

DOCKETED

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South Coast Air Quality Management District

Statement of Basis

Proposed Title V Renewal Permit

Facility Name: SC Edison, Mountainview Generating Station
Facility ID: 160437
SIC Code: 4911
Equipment Location: 2492 San Bernardino Ave
San Bernardino, CA 92374

Application #(s): 569066
Application Submittal Date(s): 10/10/14

Permit Revision #: varies depending on the section
Revision Date:
Permit Section(s) Affected: All sections (A-K, plus Appendices A and B)

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1. Introduction and Scope of Permit

Title V is a national operating permit program for air pollution sources. Facilities subject to Title V must obtain a Title V permit and comply with specific Title V procedures to modify the permit. Title V permits are issued in 5 year terms, after which the facility must apply to have the permit renewed. The Title V permit for this facility will expire on April 8, 2015. The facility has submitted the necessary information to renew their permit and has satisfied the requirements to obtain an application shield, which allows the continued operation of the facility under the terms and conditions of the existing permit until permit renewal is approved.

The SCAQMD implements Title V through Regulation XXX – Title V Permits, adopted by the SCAQMD Governing Board in order to comply with EPA's requirement that local air permitting authorities develop a Title V program. Regulation XXX was developed with the participation of the public and affected facilities through a series of public workshops, working group meetings, public hearings and other meetings.

The Title V major source threshold for a particular pollutant depends on the attainment status of the pollutant. NO₂, SO₂, CO, and lead are in attainment with federal standards. The status for PM-10 is attainment at the federal level, but remains nonattainment at the state level. The status

for ozone is currently extreme nonattainment. For the South Coast Air Basin (SOCAB) the threshold levels are as follows:

Pollutant	SOCAB Major Source Thresholds
VOC	10
NOx	10
SOx	100
CO	50
PM-10	70
Single HAP	10
Combination of HAPS	25

A Title V permit is proposed to be issued to cover the operations of the Mountainview Generating Station, located at 2492 W. San Bernardino Ave., Redlands, CA 92374. This facility is subject to Title V requirements because it is a major source of one or more criteria pollutants.

2. Facility Description

SCE, Mountainview Generating Station is an existing facility which operates 4 natural gas fired combined cycle turbines to produce power for its customers in California. Each turbine is rated at 167 MWs, and the entire facility, including the steam turbines, can produce around 1,056 MWs. The turbines were constructed with BACT as determined at the time the permit was issued in 2001. The NOx BACT limit is 2 ppm, the CO BACT limit is 6 ppm, the VOC BACT limit is 2.0 ppm, and the NH3 slip limit is 5 ppm, all based on 1 hour averages. The turbines employ dry low NOx (DLN) combustors, as well as SCRs and oxidation catalysts. There are also 2 diesel fired emergency engines at the facility. One is rated at 375 hp and is used to drive a fire pump, and the other is rated at 2155 hp and is used to drive an emergency generator. There is a 36,000 gallon aqueous ammonia storage tank on site as well. Previously, the facility operated 2 utility steam generators, but these were shut down in 2002, and the new turbines were brought on line in July 2005. Currently, the facility has proposed a minor permit revision to replace the turbine burners with newer and more efficient units. The burner replacement project will increase the plant net power output from 1,056 MWs to 1,104 MWs.

3. Construction and Permitting History

The facility was originally constructed in the 1950's by Southern California Edison. The first air permit was issued in 1976 to the 2 utility boilers. SCE sold the plant in 1998, and the permit was issued to Mountainview Power. In 2001 the facility received permits to construct the 4 turbines as a repowering project. The turbines came on line in 2005. The initial Title V permit was issued on August 19, 1999. The Title V permit was last renewed on April 9, 2010. Since the last permit renewal, there has been two permit revisions – an existing soda ash storage silo and mixing tank serving the cooling towers were added to the permit in 2012, and in 2014 permit condition language was changed to allow calibration of the ammonia monitors every 13 months instead of

every 12 months. The permit is currently being renewed for a third time and in the meantime, the facility is operating under an Application Shield.

4. Regulatory Applicability Determinations

Applicable legal requirements for this facility are required to be identified in the Title V permit (for example, Section D, E, and H of the proposed Title V permit). Applicability determinations (i.e., determinations made by the District with respect to what legal requirements apply to a specific piece of equipment, process, or operation) can be found in the Engineering Evaluations.

