this requirement.
- b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; and
- d. Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
[40 CFR 63.6603, table 2d]

6. The owner/operator shall maintain an operations log for this unit current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:

- a. Date of each use and duration of each use (in hours);
- b. Reason for use (testing & maintenance, emergency, required emission testing, etc.);
- c. Monthly and calendar year operation in terms of fuel consumption (in gallons) and total hours [17 CCR 93115]; and,
- d. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log) [17 CCR 93115].
- e. Records of the occurrence and duration of each malfunction of operation of equipment, including air pollution control and monitoring equipment, the maintenance performed during these malfunctions, and the corrective actions taken to minimize emissions and restore malfunctioning processes and air pollution control and monitoring equipment to its normal operation [40 CFR 63.6655(a)]; and,
- f. Maintenance performed on this equipment, inclusive of the requirements of 40 CFR 63, Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines as listed below.
[17 CCR 93115, ATCM for Stationary Compression Engines]

7. Engine may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.
[40 CFR 63.6640 (f)(1)(ii)]

8. This unit shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.
[Rule 204; 17 CCR 93115] District and State only

9. The daily emissions limits for SEGS III through VII includes the emissions from this equipment, reference permits B001793, B001802, B001805, B001882 and B001885.

10. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District. The owner/operator shall have such tests performed and the emission limits of 15.9

lb/hr of NO_x, 2.8 lb/hr of CO and 0.5 lb/hr of Particulate shall not be exceeded.

11. This unit is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines (17 CCR 93115) and 40 CFR Part 63, Subpart ZZZZ (NESHAP). In the event of conflict between these conditions and the ATCM or NESHAP, the more stringent requirements shall govern.



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

E001884

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: JANUARY 2021

OWNER OR OPERATOR (Co. #277)

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

EQUIPMENT LOCATION (Fac. #941)

SEGS (III through VII)
41100 Highway 395
Boron, CA 93516

Description:

DIESEL IC ENGINE, EMERGENCY GENERATOR consisting of: Engine G-503 at SEGS V (this unit replaces unit E001807 (shutdown))

One Detroit Diesel, Diesel fired internal combustion engine Model No. 16V92 and Serial No. 16 VF 007227, producing 1095 bhp with 16 cylinders at 1800 rpm while consuming a maximum of 58 gal/hr. This equipment powers a TBD Generator Model No. TBD and Serial No. TBD, rated at TBD.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
PM10	0.21	gm/bhp-hr

CONDITIONS:

1. This emergency, stationary, compression-ignited, internal combustion engine shall be installed, operated and maintained according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.

[40 CFR 63.6625(e) - Subpart ZZZZ - NESHAP for Stationary Reciprocating Internal Combustion Engines]

Fee Schedule: 7 (g)

Rating: 1 device

SIC: 4911

SCC: 20100102

Location/UTM(Km):
450E/3874N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

By: 
Brad Poiriez

Air Pollution Control Officer

2. This unit shall only be fired on ultra-low sulfur diesel fuel, whose sulfur concentration is less than or equal to 0.0015% (15ppm) on a weight per weight basis per CARB Diesel or equivalent requirements.

3. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.
[40 CFR 63.6625(f)]

4. This unit shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted. In addition, this unit shall be operated no more than 30 hours per year for testing and maintenance.
[Rule 204; 17 CCR 93115]

5. Owner/operator must meet the following requirements;

- a. Change oil and filter every 500 hours of operation or annually, whichever comes first. Owner/operator may utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend this requirement.
- b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; and
- d. Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
[40 CFR 63.6603, table 2d]

6. The owner/operator shall maintain an operations log for this unit current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:

- a. Date of each use and duration of each use (in hours);
- b. Reason for use (testing & maintenance, emergency, required emission testing, etc.);
- c. Monthly and calendar year operation in terms of fuel consumption (in gallons) and total hours [17 CCR 93115]; and,
- d. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log) [17 CCR 93115].
- e. Records of the occurrence and duration of each malfunction of operation of equipment, including air pollution control and monitoring equipment, the maintenance performed during these malfunctions, and the corrective actions taken to minimize emissions and restore malfunctioning processes and air pollution control and monitoring equipment to its normal operation [40 CFR 63.6655(a)]; and,
- f. Maintenance performed on this equipment, inclusive of the requirements of 40 CFR 63, Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines as listed below.
[17 CCR 93115, ATCM for Stationary Compression Engines]

7. Engine may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.
[40 CFR 63.6640 (f)(1)(ii)]

8. This unit shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.
[Rule 204; 17 CCR 93115] District and State only

9. The daily emissions limits for SEGS III through VII includes the emissions from this equipment, reference permits B001793, B001802, B001805, B001882 and B001885.

10. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District. The owner/operator shall have such tests performed and the emission limits of 15.9

lb/hr of NOx, 2.8 lb/hr of CO and 0.5 lb/hr of Particulate shall not be exceeded.

11. This unit is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines (17 CCR 93115) and 40 CFR Part 63, Subpart ZZZZ (NESHAP). In the event of conflict between these conditions and the ATCM or NESHAP, the more stringent requirements shall govern.



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

E003229

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: JANUARY 2021

OWNER OR OPERATOR (Co. #277)

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

EQUIPMENT LOCATION (Fac. #941)

SEGS (III through VII)
41100 Highway 395
Boron, CA 93516

Description:

IC ENGINE, EMERGENCY DIESEL FIRE PUMP (@ SEGS III) consisting of: Cummins Model NTA855F, Serial No. 11346105, number P-107A, 400 hp diesel fueled IC engine driving a fire pump.

CONDITIONS:

1. This emergency, stationary, compression-ignited, internal combustion engine shall be installed, operated and maintained according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit. [40 CFR 63.6625(e) - Subpart ZZZZ - NESHAP for Stationary Reciprocating Internal Combustion Engines]
2. This unit shall only be fired on ultra-low sulfur diesel fuel, whose sulfur concentration is less than or equal to 0.0015% (15ppm) on a weight per weight basis per CARB Diesel or equivalent requirements.
3. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.[40 CFR Subsection 63.6625(f)]

Fee Schedule: 7 (i)

Rating: 1 device

SIC: 4911

SCC: 20200102

Location/UTM(Km):
450E/3874N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

By:


Brad Poiriez

Air Pollution Control Officer

4. This unit shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted. In addition, this unit shall be operated no more than 20 hours per year for testing and maintenance [Rule 204; 17 CCR 93115]

5. The hour limits indicated in condition 4, above, do not apply to in-use emergency fire pump assemblies that are driven directly by stationary diesel-fueled CI engines and only operated the number of hours necessary to comply with the testing requirements of National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 2002 edition, which is incorporated herein by reference.[17 CCR 93115.3(n)]

6. Owner/operator must meet the following requirements;

a. Change oil and filter every 500 hours of operation or annually, whichever comes first. O/o may utilize an oil analysis program as described in 40 CFR 63.6625 in order to extend this requirement.

b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;

c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; and

d. Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6603, table 2d]

7. The owner/operator shall maintain an operations log for this unit current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below: a. Date of each use and duration of each use (in hours);

b. Reason for use (testing & maintenance, emergency, required emission testing, etc.);

c. Monthly and calendar year operation in terms of fuel consumption (in gallons) and total hours [17 CCR 93115]; and,

d. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log) [17 CCR 93115].

e. Records of the occurrence and duration of each malfunction of operation of equipment, including air pollution control and monitoring equipment, the maintenance performed during these malfunctions, and the corrective actions taken to minimize emissions and restore malfunctioning processes and air pollution control and monitoring equipment to its normal operation [40 CFR 63.6655(a)]; and,

f. Maintenance performed on this equipment, inclusive of the requirements of 40 CFR 63, Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines as listed below. [17 CCR 93115, ATCM for Stationary Compression Engines]

8. The daily emissions limits for SEGS III through VII includes the emissions from this equipment, reference permits B001793, B001802, B001805, B001882 and B001885.

9. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District. The owner/operator shall have such tests performed and the emission limits of 2.9 lb/hr of NO_x, 0.5 lb/hr of CO and 0.1 lb/hr of Particulate shall not be exceeded.



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

E003230

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: JANUARY 2021

OWNER OR OPERATOR (Co. #277)

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

EQUIPMENT LOCATION (Fac. #941)

SEGS (III through VII)
41100 Highway 395
Boron, CA 93516

Description:

DIESEL IC ENGINE, EMERGENCY FIRE PUMP consisting of: Engine P-107A at SEGS IV

One Cummins, Diesel fired internal combustion engine Model No. NTA855F and Serial No. 11310130, producing 400 bhp with 6 cylinders at 2100 rpm while consuming a maximum of 10 gal/hr. This equipment powers a TBD Pump Model No. 9000 and Serial No. 864-93613-01-01, rated at 200 GPM.

CONDITIONS:

1. This emergency, stationary, compression-ignited, internal combustion engine shall be installed, operated and maintained according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.

[40 CFR 63.6625(e) - Subpart ZZZZ - NESHAP for Stationary Reciprocating Internal Combustion Engines]

2. This unit shall only be fired on ultra-low sulfur diesel fuel, whose sulfur concentration is less than or equal to 0.0015% (15ppm) on a weight per weight basis per CARB Diesel or equivalent requirements.

3. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine

Fee Schedule: 7 (i)

Rating: 1 device

SIC: 4911

SCC: 20300101

Location/UTM(Km):
450E/3874N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

By:


Brad Poiriez

Air Pollution Control Officer

operating time.

[40 CFR Subsection 63.6625(f)]

4. This unit shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted. In addition, this unit shall be operated no more than 20 hours per year for testing and maintenance.

[Rule 204; 17 CCR 93115]

5. The hour limits indicated in condition 4, above, do not apply to in-use emergency fire pump assemblies that are driven directly by stationary diesel-fueled CI engines and only operated the number of hours necessary to comply with the testing requirements of National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 2002 edition, which is incorporated herein by reference.

[17 CCR 93115.3(n)]

6. Owner/operator must meet the following requirements;

a. Change oil and filter every 500 hours of operation or annually, whichever comes first. O/o may utilize an oil analysis program as described in 40 CFR 63.6625 in order to extend this requirement.

b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;

c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; and

d. Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[40 CFR 63.6603, table 2d]

7. The owner/operator shall maintain an operations log for this unit current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below: a. Date of each use and duration of each use (in hours);

b. Reason for use (testing & maintenance, emergency, required emission testing, etc.);

c. Monthly and calendar year operation in terms of fuel consumption (in gallons) and total hours [17 CCR 93115]; and,

d. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log) [17 CCR 93115].

e. Records of the occurrence and duration of each malfunction of operation of equipment, including air pollution control and monitoring equipment, the maintenance performed during these malfunctions, and the corrective actions taken to minimize emissions and restore malfunctioning processes and air pollution control and monitoring equipment to its normal operation [40 CFR 63.6655(a)]; and,

f. Maintenance performed on this equipment, inclusive of the requirements of 40 CFR 63, Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines as listed below.

[17 CCR 93115, ATCM for Stationary Compression Engines]

8. The daily emissions limits for SEGS III through VII includes the emissions from this equipment, reference permits B001793, B001802, B001805, B001882 and B001885.

9. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District. The owner/operator shall have such tests performed and the emission limits of 2.9 lb/hr of NO_x, 0.5 lb/hr of CO and 0.1 lb/hr of Particulate shall not be exceeded.



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

E003231

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: JANUARY 2021

OWNER OR OPERATOR (Co. #277)

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

EQUIPMENT LOCATION (Fac. #941)

SEGS (III through VII)
41100 Highway 395
Boron, CA 93516

Description:

DIESEL IC ENGINE, FIRE PUMP consisting of: Engine P-107B at SEGS V

One Cummins, Diesel fired internal combustion engine Model No. NTA855F and Serial No. 11409265, producing 400 bhp with 6 cylinders at 2100 rpm while consuming a maximum of 10 gal/hr. This equipment powers a TBD Pump Model No. 9000 and Serial No. 871-938828-03-01, rated at 2000.

CONDITIONS:

1. This emergency, stationary, compression-ignited, internal combustion engine shall be installed, operated and maintained according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.

[40 CFR 63.6625(e) - Subpart ZZZZ - NESHAP for Stationary Reciprocating Internal Combustion Engines]

2. This unit shall only be fired on ultra-low sulfur diesel fuel, whose sulfur concentration is less than or equal to 0.0015% (15ppm) on a weight per weight basis per CARB Diesel or equivalent requirements.

3. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine

Fee Schedule: 7 (i)

Rating: 1 device

SIC: 4911

SCC: 20200102

Location/UTM(Km):
450E/3874N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

By:


Brad Poiriez

Air Pollution Control Officer

operating time.

[40 CFR Subsection 63.6625(f)]

4. This unit shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted. In addition, this unit shall be operated no more than 20 hours per year for testing and maintenance [Rule 204; 17 CCR 93115]

5. The hour limits indicated in condition 4, above, do not apply to in-use emergency fire pump assemblies that are driven directly by stationary diesel-fueled CI engines and only operated the number of hours necessary to comply with the testing requirements of National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 2002 edition, which is incorporated herein by reference. [17 CCR 93115.3(n)]

6. Owner/operator must meet the following requirements;

- a. Change oil and filter every 500 hours of operation or annually, whichever comes first. Owner/operator may utilize an oil analysis program as described in 40 CFR 63.6625 in order to extend this requirement.
- b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; and
- d. Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[40 CFR 63.6603, table 2d]

7. The owner/operator shall maintain an operations log for this unit current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below: a. Date of each use and duration of each use (in hours);

b. Reason for use (testing & maintenance, emergency, required emission testing, etc.);

c. Monthly and calendar year operation in terms of fuel consumption (in gallons) and total hours [17 CCR 93115]; and,

d. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log) [17 CCR 93115].

e. Records of the occurrence and duration of each malfunction of operation of equipment, including air pollution control and monitoring equipment, the maintenance performed during these malfunctions, and the corrective actions taken to minimize emissions and restore malfunctioning processes and air pollution control and monitoring equipment to its normal operation [40 CFR 63.6655(a)]; and,

f. Maintenance performed on this equipment, inclusive of the requirements of 40 CFR 63, Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines as listed below.

