SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Draft Staff Report
Proposed Rule 118.1 – Public Safety Provisions for Stationary Emergency Standby Engines
Proposed Amended Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines

September 2021

Deputy Executive Officer
Planning, Rule Development and Area Sources
Sarah Rees, Ph.D.

Assistant Deputy Executive Officer
Planning, Rule Development and Area Sources
Susan Nakamura

Planning and Rules Manager
Planning, Rule Development and Area Sources
Vacant

Author:	Tiffani To – Assistant Air Quality Specialist
Contributors:	Rizaldy Calungcagin – Supervising Air Quality Engineer Rodolfo Chacon – Program Supervisor David Hauck – Supervising Air Quality Engineer Atul Kandhari – Air Quality Engineer Luke Lau – Assistant Air Quality Engineer Yunnie Osias – Air Quality Specialist Chris Perri – Air Quality Engineer II Barbara Radlein – Program Supervisor Kendra Reif – Air Quality Specialist Angela Shibata – Supervising Air Quality Engineer Jillian Wong – Assistant Deputy Executive Officer
Reviewed by:	Michael Laybourn – Program Supervisor Stacey Pruitt – Senior Deputy District Counsel

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
GOVERNING BOARD

Chair: BEN J. BENOIT
Mayor Pro Tem, Wildomar
Cities of Riverside County

Vice Chair: VANESSA DELGADO
Senate Rules Committee Appointee

MEMBERS:

LISA BARTLETT
Supervisor, Fifth District
County of Orange

JOE BUSCAINO
Council Member, 15th District
City of Los Angeles Representative

MICHAEL A. CACCIOTTI
Mayor Pro Tem, South Pasadena
Cities of Los Angeles County/Eastern Region

GIDEON KRACOV
Governor's Appointee

SHEILA KUEHL
Supervisor, Third District
County of Los Angeles

LARRY MCCALLON
Mayor Pro Tem, Highland
Cities of San Bernardino County

VERONICA PADILLA-CAMPOS
Speaker of the Assembly Appointee

V. MANUEL PEREZ
Supervisor, Fourth District
County of Riverside

REX RICHARDSON
Vice Mayor, City of Long Beach
Cities of Los Angeles County/Western Region

CARLOS RODRIGUEZ
Mayor Pro Tem, Yorba Linda
Cities of Orange County

JANICE RUTHERFORD
Supervisor, Second District
County of San Bernardino

EXECUTIVE OFFICER:

WAYNE NASTRI

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1 – BACKGROUND

INTRODUCTION

Over the last decade, California has experienced an increase in record-breaking wildfires as wildfire conditions have intensified due to changing weather conditions such as increased temperatures and drought conditions. In 2012, the California Public Utilities Commission (CPUC) ruled that California Public Utilities Code Section 451 and 399.2(a) provides the authority for electric utilities to shut off electric power to reduce the risk of wildfires caused by electrical power infrastructure. As a result, utility distribution companies have begun implementing Public Safety Power Shutoff (PSPS) events to proactively cut power to electrical lines reducing the likelihood that infrastructure would cause or contribute to a wildfire. During a PSPS event, critical service facilities may need to rely on emergency standby engines to continue operations. South Coast Air Quality Management District (South Coast AQMD) regulations require permits for internal combustion engines, including emergency standby engines rated greater than 50 brake horsepower (bhp). Under Rule 1110.2 - Emissions from Gaseous- and Liquid-Fueled Engines, emergency standby engines are exempt from emission limits for oxides of nitrogen (NOx), volatile organic compounds (VOCs), and carbon monoxide (CO) provided the engine has permit conditions that limit engine operations to 200 hours or less per year. The Rule 1110.2 provisions related to emergency standby engines and the associated permit conditions that limit operating hours were established before implementation of the PSPS program began in 2018 and does not account for the use of emergency standby engines due to PSPS emergency conditions. Proposed Rule 118.1 – Public Safety Provisions for Stationary Emergency Standby Engines (PR 118.1) is intended to address the use of standby engines at critical service facilities during emergencies by allowing the exclusion of emergency standby engine operating hours during PSPS events from counting toward permit limits and other South Coast AQMD rules.

South Coast AQMD Rule 1470 - Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines includes requirements that limit annual maintenance and testing hours for emergency standby engines. Routine maintenance and testing can assure that an emergency standby engine will operate properly during an actual emergency. A water district that provides water delivery and wastewater services has stated that existing Rule 1470 provisions for specific engines do not allow adequate testing to ensure engines operate during emergencies. Proposed Amended Rule 1470 (PAR 1470) will add an optional testing and maintenance schedule to provide water and sewage treatment facilities the ability to average the existing maintenance and testing hour limits over three years for specific engines located in a very high fire hazard severity zone. The option to average testing hours would allow more rigorous maintenance and testing to be conducted in one year without increasing the total maintenance and testing hours over the three years.

REGULATORY HISTORY

Rule 1110.2

Rule 1110.2 was adopted in August 1990 and amended 11 times and is designed to reduce NOx, VOC, and CO emissions by establishing emission limits for stationary and portable engines rated greater than 50 bhp. Rule 1110.2 establishes NOx, VOC, and CO emission limits and includes emissions testing, monitoring, reporting, and recordkeeping requirements. Under Rule 1110.2, emergency standby engines, engines used for fire fighting and flood control, and any other

emergency engines approved by the Executive Officer are exempt from meeting NOx, VOC, and CO emission limits provided that the engine has a permit condition limiting the engine to 200 operating hours[1] or less per year. These exempted emergency engines are also exempt from the Rule 1110.2 emissions testing, monitoring, and reporting requirements.

Rule 1470

Rule 1470 was adopted on April 2, 2004, to reduce diesel particulate from engines. Rule 1470 includes fuel requirements, emission standards for new engines, and operating requirements and emission standards for in-use (installed before January 1, 2005) and new engines. The Rule also establishes limits on maintenance and testing hours based on the PM emission rate of engines.

Rule 1472

Rule 1472 was adopted on March 7, 2008, to reduce diesel PM emissions from facilities with three or more stationary emergency standby engines. Rule 1472 supplements Rule 1470 by requiring facilities with three or more engines to meet a specific risk level called an Engine Group Index with provisions on calculating the Engine Group Index. The Engine Group Index is based on health risk and facilities required to file a compliance plan are to comply with three different options: reduce Engine Group Index to less than or equal to 1.0, all engines meet a diesel PM emission rate less than or equal to 0.15 g/bhp-hr, or all engines within engine group emit diesel PM at a weighted average rate of less than or equal to 0.15 g/bhp-hr.

California Air Resources Board (CARB) Air Toxics Measure for Stationary Compression Ignition Engines

On December 8, 2004, CARB adopted the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines, which establishes requirements to reduce diesel particulate matter and criteria pollutant emissions from stationary diesel-fueled compression ignition engines. California Health and Safety Code Section 39666 requires local air districts to implement and enforce the ATCMs or adopt and enforce equally effective or more stringent ATCM requirements than those adopted by CARB. Rule 1470 is designed to implement the state ATCM. Since Rule 1470 and the state ATCM focus on requirements from single engines, South Coast AQMD staff was concerned about multiple engines at a single location that collectively could create a significant health risk. Rule 1472 is designed to go beyond Rule 1470 and the ATCM as it establishes requirements for facilities with three or more stationary emergency standby engines.

Rules 1470 and 1472 are More Stringent than CARB's ATCM

Rule 1470 establishes requirements that are more stringent than the state ATCM. Specifically, Rule 1470 includes more stringent emission level requirements for new engines less than 50 meters from a sensitive receptor and allows fewer annual maintenance and testing hour limits for health facilities when compared to the state ATCM. Additionally, under Rule 1470 requirements the cleanest engines include permit limits for up to 50 hours annually for maintenance and testing compared to the state ATCM, which allows up to 100 hours. Table 1-1 compares the PM emission limits for new engines less than 50 meters from a sensitive receptor between Rule 1470 and the

[1] Operating hours include all operations such as emergency use, non-emergency use, maintenance, and testing

state ATCM to highlight where Rule 1470 is more stringent. Table 1-2 compares the annual maintenance and testing limits between Rule 1470 and the state ATCM to highlight provisions where Rule 1470 is more stringent. In addition, Rule 1472 establishes requirements for facilities with multiple engines to meet the Engine Group Index or file a compliance plan, making these provisions more stringent than the state ATCM which does not establish in-use PM or health risk requirements for facilities with multiple engines.

Table 1-1

Comparison Between Rule 1470 and the ATCM PM Emission Limits for New Engines Near Sensitive Receptors

Engine Size	Rule 1470	State ATCM
50 < HP < 175	0.15 g/bhp-hr	0.15 g/bhp-hr
175 ≤ HP ≤ 750	0.01 g/bhp-hr	0.15 g/bhp-hr
> 750 HP	0.075 g/bhp-hr 0.02 g/bhp-hr	0.15 g/bhp-hr

Table 1-2

Comparison Between Rule 1470 and the ATCM for Annual Maintenance and Testing Hours

Engine	Diesel PM Emission Rate (g/bhp-hr)	Rule 1470	State ATCM
In-use	> 0.4 g	30 hours*	40 hours*
In-use	>0.15 and ≤0.4 g	30 hours*	40 hours*
New	≤0.01	50 hours	Up to 100 hours

*Specific to health facilities

Rule 118

Rule 118 was adopted on December 7, 1995, to allow the Executive Officer to suspend specific South Coast AQMD rules, regulations, or orders during a state or federally declared State of Emergency. Rule 118 applies to any facility, equipment, or process within South Coast AQMD's jurisdiction that is necessary to operate to protect public health and safety during a State of Emergency. Under Rule 118, a suspension may be rule-specific and region-specific depending on the emergency. The rule suspension will be for ten calendar days but may be extended by the Executive Officer if deemed necessary.

United States Environmental Protection Agency (U.S. EPA) Stationary Engine Rules

Title 40 Code of Federal Regulations Part 63 Subpart ZZZZ was adopted on June 15, 2004, to establish National Emission Standards for Hazardous Air Pollutants (NESHAP) for reciprocating internal combustion engines (RICE). As one of the requirements to demonstrate compliance, Section 63.6640 limits emergency stationary RICE to 100 hours per calendar year for maintenance and testing purposes of which 50 operating hours can be used for non-emergency situations. Title 40 Code of Federal Regulations Part 60 Subpart IIII was adopted on July 11, 2006, to establish

standards and regulations for stationary compression ignition internal combustion engines. Section 60.4211 specifies the requirements to qualify as an emergency stationary internal combustion engine and, similar to the RICE regulation, also includes a maintenance and testing operating limit of 100 hours per calendar year which includes up to 50 hours for non-emergency operations. For both regulations, there are no restrictions on engine operating hours during emergencies. Non-emergency operation and maintenance and testing are counted towards the 100 hour calendar year limit, with non-emergency operations further limited to no more than 50 hours per calendar year. Non-emergency operations include the periods when electrical power is available from the utility.

