



Working Group Meeting #2

Proposed Amended Rule 1110.2 – Emissions From Gaseous- and Liquid-Fueled Engines

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

April 8, 2021, 1:30 p.m.

Join Zoom Meeting

<https://scaqmd.zoom.us/j/94820804121>

Zoom Webinar ID: 948 2080 4121

Teleconference Dial-In: +1 669 900 6833

Agenda

Previous Working Group Meeting Summary

Public Safety Power Shutoff (PSPS) Events

Preliminary Rule Concepts to Address
Emergency Engine Operation Due to PSPS
Events

Proposed Amended Rule 1470 Update

Next Steps

Working Group Meeting #1 Recap

- Presented background information on
 - Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines
 - Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines
- Provided an overview of Public Safety Power Shutoff (PSPS) events
- Discussed South Coast AQMD's Hearing Board purpose and variances issued for stationary emergency standby engines
- Described state ATCM requirements for stationary emergency standby diesel-fueled engines (implemented through Rule 1470)

Working Group Meeting #1 Recap (cont.)

- Discussed two general areas where Rule 1470 is more stringent than state ATCM
 - Annual limits for maintenance and testing hours at health facilities

Engine	Diesel PM Emission Rate (g/bhp-hr)	Rule 1470	State ATCM
In-use	> 0.4 g	30 hours	Up to 40 hours
In-use	>0.15 and \leq 0.4 g	30 hours	Up to 40 hours for health facilities

- PM emission limits for new engines less than 50 meters from a sensitive receptor

Engine Size	Rule 1470	State ATCM
50 < HP < 175	0.15 g/bhp-hr	0.15 g/bhp-hr
175 \leq HP \leq 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

Stakeholder Comments

- **Comment:** Stakeholders requested that in addition to PSPS events, consideration to exempt emergency engine operation hours during wildfires
 - **Response:** Will be discussed under preliminary rule concepts slides
- **Comment:** Request for updated information on 2020 Hearing Board cases for emergency standby engines
 - **Response:** Information on Hearing Board cases provided in upcoming slides
- **Comment:** A water agency also provided a written comment concerning need to operate emergency engines as a result of repair activities following a PSPS event or due to wildfire mitigation strategies
 - **Response:** Will be discussed under PSPS events

Regulatory Overview

- Staff is proposing a new rule Proposed Rule 118.1 (PR 118.1) to address emergency standby engines exceeding the 200 hour operating limit in Rule 1110.2 due to PSPS events
- Proposed Amended Rule 1470 (PAR 1470) will address increased testing and maintenance hours for emergency standby engines
- Staff is working towards a November Public Hearing for both rule projects
 - Moved the Public Hearing from August to November 2021 to allow time to complete CEQA
 - May need to bifurcate the two rule projects if one of the rules needs additional time

PR 118.1

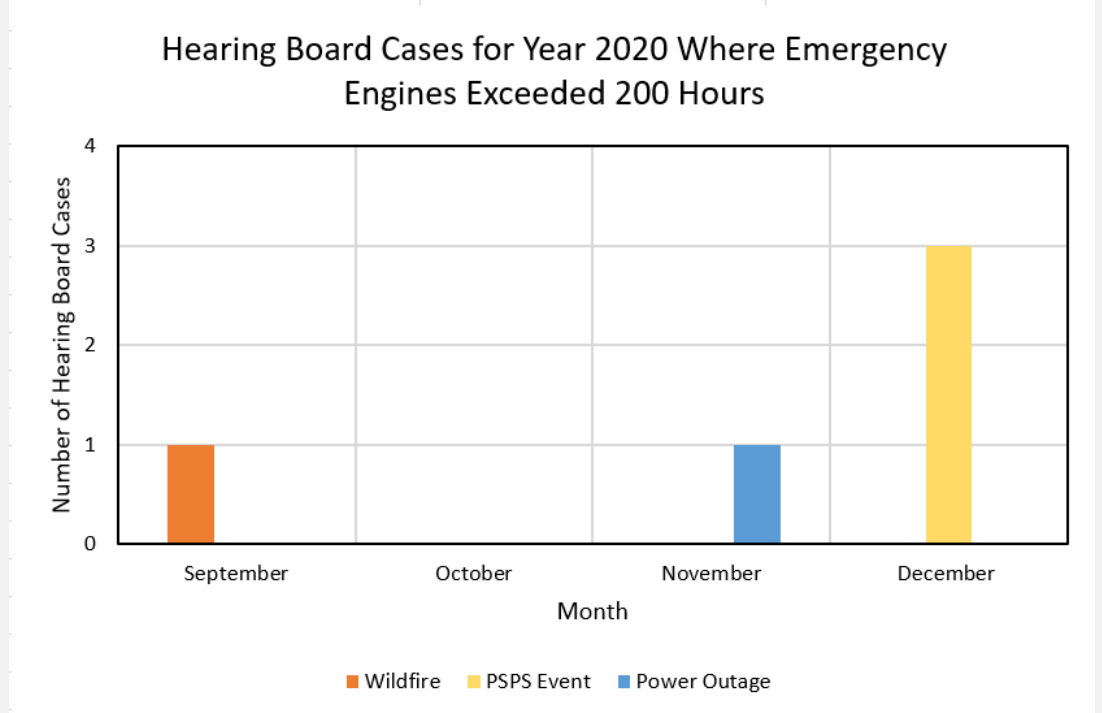
- Use of emergency standby engines during PSPS events
- Rule 1110.2 - limits on operation of emergency standby engines to 200 hours or less per year