The following summarizes the key rules that apply to the major equipment at this site:

Turbines/duct burners

218 – Continuous Emission Monitoring
401 – Visible Emissions
402 - Nuisance
407 – Liquid and Gaseous Air Contaminants (CO and SO₂ emissions)
409 – Combustion Contaminants (PM emissions)
431.1 – Sulfur Content of Natural Gas (SO_x emissions)
475 – Electric Power Generating Equipment (PM emissions)
Regulation XIII – BACT
2012 – NO_x RECLAIM (monitoring, recordkeeping and reporting of NO_x)
Regulation XXX – Title V
40CFR 60 Subpart GG (turbines)
40CFR 60 Subpart Da (duct burners)

Emergency Engines

401 – Visible Emissions
402 - Nuisance
431.2 – Sulfur Content of Liquid Fuels (SO_x)
2012 – NO_x RECLAIM (monitoring, recordkeeping and reporting of NO_x)
1470 – Air Toxic Control Measure (PM)
Regulation XXX – Title V

The facility is not a major source of HAPs. There are no area source MACT standards which apply to the turbines. There is an area source standard for the emergency engines under Subpart ZZZZ, and the engines are required to change the oil and inspect the belts and filters at regular intervals under this regulation. NSPS requirements of 40 CFR Part 60 subpart GG apply to the gas turbine at the facility. Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64 do not apply to the turbine because 1) the turbine uses continuous emissions monitor for NO_x and CO [exempt by continuous compliance determination of section 64.2(b)(vi)], and 2) there is no VOC, PM₁₀ or SO_x control equipment.

The permit terms and conditions may be found in Section D of the Title V permit.

5. Monitoring and Operational Requirements

Applicable monitoring and operational requirements for the facility are identified in the Title V permit (for example, Section D, F, and J and Appendix B of the proposed Title V permit). All periodic monitoring requirements were developed using strict adherence to the following applicable guidance documents: SCAQMD Periodic Monitoring Guidelines for Title V Facilities (November 1997), CAPCOA/CARB/EPA region IX Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP (June 1999), and CAPCOA/CARB/EPA Region IX Recommended Periodic Monitoring for Generally Applicable Grain Loading Standards in the SIP: Combustion Sources (July 2001).

Under Reclaim, the turbines are required to maintain CEMS for NO_x emissions, and report daily mass emissions through the RTU, as well as measure water injection rate, exhaust temperature into the SCR, the ammonia injection rate and exhaust O₂. As part of the CEMS, the turbine is also required to be equipped with a fuel flow meter. Under Rule 218, the turbines are required to maintain CEMS for CO and report mass emissions twice yearly. Under NSPS Subpart GG, the turbine is required to measure the water injection rate, fuel consumption, NO_x, SO_x, and O₂ emissions.

More detailed discussions of any applicable monitoring and operational requirements can be found in the Engineering Evaluations.

6. Permit Features

Permit Shield

A permit shield is an optional part of a Title V permit that gives the facility explicit protection from requirements that may be incorrectly specified in the permit. A permit shield is a provision in a permit that states that compliance with the conditions contained in the permit shall be deemed compliance with all identified regulatory requirements. To incorporate a permit shield into the Title V permit involves submission of applications for change of conditions for each equipment affected by the permit shield. Permit shields are addressed in Rule 3004 (c). This facility has not applied for a permit shield.

Streamlining Requirements

Some emission units may be subject to multiple requirements which are closely related or redundant. The conditions may be streamlined to simplify the permit conditions and compliance. Emission limits, work practice standards, and monitoring, recordkeeping, and reporting requirements may be streamlined. Compliance with a streamlined condition will be deemed compliance with the underlying requirements whether or not the emission unit is actually in compliance with the specific underlying requirement. This facility has not applied for any streamlined conditions.

7. Summary of Emissions and Health Risks

Criteria Pollutant Emissions (tons/year) Annual Reported Emissions for Reporting Period 2013

Pollutant	Emissions (tons/year)
NOx	109.598
CO	28.893
VOC	48.220
PM	123.450
SOx	13.634

Toxic Air Contaminants Emissions (TAC) Annual Reported Emissions for Reporting Period 2013

The Following TACs Were Reported	Emissions (lbs/yr)
1,3-Butadiene	17.068
Ammonia	349511
Arsenic	0.001
Benzene	468.817
Cadmium	0.001
Formaldehyde	7798.296
Lead	0.007
Naphthalene	51.102
Nickel	0.003
PAHs	35.298

Health Risk from Toxic Air Contaminants

The facility is subject to review by the Air Toxics Information and Assessment Act (AB2588). The Final Facility Health Risk was approved in 2013 with the following risk factors:

Cancer Risk	2.3 in one million
Acute Hazard Index	0.01
Chronic Hazard Index	0.01

8. Compliance History

The facility has been subject to both self-reporting requirements and AQMD inspections. The facility has had 0 citizen complaints filed, 0 Notices to Comply issued, and 1 Notice of Violation

issued in the last two calendar years. There are currently no outstanding compliance issues with this facility.

9. Compliance Certification

By virtue of the Title V permit application and renewal of this permit, the reporting frequency for compliance certification for the facility shall be annual.