PUBLIC SAFETY POWER SHUTOFF EVENTS

The California Public Utilities Commission (CPUC) regulates privately owned electric utilities, also referred to as investor-owned utilities or IOUs. According to the CPUC, although electric utility infrastructure has historically been responsible for less than ten percent of reported wildfires, roughly half of the most destructive fires in California history are attributed to power lines.[2] In 2012, the CPUC ruled that California Public Utilities Code Section 451 and 399.2(a) provides the authority for electric utilities to shut off electric power to protect public safety. Accordingly, electric utilities such as Southern California Edison (SCE), San Diego Gas & Electric (SDG&E), Pacific Gas & Electric (PG&E), Liberty, Bear Valley, and PacifiCorp have de-energized powerlines as a method of fire prevention as powerlines can potentially cause a wildfire during certain weather conditions. According to SCE, the CPUC has directed California's three largest investor-owned utilities (SCE, SDG&E, and PG&E) to coordinate and prepare all customers for power outages during a PSPS event. Because every situation is unique, each utility provider determines when to notify and initiate a PSPS event and how it will be implemented. The utility provider decides when to de-energize power lines by monitoring local fire conditions and considering a combination of weather and environmental factors. These may include but are not limited to high winds and high wind gusts, low humidity levels, dry vegetation, red flag warnings, fire threat to electric infrastructure, and real-time observations.[3]

On April 19, 2012, the CPUC provided the first PSPS guidance for implementing programs to shut off power for public safety reasons and fire prevention measures.[4] The CPUC continues to revise PSPS guidelines as part of its continuing actions to mitigate the impacts of PSPS events. After the wildfires in southern California in 2017, the CPUC adopted Resolution ESRB-8, which adds new requirements for utility providers to make all feasible attempts to notify customers before performing a de-energization and requires utilities to submit a post-event report within ten days

[2] California Public Utilities Commission. *Public Safety Power Shutoff (PSPS) / De-Energization.* Retrieved April 21, 2021, from https://www.cpuc.ca.gov/psps

[3] *Public Safety Power Shutoff: The Power of Being Prepared*. Retrieved April 22, 2021, from https://prepareforpowerdown.com/

[4] *Decision Granting Petition to Modify Decision 09-09-030 and Adopting Fire Safety Requirements for San Diego Gas & Electric Company*. Retrieved May 11, 2021, from https://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/165063.PDF

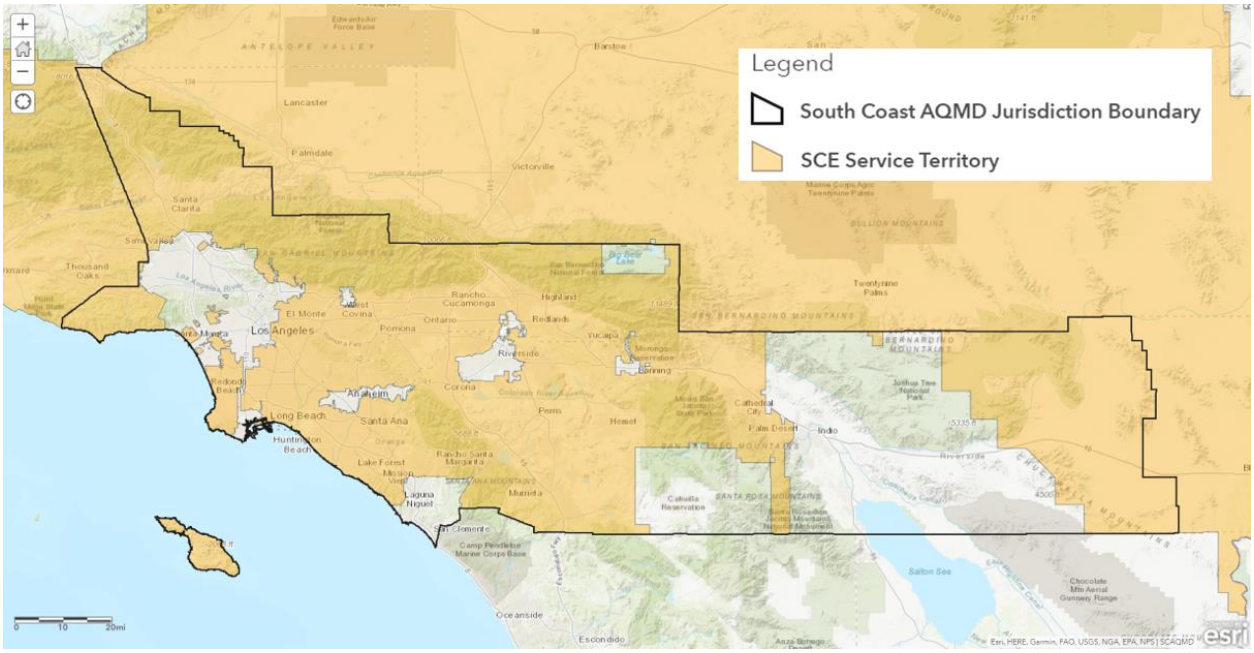
after each de-energization event.[5] The most recent PSPS guidelines (D.20-05-051)[6] were adopted on June 5, 2020. These guidelines examine the PSPS process, direct the utility providers on best practices, and provide a framework for mitigating wildfire risk and the impact on customers when implementing a PSPS event. The CPUC provides updated information on current PSPS guidelines and actions taken to mitigate the impacts of PSPS events through their website at https://www.cpuc.ca.gov/psps/.

SOUTHERN CALIFORNIA EDISON

Southern California Edison (SCE) is one of California's largest investor-owned utilities. According to SCE, in 2015, the utility provided electricity to 15 million people in 180 incorporated cities over 15 counties.[7] The SCE service area includes approximately 50,000 square miles, and a map of SCE's service area within the jurisdictional boundaries of South Coast AQMD is illustrated in Figure 1-1.

Figure 1-1

Southern California Edison Service Territory Within South Coast AQMD Jurisdiction



As described in Chapter 2 of the Draft Staff Report, PR 118.1 provisions are applicable to critical service facilities that receive electrical power from either investor-owned utilities or publicly owned utilities (e.g., Los Angeles Department of Water and Power, City of Anaheim, etc.).

[5] *Resolution Extending De-energization Reasonableness, Notification, Mitigation and Report Requirements in Decision 12-04-024 To All Electric Investor Owned Utilities* Retrieved May 19, 2021, from https://docs.cpuc.ca.gov/publisheddocs/published/g000/m218/k186/218186823.pdf

[6] *Decision Adopting Phase 2 Updated And Additional Guidelines For De-energization of Electric Facilities to Mitigate Wildfire Risk.* Retrieved May 19, 2021, from https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M339/K524/339524880.PDF

[7] *Southern California Edison: About Us.* Retrieved April 30, 2021, from https://www.sce.com/about-us/who-we-are

However, the following paragraphs summarize SCE's implementation of PSPS events because SCE operates and maintains most of the electrical infrastructure within the South Coast AQMD.

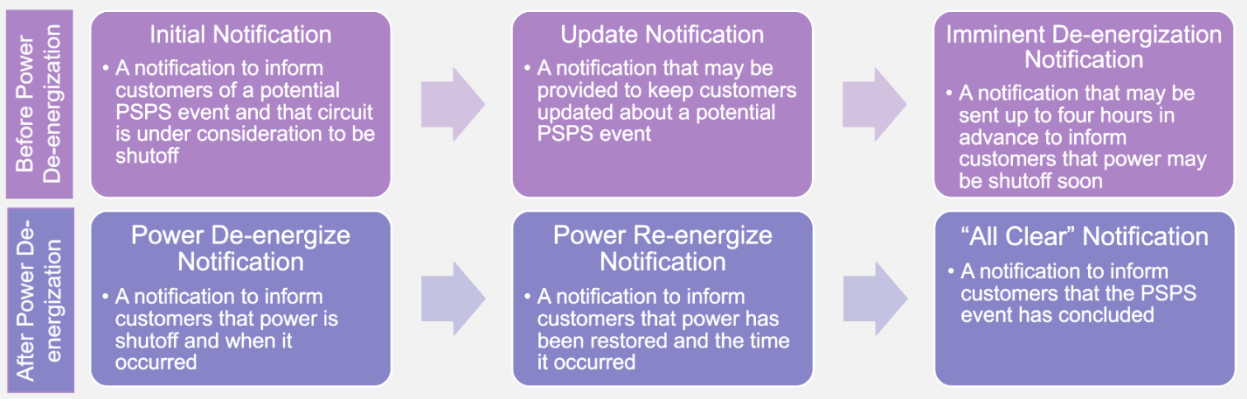
Southern California Edison PSPS Implementation

SCE began implementing PSPS events in 2018. As part of the PSPS process, SCE monitors for extreme weather and high fire danger. When extreme weather is forecast, the PSPS process begins when SCE activates their dedicated PSPS Incident Management Team to coordinate response operations associated with the potential implementation of a PSPS event. As SCE monitors weather forecasts, a range of dates may be established where circuits are under consideration for a de-energization.[8]

Customers are issued an initial notification up to three days in advance of a PSPS event. Subsequently, update notifications may be provided once a day to update customers on the current status of the potential PSPS event. The determination if a PSPS event leads to the de-energization of powerlines is unique to each potential PSPS event and depends on weather conditions. If weather conditions elevate, SCE may issue an imminent de-energization notification to inform customers that power may be shut off in the next one to four hours to reduce the risk of wildfire ignition. Usually, imminent de-energization notifications are sent to customers in advance to provide time to prepare. Although, if weather conditions escalate rapidly, an imminent de-energization notification may not be sent out before power is shut off due to lack of time. A flow chart depicting an overview of SCE's notification process is illustrated in Figure 1-2.

Figure 1-2

Overview of Southern California Edison's PSPS Notification Process



Receiving an imminent de-energization notification does not confirm that power will be shut off. Therefore, two scenarios can occur after customers receive an imminent de-energization notification: power is not shut off (Scenario A), or power is shut off (Scenario B).

In Scenario A, weather conditions may suddenly improve, and SCE may determine that it is unnecessary to shut off the power. If power is not shut off, the imminent de-energization

[8] De-energization and shut off will be used interchangeably throughout this report

notification expires after four hours. The circuit of concern will then remain on SCE's monitor list and under consideration for a de-energization event. As weather conditions fluctuate, customers may receive multiple imminent de-energization notifications during a single PSPS event.

In Scenario B, after a customer receives an imminent de-energization notification, power is shut off. The power shut off can occur after the first imminent de-energization notification or subsequent ones. When power has been shut off, customers will receive a power de-energize notification detailing which segment of the circuit was shut off, location, and the date and time of shutoff. SCE may issue an imminent re-energization notification detailing an estimated time that power will be restored as weather conditions improve. Once power has been restored, a power re-energization notification is distributed to customers.

Once weather conditions improve, customers that received an initial notification, imminent de-energization notification, or power de-energize notification will receive an all-clear notification regardless of if power was shut off or not. The all-clear notifications inform customers that all circuits in the county have been re-energized and that the PSPS event is over. If a circuit takes longer to re-energize due to different reasons such as the need for repair, inability to access infrastructure, etc., the circuit may be transitioned to a different event classified as an Operations event. Because of this, some customers may face a delay in getting power restored. However, after power is restored following an Operational event, the customers will receive a notification that power has been restored. [9]

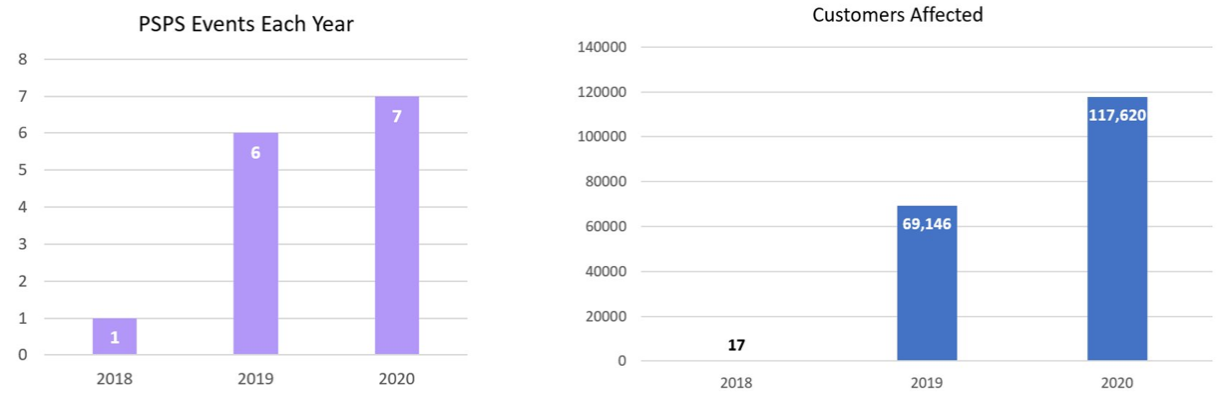
Southern California Edison PSPS Data

From January 2018 to December 2020, 14 PSPS events occurred within South Coast AQMD's jurisdiction resulting in circuit de-energization that impacted customers. Overall, there has been an increasing trend in PSPS events, and the number of customers affected each year, as depicted in Figure 1-3. However, while the same circuit can be de-energized in multiple PSPS events throughout the year, the same customers may not be affected each time because only portions of a circuit are shut off. To learn more about a specific PSPS event, SCE is required to release a post-event report after each PSPS event which can be found at the following website https://www.sce.com/wildfire.