PAR 1470

- Increased testing and maintenance hours necessary to ensure engine reliability
- Rule 1470 - limits on operation of emergency standby engines for testing and maintenance

2020 Hearing Board Activity – Rule 1110.2

- For 2020, 5 cases for emergency standby engines were filed with the Hearing Board for exceeding the 200 hour limit
 - 3 PSPS event related cases
 - 1 water district (Case A)
 - 2 emergency communication providers (Cases B and C)
 - 1 Wildfire related case
 - Emergency communication provider/fire station (Case D)
 - 1 Power outage
 - Private data center
- In addition, staff is aware of Notice of Violations (NOV) issued for exceeding the 200 hour limit



Cases	Hours at Variance Submittal	Total Hours
A	~150	356.6
B	Generator #1: 209.5	TBD
	Generator #2: 186	TBD
C	229	356
D	~160	647

Hearing Board Activity – Rule 1470

January 2014 to December 2020

- 1 case filed for an emergency standby engine exceeding the Rule 1470 testing and maintenance hours limit
 - In 2016, a medical device manufacturer was issued a Notice to Comply after a South Coast AQMD inspection identified an exceedance of the 20 hour testing and maintenance hour limit
 - A variance for exceeding the Rule 1470 limit was filed but was dismissed for lack of good cause

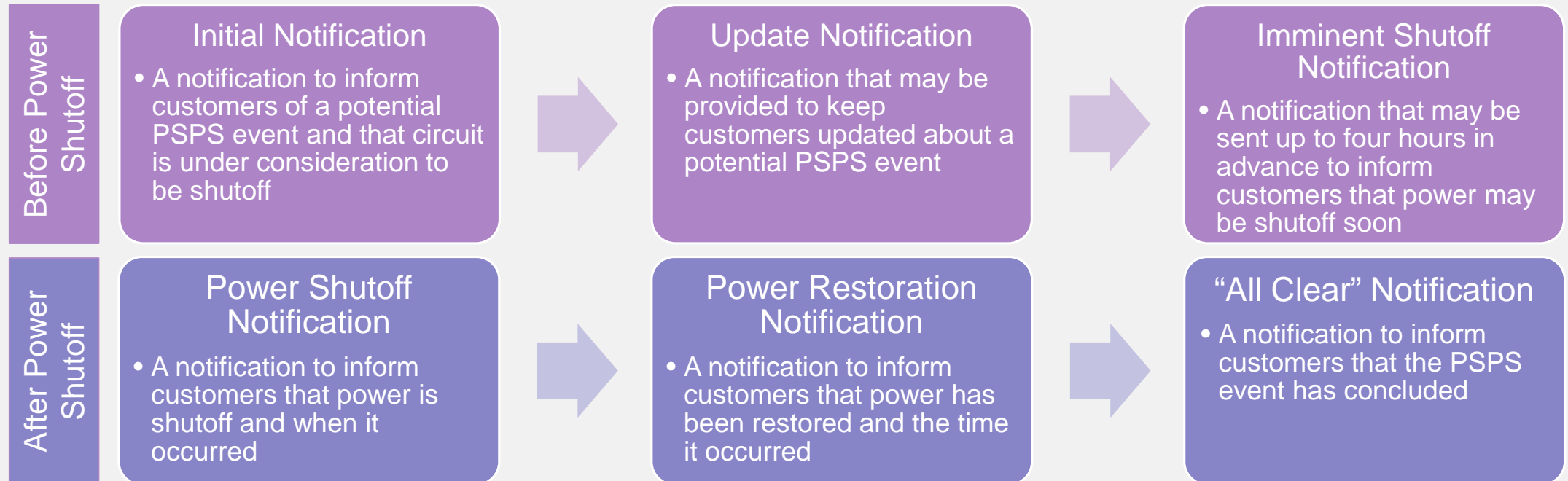
Public Safety Power Shutoff (PSPS) Events

Background for PSPS Events

- Southern California Edison (SCE) is the utility provider for the majority of South Coast AQMD's jurisdiction
- PSPS process used by SCE is summarized in today's meeting
- SCE has a specific process for notifying customers in the event power lines are shutoff and when the power is restored
- Based on discussions with SCE, PSPS events are declared after taking into consideration many factors (fire danger threat level, weather conditions, real-time observations, etc.)