[17 CCR 93115, ATCM for Stationary Compression Engines]

8. The daily emissions limits for SEGS III through VII includes the emissions from this equipment, reference permits B001793, B001802, B001805, B001882 and B001885.

9. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District. The owner/operator shall have such tests performed and the emission limits of 2.9 lb/hr of NO_x, 0.5 lb/hr of CO and 0.1 lb/hr of Particulate shall not be exceeded.



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

E009445

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: JANUARY 2021

OWNER OR OPERATOR (Co. #277)

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

EQUIPMENT LOCATION (Fac. #941)

SEGS (III through VII)
41100 Highway 395
Boron, CA 93516

Description:

GASOLINE IC ENGINE, EMERGENCY GENERATOR consisting of:

One Ford, 87U fired internal combustion engine Model No. LSG-8751-6005-A and Serial No. 17806 T-18-TT, producing 87 bhp with 8 cylinders at 1800 rpm while consuming a maximum of 9 gal/hr. This equipment powers a 75 Onan Generator Model No. 60EN and Serial No. B890206154, rated at 60kW.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	211.7	gm/bhp-hr
NOx	8.8	gm/bhp-hr
VOC	2.8	gm/bhp-hr

CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.

Fee Schedule: 7 (g)

Rating: 1 device

SIC: 4911

SCC: 20300301

Location/UTM(Km):
450E/3874N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

By: 

Brad Poiriez

Air Pollution Control Officer

2. Engine may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.

3. This ICE shall only be fired on gasoline.

4. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.

5. This unit shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted. In addition, this unit shall be operated no more than 20 hours per year for testing and maintenance, excluding compliance source testing. Time required for source testing will not be counted toward the 20 hour per year limit.

6. The o/o shall maintain a operations log for this unit current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:

- a. Date of each use and duration of each use (in hours);
- b. Reason for use (testing & maintenance, emergency, required emission testing); and
- c. Calendar year operation in terms of fuel consumption (in gallons) and total hours.



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

N005073

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: JANUARY 2021

OWNER OR OPERATOR (Co. #277)

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

EQUIPMENT LOCATION (Fac. #941)

SEGS (III through VII)
41100 Highway 395
Boron, CA 93516

Description:

GASOLINE DISPENSING FACILITY (NON-RETAIL) consisting of: SEGS VI

DISPENSING EQUIPMENT

Fuel Type	Quantity
87U	1
Diesel	1

VAPOR CONTROL EQUIPMENT

Type	Equipment Name	Compliance
PII	BAL	G-70-167
PI	CO	G-70-167

CONDITIONS:

1. The toll-free telephone number that must be posted is 1-800-635-4617.
2. The owner/operator, o/o, shall maintain a log of all inspections, repairs, and maintenance on equipment subject to Rule 461.

Fee Schedule: 5 (a)

Rating: 5000 gallons

SIC: 4911

SCC: 40600603

Location/UTM(Km):
450E/3874N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, CA 93516

By:
Brad Poiriez

Air Pollution Control Officer

This log shall be kept current, on-site for a minimum of 2 years and provided to District personnel on request.

3. Any modifications or changes to the piping or control fittings of the vapor recovery system requires prior approval from the District.

4. The vapor vent pipes are to be equipped with pressure relief valves.

5. The owner or operator shall conduct and pass the following tests annually using the latest adopted version of the following test procedures:

a. Pressure Decay Tests per CARB test method TP-201.3B.

b. Liquid Removal Test (if applicable) per TP-201.6

c. Emergency vents and manways shall be leak free when tested at the operating pressure of the tank in accordance with CARB test methods, as specified in Title 17, California Code of Regulations.

The District shall be notified a minimum of 10 days prior to performing the required tests with the final results submitted to the District within 30 days of completion of the tests.

6. The annual throughput of gasoline shall not exceed 60,000 gallons per year. Throughput records shall be kept on site and available to District personnel upon request, and annual throughput for the previous calendar year shall be provided to the District not later than the end of February of each year. Before this annual throughput can be increased the facility is required to submit to the District an application to modify the permit which may require a Health Risk Assessment (HRA). In addition, public notice and/or a commenting period may be required.

[District Rule 1320 - NSR for Toxic Air Contaminants; District Rule 107(b); H&S Code 39607 & 44341-44342; and 40 CFR 51, Subpart A]

7. The o/o shall maintain and operate this equipment in compliance with CARB Executive Order G-70-167.