[9] *Southern California Edison Public Safety Power Shutoff Protocol (PSPS) Post-Event Reporting in Compliance with Resolution ESRB8 and PSPS OIR Phase 1 & 2 Requirements December 16 to December 24, 2020*. Retrieved June 6, 2021, from https://www.sce.com/sites/default/files/inline-files/121620%20-%20SCE%20PSPS%20Post%20Event%20Report%20-%20Amended%20Final.pdf

Figure 1-3

Number of PSPS Events and Customers Affected Each Year



The data in Table 1-3 depicts further details about each PSPS event that occurred from 2018-2020 within the South Coast AQMD. Table 1-3 provides the date of each PSPS event beginning when a circuit was first de-energized and until power to the last circuit was restored, the number of circuits shut off, and the total number of customers affected. Each circuit that is shutoff is unique, and therefore the shutoff duration of each circuit will vary. The fourth column ("Range of Shutoff Duration") of the table depicts the shortest and longest shutoff duration of any de-energized circuit. The average shutoff duration is calculated by averaging together all the circuits shutoff in a particular PSPS event. The variation between each circuit can also be seen in the number of customers affected. The fifth column ("Range of Customers Affected") depicts the fewest to the largest number of customers affected by any one circuit.

Table 1-3

Summary Table of PSPS Events Implemented By Southern California Edison Within South Coast AQMD Jurisdiction From 2018 – 2020

Year	PSPS Event	Circuit Shutoff	Range of Shutoff Duration	Average Shutoff Duration[1]	Range of Affected Customers	Total Affected Customers
2018	Nov 8 – 9	2	16 – 17 hours	~16.5 hours	8 – 9	17
2019	Sep 24	2	6 hours	~6 hours	9 – 76	85
2019	Oct 9 – 12	12	13 – 50 hours	~31 hours	5 – 2,728	4,522
2019	Oct 20 – 21	3	8 – 14 hours	~10 hours	10 – 165	246
2019	Oct 24 – 27	24	14 – 80 hours	~33 hours	5 – 2,205	14,985
2019	Oct 27 – Nov 1	62	6 – 62 hours	~28 hours	2 – 2,408	49,212
2019	Nov 25 – 27	2	20 – 43 hours	~31.5 hours	25 – 71	96
2020	Sep 9 – 11	5	11 – 55 hours	~20 hours	9 – 62	136
2020	Oct 26 – 28	42	7 – 57 hours	~28 hours	5 – 2,366	27,224
2020	Nov 17 – 18	2	25 hours	~25 hours	9 – 165	174
2020	Nov 26 – 28	22	2 – 53 hours	~25 hours	5 – 1,774	10,115
2020	Dec 2 – 4	71	6 – 53 hours	~26 hours	1 – 2,051	29,610
2020	Dec 7 - 9	75	9 – 53 hours	~27 hours	2 – 2,675	33,857
2020	Dec 18 – 24	30	2 – 32 hours	~20 hours	2 – 2,739	16,504

Southern California Edison Wildfire Mitigation

In addition to PSPS events, SCE implements a Wildfire Mitigation Plan that outlines measures to reduce the risk of potential wildfire causing ignitions associated with their electrical infrastructure. According to SCE, the Wildfire Mitigation Plan includes vegetation management and annual inspection of overhead transmission, distribution, and generation equipment in high fire risk areas to identify potential hazards[10]. The Wildfire Mitigation Plan also emphasizes installing new or improved devices and technologies as part of the SCE grid design and system hardening activities to minimize the number of customers impacted during a PSPS event. Because monitoring weather

[10] Southern California Edison Wildfire Mitigation Efforts. Retrieved May 27, 2021, from https://www.sce.com/wildfire/wildfire-mitigation-efforts

conditions is a method used to predict wildfire risks, plans are also being made to install additional weather stations.

According to SCE, activities for 2021 include refining inspections of high fire risk areas, expanding system hardening activities to make the grid more resilient, improving fire agencies' ability to detect and respond to emerging fires, and establishing central data platforms for next-generation data analytics and governance.[11] SCE is continuing to work towards reducing the size, frequency, and duration of PSPS events by implementing these wildfire mitigation strategies and hardening power lines. However, PSPS events will remain as a method of mitigating wildfire risk during extreme fire weather conditions. Further details about the actions SCE is taking to minimize the impacts of PSPS events and their 2021 Wildfire Mitigation Plan can be found at https://www.sce.com/wildfire/wildfire-mitigation-efforts.

NEED FOR PROPOSED RULE 118.1

When Rule 1110.2 established the annual operating limit for emergency engines of 200 hours or less in 1990, PSPS events did not exist and were not considered part of emergency engine usage. As California is experiencing more intense wildfires in recent decades, utility providers may implement PSPS events more frequently, requiring certain entities that provide critical public services to operate emergency standby engines. It is recognized that during PSPS events, critical service facilities will need to maintain power to provide continuous services for the public and protect public health and safety. Accordingly, critical service facilities may need to operate emergency standby engines above the 200-hour limitation included in South Coast AQMD permits and other South Coast AQMD rules.

Under current South Coast AQMD rules, a facility that exceeds the permitted operating hour limits can petition the South Coast AQMD Hearing Board and file for a variance. PR 118.1 is needed to provide critical service facilities another option for regulatory certainty and relief other than petitioning the South Coast AQMD Hearing Board. PR 118.1 will allow critical service facilities the option to exclude operating hours during PSPS events provided that the Executive Officer is notified when an emergency standby engine exceeds the permitted operating hour limit and supporting documentation is maintained to support a PSPS occurrence. Rule 118 can also provide regulatory relief after a State of Emergency is declared, however, since a PSPS event is a preventative measure, facilities cannot receive regulatory relief under Rule 118 for operating emergency standby engines.

NEED FOR PROPOSED AMENDED RULE 1470

During the Woolsey Fire in 2018, a water district needed additional electrical power to maintain critical public services. In response, a mutual aid request was made to receive a portable emergency engine. Although the engine appeared to be kept in proper working order, it was an older engine and the hours of testing and maintenance logged on the engine were unknown. The engine failed during the emergency event resulting in a boil water alert to the community. According to the water district, these events and the associated actions highlighted the need to conduct more

[11] *2021 Wildfire Mitigation Plan Update*. Retrieved May 27, 2021, from https://download.newsroom.edison.com/create_memory_file/?f_id=601c9eeeb3aed375e1fffa67&content_verified=True

extensive testing on existing engines to better ensure engines are reliable in a PSPS event or wildfire.

PAR 1470 is needed to allow water and sewage facilities to periodically conduct more rigorous maintenance and testing of engines located in a very high fire hazard severity zone. PAR 1470 proposes an alternative testing schedule that will allow water and sewage facilities to conduct more rigorous testing, with no increase in the estimated health risk.

AFFECTED INDUSTRIES/FACILITIES

PR 118.1

PR 118.1 will apply to critical service facilities, including essential public services under Rule 1302, sewage pumping plants (also referred to as lift stations), pumping plants used for recycled water as defined in Title 22 - Section 60304 of the California Code of Regulations, natural gas delivery facilities, health facilities as defined in Section 1250 of the California Health and Safety Code, and facilities used exclusively for telecommunications, including radio and cell towers. Based on a review of South Coast AQMD permit data, approximately 2,560 facilities meet the definition of a critical service facility, and from these facilities, there are approximately 3,434 emergency engines. However, the number of facilities that may exceed emergency engine permit operating limits due to PSPS events is unknown as the number of future PSPS events and the specific areas affected is unknown.

PAR 1470

PAR 1470 provisions regarding maintenance and testing hours for engines with a 20-hour limitation will be available to water and sewage facilities with engines located in a very high fire severity zone. The California Fire Hazard and Severity Zones map identifies areas of significant fire hazards based on various factors such as fire history, natural vegetation, terrain, and the typical weather conditions in that area. These hazard areas are based on physical conditions that increase the likelihood that an area will burn over a 30-50 year period. The map is established by the California Department of Forestry and Fire Protection and is depicted in Figure 1-4.

Based on a review of South Coast AQMD permit data, it is estimated that there are up to 359 emergency standby engines with permit conditions that limit maintenance and testing to 20 hours at water and sewage facilities. A review of California Fire Hazard and Severity Zones mapping indicates 94 of those engines are located in a very high fire hazard severity zone and is depicted in Figure 1-5.

PUBLIC PROCESS

Development of PR 118.1 and PAR 1470 is being conducted through a public process. A PR 118.1 and PAR 1470 Working Group was formed to allow the public and stakeholders to discuss details of the proposed rule and provide South Coast AQMD staff with input during the rule development process. The Working Group includes representatives from businesses, environmental and community groups, public agencies, and consultants. South Coast AQMD has held four Working Group Meetings via Zoom videoconference and teleconference due to COVID-19. The meetings held via Zoom were on December 10, 2020, April 8, 2021, May 27, 2021, and July 9, 2021. A

Public Workshop was also held on July 29, 2021, via Zoom to present preliminary draft rule language for PR 118.1 and PAR 1470 and receive public comment.

Figure 1-4
Map of California Fire Hazard Severity Zones

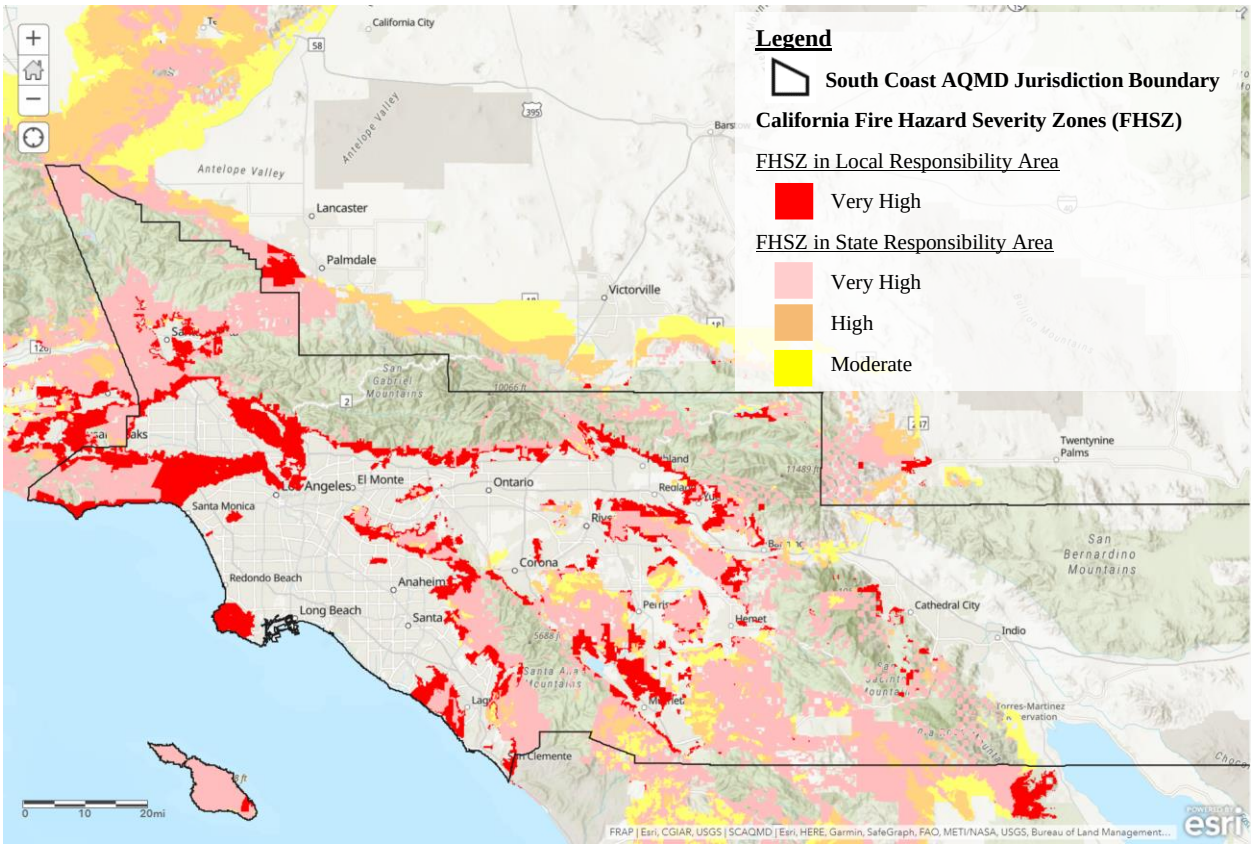
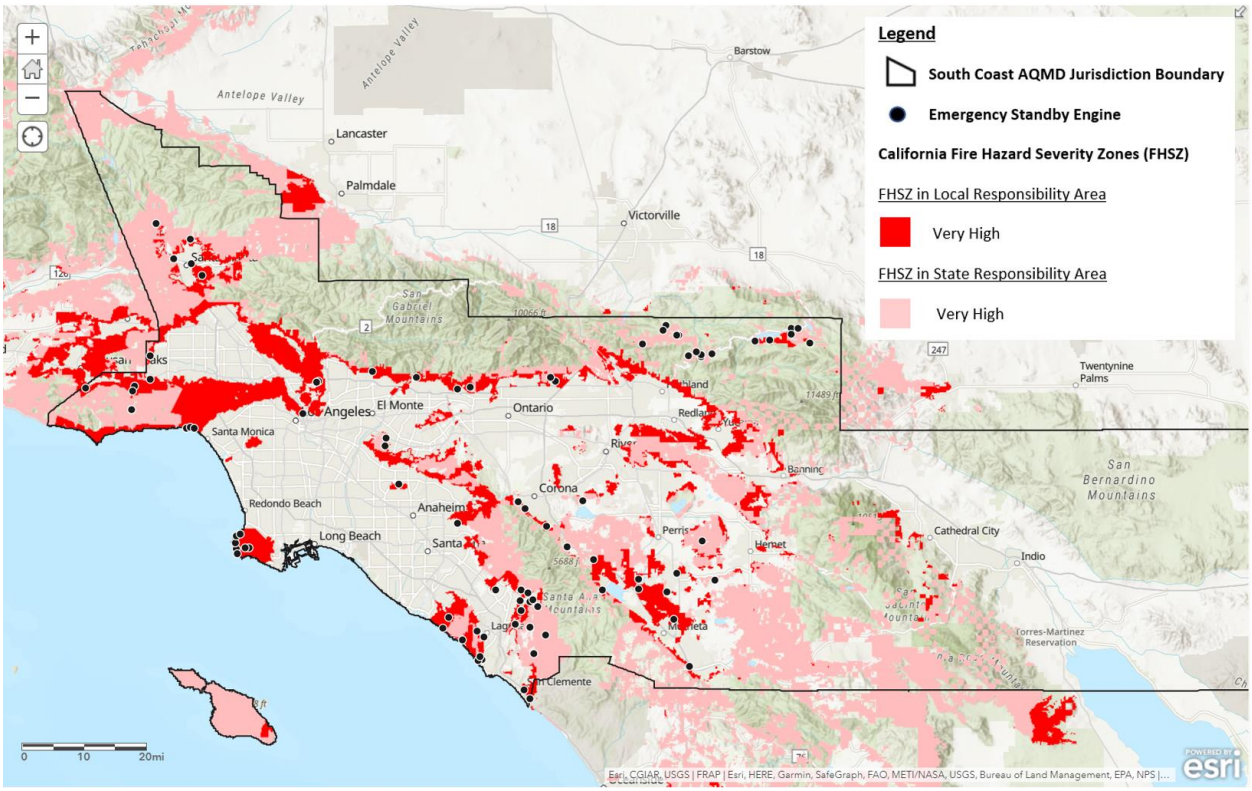


Figure 1-5

PAR 1470 Water and Sewage Engines With 20 Maintenance and Testing Hours Limits Located in a Very High Fire Hazard Severity Zone



CHAPTER 2 – SUMMARY OF PROPOSED RULE 118.1

OVERALL APPROACH

Proposed Rule 118.1 is designed to address the use of emergency standby engines for critical service facilities during PSPS events. PR 118.1 includes a notification process and recordkeeping requirements for facilities that seek to exclude emergency standby engine operating hours.

The following is a summary of PR 118.1 provisions.

Purpose – Subdivision (a)

The purpose of PR 118.1 is to allow an owner or operator of a critical service facility to exclude emergency standby engine operating hours due to a PSPS event since PSPS events were not foreseen when the 200 hour operating limit was established. Other South Coast AQMD programs have been established for non-PSPS emergencies. For example, if the governor or the federal government declares a State of Emergency, the Executive Officer can suspend specific South Coast AQMD rules under existing South Coast AQMD Rule 118 – Emergencies. Additionally, a facility can seek regulatory relief by petitioning the South Coast AQMD Hearing Board and filing for a variance.

Applicability – Subdivision (b)

PR 118.1 applies to an owner or operator of a critical service facility of an emergency standby engine that has a permit operating limit of 200 hours or less per year. A review of existing emergency standby engine permits indicates most permits limit operation to 200 hours per year; however, some may specify lower annual limits such as 199 hours. PR 118.1 provisions apply to emergency standby engines with permit conditions that limit operation to 200 hours, or less per year.

PR 118.1 is limited to critical service facilities recognizing the importance of a critical service facility to protect public health and safety during emergencies by providing continuous services.

Definitions – Subdivision (c)

PR 118.1 includes definitions for specific terms. Some definitions are based on other South Coast AQMD rules, while others are unique to PR 118.1. For certain definitions, additional clarification is provided in this section or where the definition is used within a specific subdivision. Please refer to PR 118.1 for actual definitions.

Critical Service Facility

Throughout the rulemaking process, staff worked with the Working Group to develop a critical service facility definition. In general, staff included those facilities that provide a service where continuous operation is needed to protect public health and safety. The definition of a critical service facility goes beyond the definition of "essential public service" used in Rule 1302, which is designed to identify those public service facilities that have specific exemptions under Regulation XIII – New Source Review because they are generally funded by public monies while providing a public service. For PR 118.1, a critical service facility includes essential public services from South Coast AQMD Rule 1302, which includes: publicly owned and operated sewage treatment facilities that are consistent with an approved regional growth plan, prisons, police facilities, fire fighting facilities, schools, hospitals, construction and operation of a landfill gas control or processing facility, water delivery operations, and public transit.

Under the essential public service definition in Rule 1302, water delivery operations are specific to facilities that process and deliver potable water. Additionally, the Rule 1302 essential public service definition for sewage treatment facilities does not include emergency standby engines at off-site sewage pumping plants. Based on stakeholder input, sewage pumping plants and pumping plants for recycled water as defined in Title 22, Section 60304 of the California Code of Regulations have been included in the PR 118.1 critical service facility definition.

The critical service facility definition also includes health facilities as defined in Section 1250 of the California Health and Safety Code, natural gas delivery facilities, and facilities used exclusively for telecommunications, including radio and cell towers. Natural gas delivery facilities will refer to facilities that are critical to the delivery of natural gas including gas control, call centers/dispatch operations, gas storage, and pipeline compressor stations. The critical service facility definition is specific to PR 118.1, and the rule provisions are only for emergency standby engines at these facilities.

Emergency Standby Engine

The emergency standby engine definition is based on the definition from Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines and includes engine use during a loss of power.

Imminent Shutoff Notification

An imminent shutoff notification may be sent out by the utility distribution company to let customers know that power may be shut off. The PR 118.1 definition for an imminent shutoff notification references notices sent by a utility distribution company and, for the purpose of this rule, imminent shutoff notification and imminent de-energization notification have the same meaning.

Public Safety Power Shutoff Event

When a PSPS event is implemented, powerlines may be de-energized by the utility distribution company as a safety precaution to reduce the chance of infrastructure causing or contributing to a wildfire. These events differ from rotating outages. Rotating outages occur when the state's electricity demand outpaces available supply resulting in the need for a utility distribution company to immediately reduce electrical load by shutting off power to customers for about an hour.

Utility Distribution Company

Although most critical service facilities in the South Coast AQMD receive power from SCE (an investor-owned utility), some are served by publicly owned utilities (e.g., City of Anaheim). The intent of PR 118.1 is allow customers of either type of utility to be eligible to exclude emergency engine operating hours due to PSPS events. Accordingly, the utility distribution company definition includes organizations that manage energy transmission and distribution as overseen by the CPUC or by municipal districts or municipalities.

Provisions for Excluding Public Safety Power Shutoff Events – Subdivision (d)

Paragraph (d)(1) establishes the provision that allows a critical service facility with an emergency standby engine to exclude engine operating hours during a PSPS event. Subparagraphs (d)(1)(A) and (d)(1)(B) further specify notification and recordkeeping procedures for a facility that operates

an emergency standby engine during a PSPS event that is opting to exclude those hours from permit operating limits and other South Coast AQMD rules.

Paragraph (d)(2) establishes the three conditions when emergency standby engine operating hours due to a PSPS event can be excluded. If applicable, facilities can elect to exclude operating hours associated with one or more of the applicable conditions specified in paragraph (d)(2).

Under subparagraph (d)(2)(A), operating hours that can be excluded include the de-energization period for a PSPS event beginning from the time power was shut off until the time power was restored. There have been situations where SCE de-energizes power during a PSPS event and after the weather conditions that triggered the PSPS event ended, a follow up inspection determines that individual power lines may need repair. In other situations, a wildfire or other event may occur during a PSPS event which may extend power outages beyond the PSPS period. In either case, power that was shut off during a PSPS event may remain shut off for individual customers after the utility distribution company determines the PSPS event has ended. Under these circumstances, PR 118.1 would allow critical service facilities to exclude emergency standby engine operating hours beginning from when power was shut off due to a PSPS event and until power is restored (activities associated with a PSPS event). It is possible that following repair activities or other PSPS associated activities, power may be temporarily restored and then may need to be shut off again to conduct further repairs. Although these circumstances do not result in a continuous loss of power, critical service facilities are eligible to exclude these engine operating hours until power is fully restored.

Subparagraph (d)(2)(B) includes provisions for excluding emergency engine operating hours as a result of a facility receiving an imminent shutoff notification. As described in Chapter 1, SCE will send an imminent shutoff notification to customers as weather conditions elevate to allow customers an opportunity to prepare for a possible power shutoff event. After an imminent shutoff notification is sent, two situations may occur: Scenario A (power is shut off) and Scenario B (power is not shut off). In either case, after receiving an imminent shutoff notification, some facilities proactively start and operate the engines prior to power de-energization to ensure continuous operation. Under the provisions of subparagraph (d)(2)(B), up to three operating hours can be excluded for each imminent shutoff notification received regardless of whether the power is shut off. The exclusion of operating hours can only begin after the date and time that the imminent shutoff notification is received and the three hours that can be excluded must be associated with the corresponding imminent shutoff notification. Hours that are associated with each imminent shutoff notification means that the three hours eligible to be excluded are specific to each notification and cannot be combined. For example, during a PSPS event a facility received a total of two imminent shutoff notifications. During the first imminent notification received, the emergency engine ran for two hours and so those two hours are eligible to be excluded. For the second imminent shutoff notification, no more than three hours are eligible to be excluded even though during the first imminent shutoff notification the facility only excluded two hours. For instances when the engine is operated while power is available (such as when power is not shutoff (Scenario B), or when engines are operated in advance of a power shutoff or after power has been restored under Scenario A), engine operating hours associated with an imminent shutoff notification will apply towards the 50 hour operating limit for non-emergency situations included in federal stationary engine rules (40 CFR Part 63, Subpart ZZZZ and 40 CFR Part 60, Subpart IIII).

Subparagraph (d)(2)(C) allows for the exclusion of emergency engine operating hours for repair activities associated with a PSPS event. Specifically, after a de-energization event, certain circuits may take longer to restore if there is a need for repair, inability to access infrastructure, etc. This may prolong power de-energization for some customers. Accordingly, subparagraph (d)(2)(C) specifies that a facility can exclude the emergency engine operating hours during the time power is shut off if the utility distribution company can document that power could not be restored due to repair activities associated with a PSPS event.

Notification Requirements – Subdivision (e)

Paragraph (e)(1) establishes the notification requirements for an owner or operator of an emergency standby engine to be eligible to exclude operating hours due to a PSPS event. If an emergency standby engine exceeds the permitted operating hour limit and the owner or operator elects to exclude engine operation hours during events specified in subparagraphs (d)(2)(A) through (d)(2)(C), the facility must notify the Executive Officer by calling 1-800-CUT-SMOG within 48 hours of knowing about the occurrence. PR 118.1 requires a one-time notification for the calendar year for the first time the owner or operator is aware of the engine exceeding the operating hour limits regardless of the type of engine operating hours that caused the exceedance. If the use of an emergency standby engine exceeds 200 hours per year after excluding all eligible hours allowed under PR 118.1, the owner or operator is in violation of the annual 200-hour permit limit, and the facility can seek a variance from the South Coast AQMD's Hearing Board.

Paragraph (e)(2) specifies the necessary information for the owner or operator to provide during a notification. Specifically, when submitting a notification, the owner or operator will convey the facility name, facility contact name and phone number, facility identification number, emergency engine permit number, and the estimated hours the facility operated the emergency standby engine during events specified in subparagraphs (d)(2)(A) through (d)(2)(C).

Summary Report Requirements – Subdivision (f)

Subdivision (f) establishes requirements to prepare a summary report for an emergency standby engine that exceeds the 200-hour operating limits due to a PSPS event. Specifically, under paragraph (f)(1), facilities that seek to exclude operating hours must maintain a report that will be available no later than January 15 following the calendar year when the permitted operating hour limit was exceeded. The owner or operator is not required to submit the report to the South Coast AQMD; however, the owner or operator must maintain the report on site and provide it to the Executive Officer upon request.

Subparagraphs (f)(1)(A) and (B) specify the information and supporting documentation that must be included in the summary report including the total engine operating hours for the calendar year and the total engine operating hours for the calendar year that are associated with a PSPS event. These can be in the form of engine run logs. However, the records will need to clearly differentiate operating hours associated with PSPS events from another use of the emergency engine. Subparagraph (f)(1)(C) specifies that the summary report is to include the date when the Executive Officer was notified that the emergency standby engine exceeded the permit limits. Subparagraph (f)(1)(D) specifies that the facility will also need to maintain documentation such as notifications or correspondence from the utility distribution company to support the exclusion of eligible operating hours for each PSPS event. Under clause (f)(1)(D)(i), this documentation will include the dates and times for each imminent shutoff notification if operating hours are to be excluded

under the provisions of subparagraph (d)(2)(B). Clauses (f)(1)(D)(ii) and (f)(1)(D)(iii) further require the date and time of the power shut off and restoration to be part of the summary report documentation. The utility distribution company currently provides PSPS related notifications to customers through numerous means, including email notifications and is currently exploring other methods to improve customer notifications of PSPS events. The PR 118.1 summary report can include copies of email notifications or email confirmations from the utility distribution company or copies of information obtained from the utility distribution company that identify the date and time a facility experienced a de-energization due to a PSPS event and when power was restored. If the notifications received from the utility distribution company do not include a clear date and time, facilities may request additional information from the utility distribution company to provide supporting documentation that specifies the date and time of when power was shut off and restored.

Paragraph (f)(2) establishes that facilities maintaining the summary report under paragraph (f)(1) need to maintain the report onsite for a minimum of five years and make the information available to the Executive Officer upon request.

CHAPTER 3 – SUMMARY OF PROPOSED AMENDED RULE 1470

OVERALL APPROACH

PAR 1470 provisions regarding engines with an annual limit of 20 hours for maintenance and testing hours will be available to water and sewage facilities with emergency standby engines located in a very high fire severity zone, provided the equipment is not within a Disadvantaged Community. The proposed amendments would allow these facilities to average the existing annual maintenance and testing limits over three years.

The following is a summary of PAR 1470 provisions.

PROPOSED AMENDED RULE 1470

Definitions – Subdivision (b)

Paragraph (b)(70) - Very High Fire Hazard Severity Zone

The California Department of Forestry and Fire Protection establishes a very high fire hazard severity zone mapping program to identify land with a high fire hazard potential. PAR 1470 includes a reference to this program to narrow the focus of the proposed amendment to engines within those areas. Specifically, paragraph (b)(70) of PAR 1470 defines a very high fire hazard severity zone as a portion of land with a very high degree of fire hazard as established by the California Department of Forestry and Fire Protection according to Public Resources Code 4201-4204 or a local authority under Government Code 51175-51189. A map showing these areas and the jurisdictional boundaries of South Coast AQMD is included in Chapter 1.

Paragraph (b)(71) – Water and Sewage Facility

As previously mentioned, the scope of PAR 1470 is intended to be narrow to address a specific need for water and sewage facilities to prepare for future emergencies. For the purposes of PAR 1470, water and sewage facilities are defined as a public entity that is responsible for water delivery operations, sewage pumping plants, sewage treatment, or water reclamation.

Requirements – Subdivision (c)

Paragraph (c)(3) of existing Rule 1470 establishes operating requirements and emissions standards for in-use emergency standby diesel engines rated greater than 50 bhp. Subclause (d)(3)(C)(i)(I) further specifies a 20 hour per year limit for maintenance and testing of an emergency diesel engine with a diesel PM rate greater than 0.40 g/bhp-hr. The annual 20-hour limit does not apply to engine operation for emergency use or emissions testing.

PAR 1470 would add a reference to an alternative maintenance and testing schedule to subclause (d)(3)(C)(i)(I). PAR 1470 would also add subclause (d)(3)(C)(i)(III) to establish the alternative maintenance and testing schedule provisions for emergency standby engines with a diesel PM rate greater than 0.40 g/bhp-hr operated by a water or sewage facility within a very high fire hazard severity zone, excluding engines located in SB 535 Disadvantaged Communities as identified by the California Office of Environmental Health Hazard Assessment's CalEnviroScreen. Specifically, the proposed amended rule provisions would allow the owner or operator of a water or sewage facility the option to average the annual 20 hours of operation for maintenance and testing purposes over a consecutive three-year rolling period, provided annual maintenance and testing in any individual year does not exceed 30 hours. Averaging maintenance and testing hours

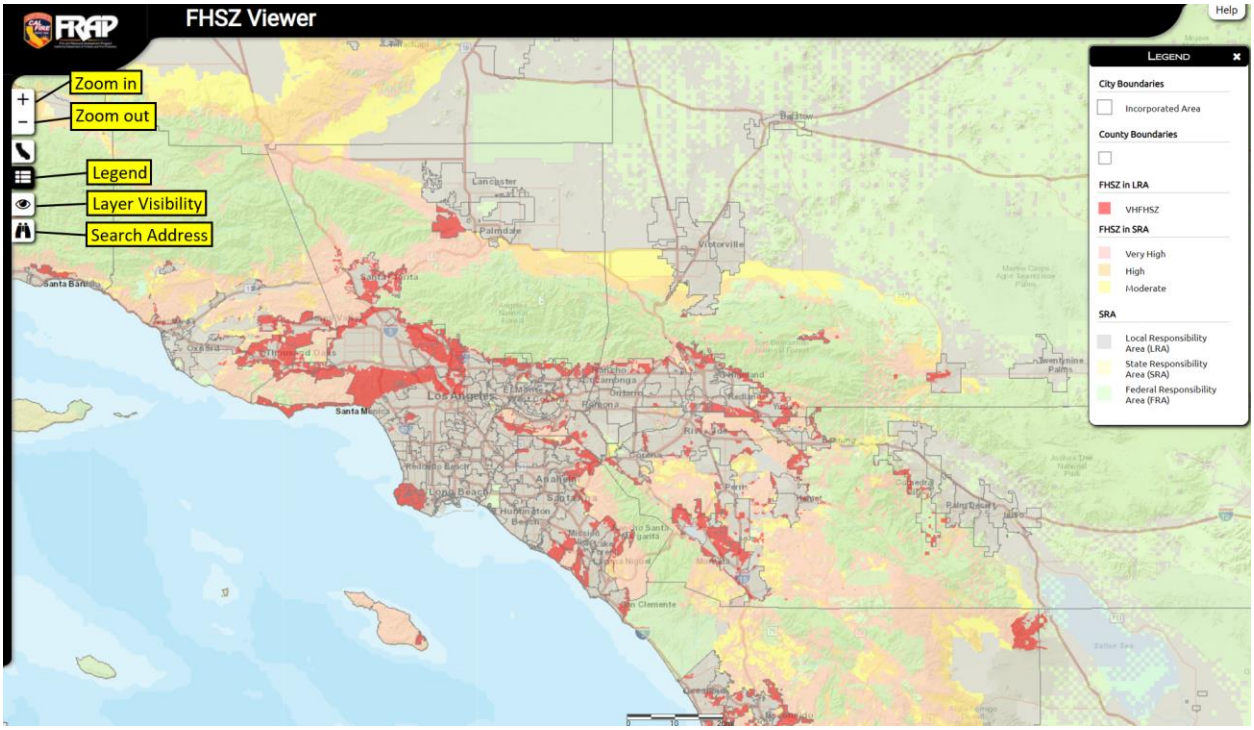
will provide an alternative maintenance and testing schedule that will not increase the total maintenance and testing hours. Water and sewage facilities that elect to use this alternative maintenance and testing schedule would need to modify existing permits to reflect 20 hours averaged over a consecutive 3-year period, with no year to exceed 30 hours for maintenance and testing. In addition, under PAR 1470 subclause (d)(3)(C)(i)(III) the determination of whether an engine is in a very high fire hazard severity zone and a Disadvantaged Community is based on the time that the permit application is deemed complete. Therefore, if the boundaries for either the very high fire hazard severity zone or the SB 535 Disadvantaged Communities were to change, an emergency engine that has already been permitted with the alternative testing and maintenance schedule can continue using the alternative schedule. Subclause (d)(3)(C)(i)(III) of PAR 1470 also specifies that the consecutive three-year rolling period would initially start with the calendar year that the permit modification is approved.

Example of Determining Emergency Engine Applicability

To determine if an emergency engine is located in a very high fire hazard severity zone, the facility can check the equipment location on the fire hazard severity zone map viewer that can be found on the Office of the State Fire Marshall website at: https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/. This website has a separate link to the Fire Hazard Severity Zone Viewer which directs users to the updated fire hazard severity zone map. Figure 3-1 depicts an example of the map interface. On the left-hand side of the map, there are a list of icons to choose from to search for an address.

Figure 3-1

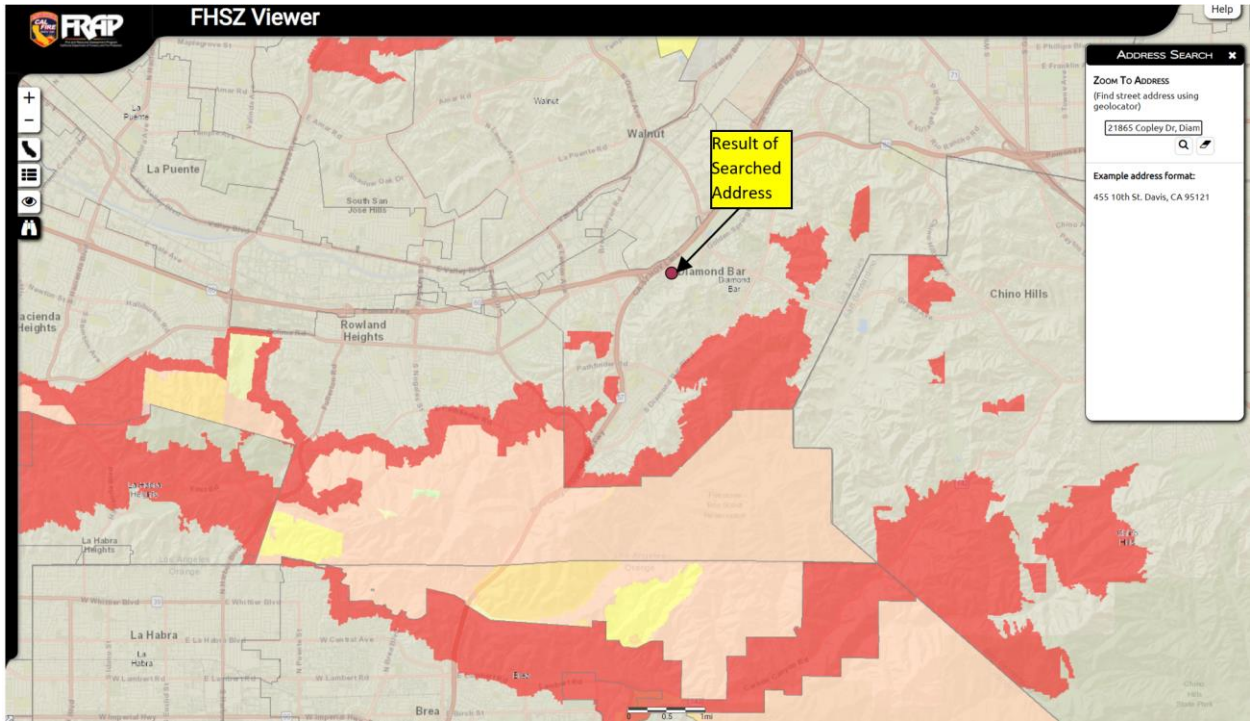
Fire Hazard Severity Zone Viewer Example



As depicted by the legend, areas in red and pink are very high fire hazard severity zones. After searching an address, a dot will depict the location on the map and it can then be determined if the location is within a very high fire hazard severity zone. If the engine location is within an area that is colored red or pink, then the engine is within a very high hazard severity zone. An example of searching an address is depicted in Figure 3-2 below. The address provided in this example is not within a very high fire hazard severity zone.

Figure 3-2

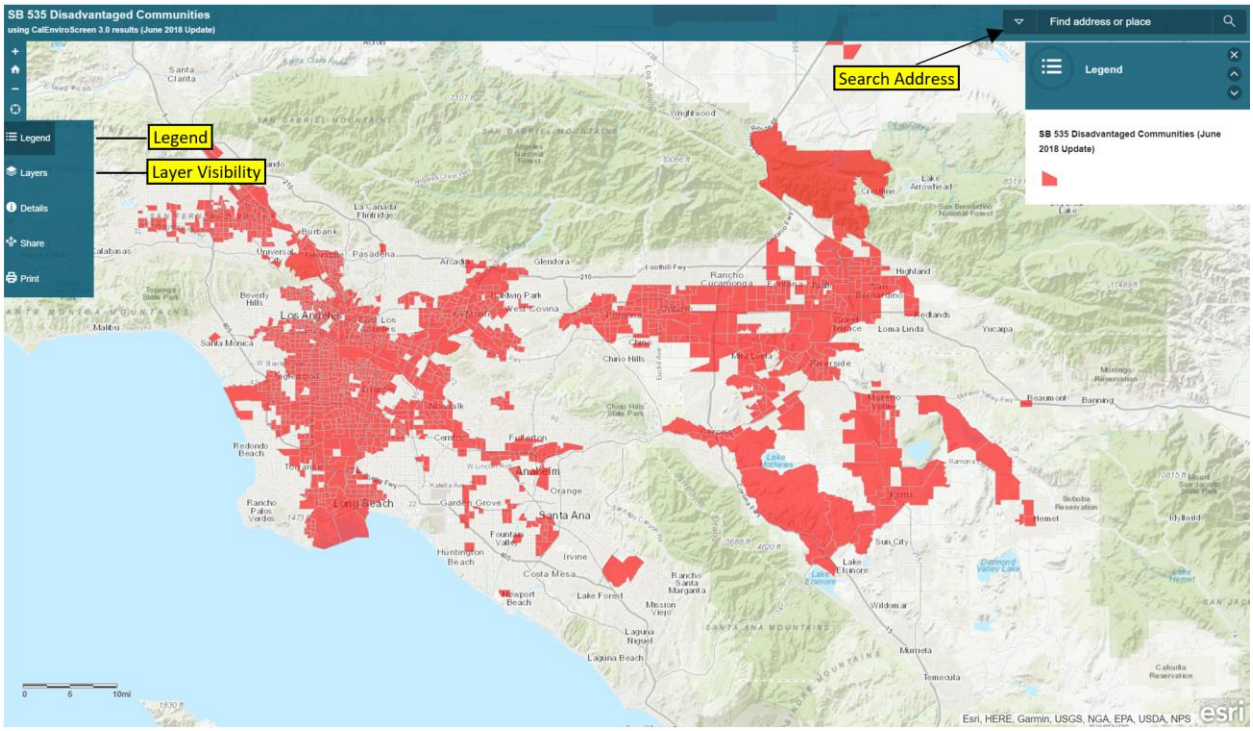
Fire Hazard Severity Zone Viewer Example (Address Search)



To determine if an emergency engine is located in SB 535 Disadvantaged Communities, the facility can check the equipment location using an online map based on CalEnviroScreen which can found on the California Office of Environmental Health Hazard Assessment website at: https://oehha.ca.gov/calenviroscreen/sb535. The webpage has a separate link to the CalEnviroScreen application that will take viewers to the updated SB 535 Disadvantaged Communities boundaries map. Figure 3-3 depicts an example of the map interface. On the left-hand side of the map, there are a list of icons to choose from that provide information about the legend and options are provided to share or print out the map. On the top right-hand corner of the map is a search bar to look up an address.

Figure 3-3

CalEnviroScreen SB 535 Disadvantaged Communities Map Example

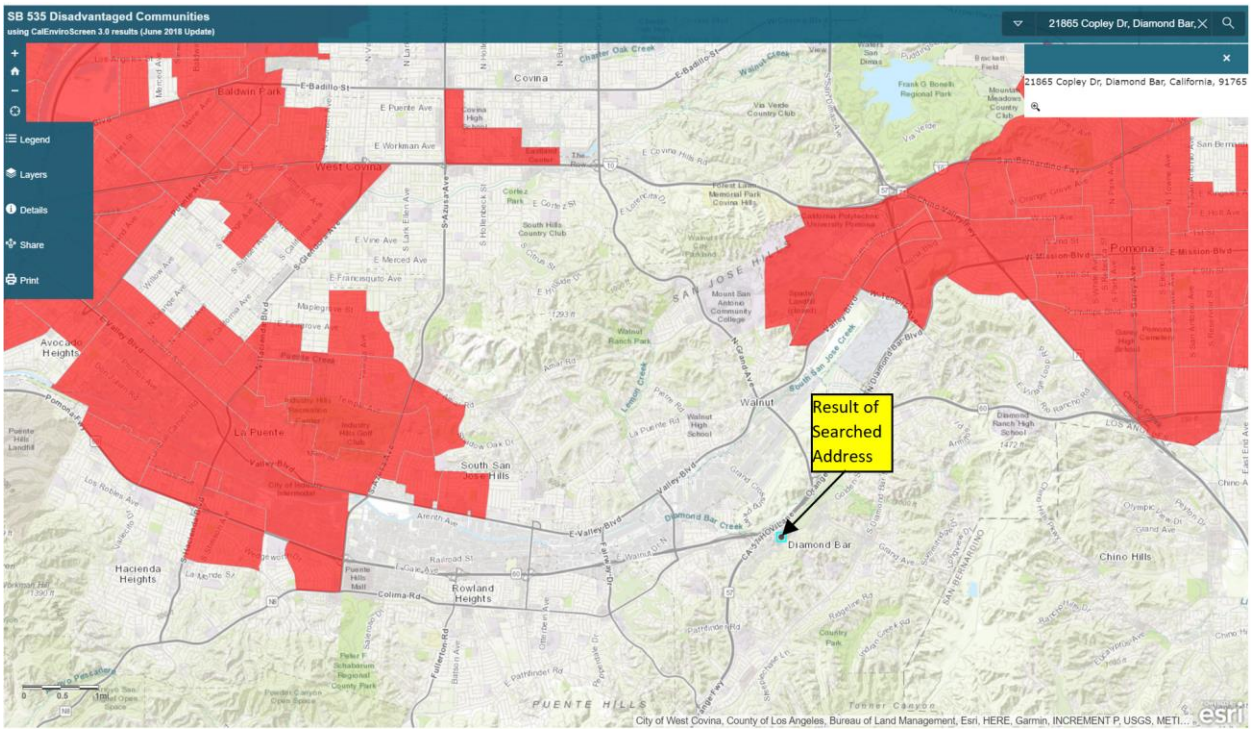


As depicted by the legend, areas in red are SB 535 Disadvantaged Communities. After searching an address, a dot will depict the location on the map and it can then be determined if the location is within a disadvantaged community. If the engine location is within an area that is colored red, then the engine is within a disadvantaged community. An example of searching an address is depicted in

Figure 3-4 below. The address provided in this example is not located within a disadvantaged community.

Figure 3-4

CalEnviroScreen SB 535 Disadvantaged Communities Map Example (Address Search)



.

CHAPTER 4 – IMPACT ASSESSMENT

AFFECTED SOURCES

PR 118.1

PR 118.1 will apply to critical service facilities which are defined as facilities that include essential public services as defined under Rule 1302, sewage pumping plants, recycled water[12] pumping plants, natural gas delivery facilities, health facilities as defined in Section 1250 of the California Health and Safety Code, and facilities used exclusively for telecommunications, including radio and cell towers. However, the number of future PSPS events and the facilities that may exceed emergency engine permit operating limits due to PSPS events is unknown. For reference, based on a review of 2020 South Coast AQMD Hearing Board activity, there were three cases in which a petitioner submitted a variance request for an emergency standby engine that exceeded the 200-hour permit conditions due to power outages associated with a PSPS event. Two of the variance requests were for single engines, and one variance was for two engines operating at a facility. All three petitioners were critical service facilities as defined in PR 118.1, and each engine was used to provide emergency standby power for a communications tower.

PAR 1470

PAR 1470 allows an alternative testing and maintenance schedule for engines with a 20-hour limitation for water and sewage facilities with engines located in a very high fire severity zone. Based on a review of South Coast AQMD permit data, it is estimated that there are 359 engines at water and sewage facilities with a 20-hour limitation. Of the 359 engines, 94 of these engines are in a very high fire hazard severity zone. Based on consultation with the representatives from the Southern California Alliance of Publicly Owned Treatment Works (SCAP) and the California Municipal Utilities Association (CMUA) which represent many water and sewage facilities, approximately two facilities representing less than 15 engines are expected to utilize the provision.

EMISSIONS IMPACT

PR 118.1

During PSPS events, critical service facilities may need to operate engines despite exceeding the 200-hour limit to provide the public continuous services and protect public health and safety. As previously mentioned, the future number of PSPS events and the facilities that may exceed emergency engine permit limitations is unknown; however, a review of South Coast AQMD Hearing Board cases related to PSPS events in 2020 can provide information on emergency engine emissions.

In 2020, three facilities (Facility A, Facility B, and Facility C) filed for variances due to emergency standby engines exceeding the 200-hour permit condition because of power outages from a PSPS event. All the engines were diesel-fueled, except for Facility B that operated a propane engine. Table 4-1 summarizes hourly emission factors for the engines associated with each of the three Hearing Board cases.

The operation of emergency standby engines during PSPS events at critical service facilities is necessary to protect public health and safety. PR 118.1 does not increase emergency standby

[12] Recycled water definition included in Title 22, Section 60304 of the California Code of Regulations

engine operation and would allow the exclusion of operating hours associated with PSPS events from counting towards the current South Coast AQMD permit limitations.

Table 4-1

Summary Table of Engine Emission Factors From South Coast AQMD Hearing Board Cases

Facility	Engine HP	Emission Factors (lb/hr)				
		CO	NOx	PM10	RHC	SOx
Facility A	80	0.19	0.51	0.03	0.03	0.001
Facility B	74	0.009	0.01	Negligible	0.025	0.026
Facility C	75	0.05	0.91	0.05	0.17	0.03
Facility C	102	0.255	1.173	0.084	0.08	0.018

PAR 1470

PAR 1470 will allow fluctuations in annual maintenance and testing hours but does not increase the annual average or total operating hours during the three years. Engine emissions and the estimated cancer risk for diesel particulates are based on 25 years for worker receptors and 30 years for residential and sensitive receptors. By maintaining the same total amount of permitted maintenance and testing hours over three years, the cancer risk for PAR 1470 will remain the same as Rule 1470 and the state ATCM. Since the proposal allows up to 30 hours in one year, to be conservative, PAR 1470 prohibits use of the alternative maintenance and testing schedule for engines located in SB 535 Disadvantaged Communities.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

Pursuant to California Environmental Quality Act (CEQA) Guidelines Sections 15002(k) and 15061, the proposed project is exempt from CEQA pursuant to CEQA Guidelines Sections 15269(c) and 15061 (b)(3). A Notice of Exemption will be prepared pursuant to CEQA Guidelines Section 15062, and if the proposed project is approved, the Notice of Exemption will be filed for posting with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino Counties. The Notice of Exemption will also be electronically filed with the State Clearinghouse of the Governor's Office of Planning and Research to be posted on their CEQAnet Web Portal, which may be accessed via the following weblink: https://ceqanet.opr.ca.gov/search/recent. In addition, the Notice of Exemption will be electronically posted on the South Coast AQMD's webpage which can be accessed via the following weblink: http://www.aqmd.gov/nav/about/public-notices/ceqa-notices/notices-of-exemption/noe---year-2021.

SOCIOECONOMIC IMPACT ASSESSMENT

PR 118.1 and PAR 1470 do not impose any additional requirements and will have no adverse socioeconomic impacts.

DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727

Requirements to Make Findings

California Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the South Coast AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the staff report.

Necessity

PR 118.1 is needed to provide critical service facilities with an emergency standby engine that exceeds the annual operating limit due to PSPS events another option for regulatory certainty and relief other than petitioning the South Coast AQMD Hearing Board. Rule 118 will not provide relief for engines operating during a PSPS event since PSPS events are preventative measures and not associated with a state of emergency. PAR 1470 amendments are needed to provide water or sewage facilities with engines located in a very high fire hazard severity zone an alternative maintenance and testing schedule to conduct more rigorous testing to ensure emergency engine reliability.

Authority

The South Coast AQMD Governing Board has authority to adopt PR 118.1 and amend PAR 1470 pursuant to the California Health and Safety Code Sections 39002, 39666, 40000, 40001, 40702, 40725 through 40728.

Clarity

PR 118.1 and PAR 1470 are written or displayed so that its meaning can be easily understood by the persons directly affected by it.

Consistency

PR 118.1 and PAR 1470 are in harmony with and not in conflict with or contradictory to, existing statutes, court decisions or state or federal regulations.

Non-Duplication

PR 118.1 and PAR 1470 will not impose the same requirements as or in conflict with any existing state or federal regulations. The proposed amended rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the South Coast AQMD.

Reference

By adopting PR 118.1 and PAR 1470, the South Coast AQMD Governing Board will be implementing, interpreting or making specific the provisions of the California Health and Safety code, 40001 (non-vehicular air pollution) and 40702 (adopt regulations & execute duties).

COMPARATIVE ANALYSIS

California Health and Safety Code Section 40727.2 (g) for comparative analysis is applicable when the proposed amended rules or regulations impose, or have the potential to impose, a new emissions limit or standard, or increased monitoring, recordkeeping, or reporting requirements. In this case, a comparative analysis is not required because PR 118.1 and PAR 1470 do not impose such requirements.

APPENDIX A – RESPONSE TO COMMENTS

PUBLIC COMMENTS AND RESPONSES

A public workshop was held for PR 118.1/PAR 1470 on July 29, 2021. The following section is a summary of individual oral comments, followed by South Coast AQMD staff responses. In addition to the oral comments at the public workshop, staff received written comment letters specific to PR 118.1/PAR 1470 during a comment period that closed on August 6, 2021. Copies of comment letters received and South Coast AQMD staff responses are provided following the below responses to individual comments.

Individual Comments and Responses

PR 118.1

Critical Service Facility Definition

Comment 1: Our agency runs several senior citizen residential facilities for low-income households. These facilities have backup generators to ensure operation of key building infrastructure during power outages. Ability to provide facility power is important to ensure the health and safety of facility residents. Suggestion is to include federally funded senior citizen residential care centers into the PR 118.1 definition of a critical service facility.

Staff Response: The importance of providing continuous electrical power at senior centers as well as other facilities is acknowledged. PR 118.1 does not restrict use of emergency standby engines. The intent of PR 118.1 is to allow facilities that provide the public with critical services the opportunity to exclude emergency standby engine operating hours during PSPS events. Other facilities can seek a variance from the South Coast AQMD Hearing Board if operating hours for an emergency standby engine approach or exceed permit limits.

Comment 2: Universities have emergency standby generators that can provide electricity to campus facilities if the power is shut off. Some of the campus facilities need to have constant power for emergency services or for ongoing research activities. Are universities included in the critical service facility definition?

Staff Response: While the critical service facility definition includes schools, the definition of a school includes only K-12 and not higher education. Therefore, universities are not included in the critical service facility definition. As with other facilities, universities can seek a variance from the South Coast AQMD Hearing Board if operating hours for an emergency standby engine approach or exceed permit limits.

Applicability to Power Generation

Comment 3: Does PR 118.1 include any provisions related to the generation of electrical power for neighbors or off-site use during emergencies or when there are rolling black outs? If so, what kinds of supporting documentation is required when generators are used for power generation?

Staff Response: PR 118.1 provisions are specific to emergency engine operating hours due to Public Safety Power Shutoff (PSPS) events which are implemented by utility distribution companies as a preventative measure during adverse weather conditions. Use of emergency standby engines during electrical outages due to fluctuations in power capacity or to supplement grid power are not applicable to PR 118.1 provisions.

PAR 1470

Applicability

Comment 4: Do the PAR 1470 provisions affect existing maintenance and testing provisions included in existing permits?

Staff Response: No. As described in the preliminary draft staff report, a permit modification would be required before a water and sewer facility could implement the PAR 1470 alternative maintenance and testing schedule. Facilities would remain subject to existing permit conditions unless permit modifications are approved.

Written Comments

Letters Received

1. California Municipal Utilities/Association of California Water Agencies (07/29/21)
2. California State University (07/29/21)
3. California State University Fullerton (07/30/21)
4. Hospital Association of Southern California (07/26/21)
5. Las Virgenes Municipal Water District (7/21/21)
6. Southern California Gas Company (7/23/21)

California Municipal Utilities Association/ Association of California Water Agencies Email Correspondence, submitted 07/29/2

July 29, 2021

Ms. Susan Nakamura, Assistant Deputy Executive Officer
Planning, Rule Development and Area Sources
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765
e-mail: SNakamura@aqmd.gov

RE: Support of Proposed Amendment to Rule 1470 and Proposed New Rule 118.1

Dear Ms. Nakamura:

The California Municipal Utilities Association (CMUA) and the Association of California Water Agencies (ACWA) appreciate the opportunity to comment on the South Coast Air Quality Management District's (SCAQMD) proposed rulemaking efforts to incorporate generator provisions for Public Safety Power Shutoff (PSPS) events. CMUA represents over 50 public water agencies that serve water to 75 percent of California, including several agencies located in SCAQMD's jurisdiction. ACWA represents more than 460 public water agencies that collectively deliver approximately 90 percent of the water in California for domestic, agricultural, and industrial uses.

CMUA and ACWA are grateful that SCAQMD has actively included our input in the process to amend Rule 1470 and develop proposed new Rule 118.1. Our members value the transparency that SCAQMD exemplified during this process.

1-1

We write to express support for the proposed amendment to Rule 1470 and proposed new Rule 118.1. The proposal provides additional flexibility for the essential operation, maintenance, and testing of emergency backup generators, while ensuring the protection of the region's air resources. We additionally offer a few suggestions that could help clarify the scope of the proposed amended rule and new rule.

Rule 1470 (Proposed Amended Rule) – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines

The proposed amendment would provide much needed flexibility for the maintenance and testing of the limited number of generators that are currently limited to no more than 20 hours per year of runtime for these purposes. The amended rule would allow run-time to be averaged over a three-year period with no more than 30 hours in any single year and would not result in

the generation of more particulate matter over a three-year period or create any greater health risk as the maximum average runtime would still equate to the current 20 hours annually. The change would allow more rigorous maintenance and testing to be performed every two to three years without undue concern for exceeding the current 20-hour limitation. This rule change is critical to ensure the reliability of emergency backup generators when needed to respond to emergencies or PSPS events.

We offer one suggestion regarding proposed amended Rule 1470.

Revise Definition of Very High Fire Hazard Severity Zone

As written, the definition of "very high fire hazard severity zone" may be overly restrictive. In some jurisdictions, the State of California recommends areas to designate as very high fire hazard severity zones, but ultimately these zones are established by the local agency by local ordinance. The Government Code, referenced in the definition, refers to establishing zones in "local responsibility areas." It would be prudent to ensure any local changes are addressed in the definition. CMUA proposes SCAQMD revise the definition of Very High Fire Hazard Severity Zone to add the underlined as follows:

1-2

> VERY HIGH FIRE HAZARD SEVERITY ZONE means land designated by the California Department of Forestry and Fire Protection or a Local Agency pursuant to Public Resources Code 4201- 4204 and/or Government Code 51175-51189 as an area with a very high degree of fire hazard.

Rule 118.1 (Proposed Rule) – Public Safety Provisions for Stationary Emergency Standby Engines

The new rule would allow operators of emergency standby engines located at critical service facilities to exceed the current 200-hour annual limitation if the exceedance is due to a PSPS event. The increasing number and duration of PSPS events and other emergencies that result in loss of power from the electrical grid continues to be a major concern for operators of critical service facilities as defined in the proposed rule. The provisions would allow an owner or operator of an emergency standby engine at a critical service facility to not count the operating hours of a qualifying event towards the 200-hour calendar year limitation specified in Rule 1110.2 provided timely notification is provided and records are maintained. The one-time notification and annual recordkeeping requirements for an exceedance represent a reasonable compliance burden to ensure the agency is aware of these events while maintaining a mechanism to enforce the provisions of the rule. Also, the addition of up to 3-hours for each PSPS imminent shutoff notice will support the smooth transition of power before and after each event.

CMUA offers a few suggestions to proposed Rule 118.1 to facilitate understanding by facilities that would avail themselves of the new rule.

Clarify Scope of Utility Distribution Company

The current wording in the definitions for "PSPS event" and "utility distribution company" appear to apply only to PSPS events by investor-owned utilities (IOUs). Utility distribution companies not under the purview of the California Public Utilities Commission, such as publicly owned electric utilities (POUs), have the capability to initiate PSPS events. To ensure the intent of proposed Rule 118.1 is captured, we recommend broadening these two definitions to include POUs and other utility distribution companies that service SCAQMD jurisdiction.

1-3

Add a Definition for "Imminent Shutoff Notification"

The term "imminent shutoff notification" is used throughout proposed Rule 118.1 without being defined. SCAQMD has defined the term in the various workshop meetings it has held since December 2020 as a notification from a utility distribution company about a potential power shutoff, but that power may not be shutoff. SCAQMD offers the same definition in its Draft Staff Report. The requirements that are linked to imminent shutoff notifications, such as the three-hour buffer in subsection (d)(2)(B) and the summary report content in subsection (f)(1)(D)(i), would be more explicit if proposed Rule 118.1 included a definition for "imminent shutoff notification."

1-4

Clarify the Scope of Excluded Hours and When Notification is Required

We understand the intent of proposed Rule 118.1 is to allow applicable facilities to exclude operating hours that occurred during a PSPS event from the 200-hour annual operating limit. Subsection (e) related to Notification Requirements requires owners and operators of emergency standby engines to notify the Executive Officer when the standby engine exceeds the 200-hour annual operating limit. SCAQMD clarified our understanding of these subsections during a call on July 22, 2021.

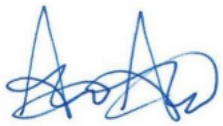
However, to facilitate greater understanding we suggest that SCAQMD clarify some language in subsections (d) and (e). First, we suggest that SCAQMD include language in subsection (d)(2)(B) to affirm that a total of 3 hours for each imminent shutoff notification may be used before and/or after a PSPS event.

1-5

Next, we suggest clarifying that the notification required in subsection (e) is required when the 200-hours are met but any hours attributable to a PSPS event may be excluded from the 200 hours. Alternatively, SCAQMD may clarify when notification is required and how to exclude PSPS hours by revising language in the preliminary Draft Staff Report on pages 16-17. Specifically, the word "occurrence" on page 17 of the draft Staff Report could be clarified to refer to when the facility exceeds the annual 200-hour operating limit. As written, "occurrence" could indicate a PSPS event. Additionally, SCAQMD should suggest that operators keep a log to indicate total standby engine operating hours and operating hours during PSPS events to comply with the notification and recordkeeping provisions of proposed Rule 118.1. 1-6

We appreciate the support of you and your staff to develop the proposed rule changes and to obtain concurrence from the California Air Resources Board on the proposed amendment for Rule 1470. Please do not hesitate to contact me at aabergel@cmua.org if you have any questions about our comments.

Sincerely,



Andrea Abergel
Senior Regulatory Advocate
California Municipal Utilities Association

Nicholas Blair
Regulatory Advocate
Association of California Water Agencies

cc: Tiffani To, SCAQMD - TTo@aqmd.gov
Michael Laybourn, SCAQMD - MLaybourn@aqmd.gov
Jillian Wong, SCAQMD – Jwong@aqmd.com
Danielle Blacet-Hyden, CMUA – dblacet@cmua.org

Responses to California Municipal Utilities Association/Association of California Water Agencies Email Correspondence, submitted 07/29/21

1-1 Response: Supportive comment noted.

1-2 Response: South Coast AQMD acknowledges the role of local agencies in the establishment of very high fire hazard severity zones. The PAR 1470 definition for a very high fire hazard severity zone has been modified as follows:

VERY HIGH FIRE HAZARD SEVERITY ZONE means land designated by the California Department of Forestry and Fire Protection pursuant to Public Resources Code 4201- 4204 or a Local Agency pursuant to Government Code 51175-51189 as an area with a very high degree of fire hazard.

1-3 Response: Staff concurs that publicly owned utility customers should be allowed the same provisions as those that receive electrical power from investor-owned utilities, such as Southern California Edison. Accordingly, the PR 118.1 utility distribution company definition has been modified as follows:

UTILITY DISTRIBUTION COMPANY means one of several organizations that manage energy transmission and distribution within the South Coast AQMD jurisdiction for electric power primarily in the grid system overseen by the California Public Utilities Commission or by a special-purpose district or other jurisdiction, including municipal districts or municipalities.

1-4 Response: PR 118.1 includes provisions related to an imminent shutoff notification and has added the following definition to improve rule clarity.

IMMINENT SHUTOFF NOTIFICATION means a notification by a Utility Distribution Company sent to entities in a specific geographic area of an anticipated power shutoff due to a Public Safety Power Shutoff event.

1-5 Response: Paragraph (e)(2) establishes the three conditions where emergency standby engine operating hours can be excluded under PR 118.1. Subparagraph (d)(2)(B) provisions allow for the exclusion of emergency engine operating hours after receipt of an imminent shutoff notification. The staff report includes additional language to clarify that the hours excluded as a result of receiving an imminent shutoff notification (up to three hours) can applied to engine operating hours before and after a PSPS event.

1-6 Response: The intent of subdivision (e) is to establish the notification procedures for a critical service facility that seeks to exclude emergency standby engine operating hours because of a PSPS event. Paragraph (d)(1) specifies a facility must notify the Executive Officer within 48 hours of knowing that an emergency standby engine exceeded the annual operating limit specified in a South Coast AQMD permit. These provisions are not specific to the reason for operating the engine (e.g., testing, maintenance, emergency, etc.).

California State University Email Correspondence, submitted 07/29/21

From: Wallace, Tamara <twallace@calstate.edu>
Sent on: Thursday, July 29, 2021 10:43:10 PM
To: Tiffani To <TTo@aqmd.gov>; Michael Laybourn <MLaybourn@aqmd.gov>; Susan Nakamura <SNakamura@aqmd.gov>; Kendra Reif <KReif@aqmd.gov>; Barbara Radlein <bradlein@aqmd.gov>
CC: Wong, Rachel <rwong@calstate.edu>; Clemson, Michael <mclemson@calstate.edu>; Lane, Renz <rlane@calstate.edu>; Collins-Doehne, Anne <acollins-doehne@calstate.edu>
Subject: Cal State Univ, SCAQMD Proposed Rule 118.1 clarifications

Hi SCAQMD Folks,

Thank you for facilitating today's workshop regarding the proposed rule 118.1, additional information on SCAQMD webpage, for stationary emergency standby engines. I'm reaching out on behalf of the CSU campuses in the SCAQMD territory.

On the workshop call today, Rachel Wong (Associate Univ Engineer, CSU Office of Chancellor) raised a few questions that we would like to further clarify with your team:

1. The definition of "schools:"
    a. Do public higher education, and specifically California State University campuses, fall within the scope of this proposed rule change? 2-1
2. 200 hour maximum for each engine p/year:
    a. (question raised in our team's debrief conversation) Are Demand Response events included in the exemption considerations as it will for PSPS? 2-2

- Would you be available for a call with some of our folks from our systemwide office, to help clarify the proposed changes to better understand impacts to CSU?

Thank you for your guidance and collaboration as a partner agency,

Tamara Wallace
LEED GA, Certified Change Management Professional (CCMP)
Interim Chief, Energy, Sustainability, & Transportation
Capital Planning, Design, & Construction
401 Golden Shore, Long Beach, CA 90802
P: 562-951-4296 | E: twallace@calstate.edu

CSU The California State University
OFFICE OF THE CHANCELLOR

Responses to California State University Email Correspondence, submitted 07/29/21

2-1 Response: For PR 118.1, the definition of a critical service facility incorporates essential public services from South Coast AQMD Rule 1302. Schools are included in the essential public services definition and have also been included in the critical service facility definition. However, the definition of schools only includes K-12 and does not include higher education. Therefore, public higher education facilities do not fall within the scope of PR 118.1.

2-2 Response: The purpose of PR 118.1 is to allow critical service facilities the option to exclude emergency engine operating hours during PSPS events. Demand Response events are a different program and the associated emergency standby engine operating hours are not within the scope of PR 118.1.

California State University Fullerton Email Correspondence, submitted 07/30/21

From: Denman, Robert <rdenman@fullerton.edu>
Sent on: Friday, July 30, 2021 8:22:03 PM
To: Tiffani To <TTo@aqmd.gov>
CC: Susan Nakamura <SNakamura@aqmd.gov>; Michael Laybourn <MLaybourn@aqmd.gov>
Subject: Rule 118.1 Critical Service Facilities Clarification

Hi Tiffani,

Per yesterday's Rule 118.1 Working Group Meeting, following up to see if the air district has made a final determination regarding universities being classified as a critical/essential public service facility. We recommend this classification to ensure uninterrupted power supply for the following:

- University Police Department
- Emergency Operations Center
- Research and Experiments
- Potential for university to be utilized as a community shelter
- Building fire suppression (e.g., sprinkler systems, smoke detectors)

3-1

Best regards,

Robert Denman, REHS
Environmental Compliance Specialist/BSO
Environmental Health and Safety
California State University, Fullerton
Office: (657) 278-8118
Cell: (657) 253-2345
rdenman@fullerton.edu

Responses to California State University Fullerton Email Correspondence, submitted 07/30/21

3-1 Response: As described in response to comment 2-1, higher education is not included in the definition of school. Of the listed operations, the university police department will have the option to exclude emergency engine operating hours during PSPS events as police are included in the definition of critical service facility. It is acknowledged that usage of an emergency engine is needed to provide uninterrupted power for operations on the university campus. PR 118.1 does not restrict emergency engine use and other university campus facilities have the option to file for a variance with the South Coast AQMD Hearing Board.

Hospital Association of Southern California Email Correspondence, submitted (07/26/21)

From: Jaime Garcia <jgarcia@hasc.org>
Sent on: Monday, July 26, 2021 12:32:32 PM
To: Susan Nakamura <SNakamura@aqmd.gov>
CC: Tiffani To <TTo@aqmd.gov>
Subject: Emergency Generator - 200 hours limit

Hi Susan
I appreciate the work you and the AQMD staff have invested in the stakeholder meetings. During the previous call you mentioned hospitals are not approaching the 200-hour limit on generator use (emergency use, maintenance and testing). What are hospitals averaging in terms of this limit? 4-1

We are concerned that as the fire season grows in duration and frequency/intensity that hospitals will hit the limit sooner rather than later. Increased generator use due to PSPS events will require more maintenance and testing time. Therefore, can this cap be increased for this purpose? 4-2

JAIME GARCIA, MPA

Regional Vice President -
Los Angeles Region
Hospital Association of Southern CA

Responses to Hospital Association of Southern California Email Correspondence, submitted (07/26/21)

4-1 Response: A review of 2020 South Coast AQMD Hearing Board activity was conducted as part of the PR 118.1 Rule development process. Staff is not aware of any hospital facilities that have sought a variance for a stationary emergency standby engine exceeding a permit operating limit.

4-2 Response: It is acknowledged that there could be an increase in PSPS events in the future and PR 118.1 is intended to allow hospitals as well as other critical service facilities the opportunity to exclude emergency stand by engine operating hours due to PSPS events. Current Rule 1470 provisions allow health facilities an additional ten hours for maintenance and testing purposes for diesel-fueled compression ignition engines (>50 bhp) that emit diesel PM at a rate greater than 0.40 g/bhp-hr.

Las Virgenes Municipal Water District Email Correspondence, Submitted (7/21/21)

From: Pedersen, David <DPedersen@lvmwd.com>
Sent on: Wednesday, July 21, 2021 6:06:16 PM
To: Susan Nakamura <SNakamura@aqmd.gov>; Tiffani To <TTo@aqmd.gov>; Michael Laybourn <MLaybourn@aqmd.gov>
Subject: RE: South Coast AQMD Proposed Rule 118.1 & Proposed Amended Rule 1470 - Notice of Public Workshop

Hi Susan/Tiffani/Michael,

Thanks for the call last Tuesday. In reviewing the documents for the public workshop, it appears that the "three hour provision" was added back for an imminent shutoff notification (when a shutoff does not actually occur) but not for each PSPS event to support a smooth transition to and from grid power. Could you please take a look at that element of the "three hour provision"? Thank you. 5-1

-Dave

Responses to Las Virgenes Municipal Water District Email Correspondence, Submitted (7/21/21)

5-1 Response: As described in response to comment 1-4, the PR 118.1 definition of an imminent shutoff notification is based on an anticipated power shutoff due to a PSPS event. It is acknowledged that issuance of imminent shutoff notification does not indicate the power will be shut off and that critical service facilities may still need to operate emergency standby engines in preparation for a possible power shut off. PR 118.1 allows the exclusion of up to three operating hours after receipt of an imminent shutoff notification, regardless of if the power was shut off.

Southern California Gas Company Email Correspondence, Submitted (7/23/21)

From: McGivney, Daniel <DMcGivney@socalgas.com>
Sent on: Friday, July 23, 2021 10:30:37 PM
To: Tiffani To <TTo@aqmd.gov>
CC: Michael Laybourn <MLaybourn@aqmd.gov>; Nolan, Hadley K <HNolan@socalgas.com>
Subject: SoCalGas Proposal regarding "Natural Gas Delivery Facilities"

Tiffani, below is language SoCalGas has come up with to identify the types of facilities that would be covered un the PR 118.1's "Natural Gas Delivery Facilities" Term. We are suggesting that this language, or language similar to this, be included in the Staff Report discussion of "Critical Facility" that begins at the bottom of page 15 of the staff report (page 19 of the pdf).

> **Natural gas delivery facility** refers to facilities critical to the delivery of natural gas including gas control, call centers/ dispatch operations, gas storage, and pipeline compressor stations.

6-1

Daniel McGivney
Environmental Affairs Program Manager
Southern California Gas Company
951-225-2958
dmcgivney@socalgas.com

Responses to Southern California Gas Company Email Correspondence, Submitted (7/23/21)

6-1 Response: As indicated, the PR 118.1 definition of a critical service facility includes natural gas delivery facilities. The suggestion information has been added to the Draft Staff Report to clarify the specific facilities that are critical to the delivery of natural gas and applicable to PR 118.1 provisions.