PSPS Process and Notification System

- PSPS process includes monitoring weather conditions and notifying customers
- SCE has two notification procedures for customers before power is shutoff and when power is restored



PSPS – Notifications

- Initial notifications are sent out to inform customers the circuit is under consideration for a shutoff event
 - Initial notification can be sent up to three days before possible event
 - Update notifications may be provided once a day
- Imminent shutoff warning notifications* may be sent up to four hours in advance
 - If weather conditions escalate rapidly, imminent shutoff warning notifications may not be sent out before power is shutoff, but customers will be notified that circuit has been shutoff
- Power shutoff notifications are sent out to inform the customer that the circuit has been shutoff
- Power restoration notifications are sent out to document when power is restored
- An “all-clear” notification is sent out once the circuit is no longer considered for a PSPS event

*Facilities/customers can receive multiple imminent shutoff warnings throughout a potential PSPS event

PSPS – Possible Scenarios

After an imminent shutoff notification is received

If power is not shutoff

- The imminent shutoff warning expires after four hours
- Circuit remains on SCE's monitor list and under consideration for a PSPS
- Another imminent shutoff warning can be received based on weather conditions
- An "all-clear" notification is sent once the circuit is no longer being considered for a PSPS event

If power is shutoff

- Customer receives a power shutoff notification
- Power is restored
- Customer receives notification that power has been restored
- An "all-clear" notification is sent once the circuit is no longer being considered for a PSPS event

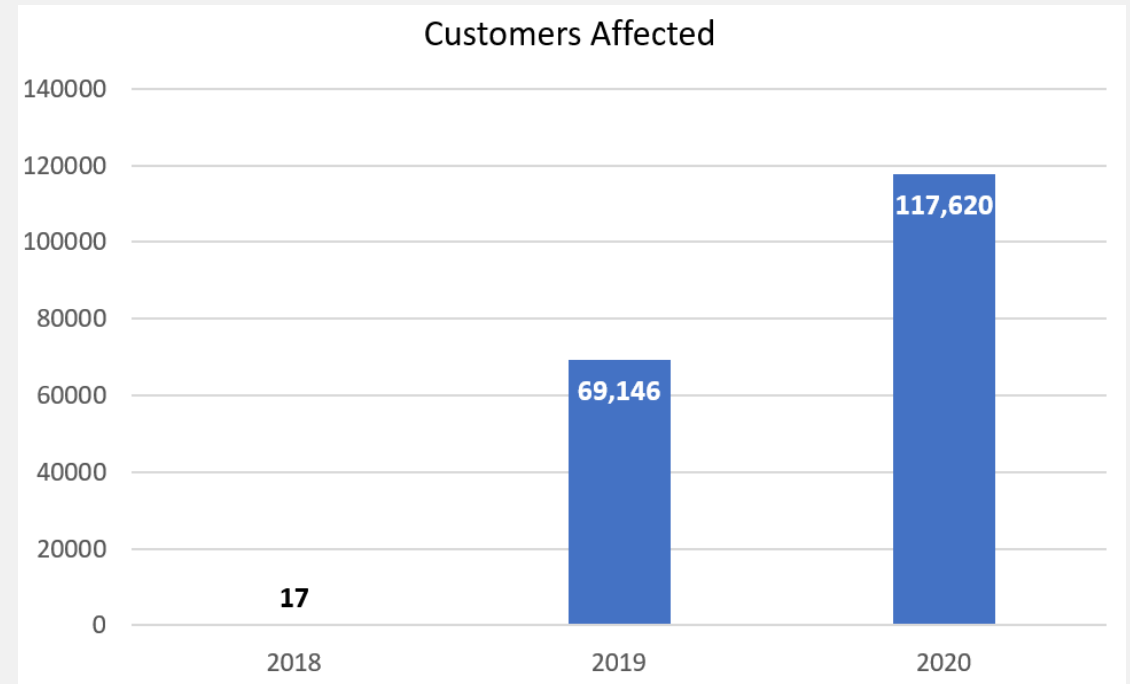
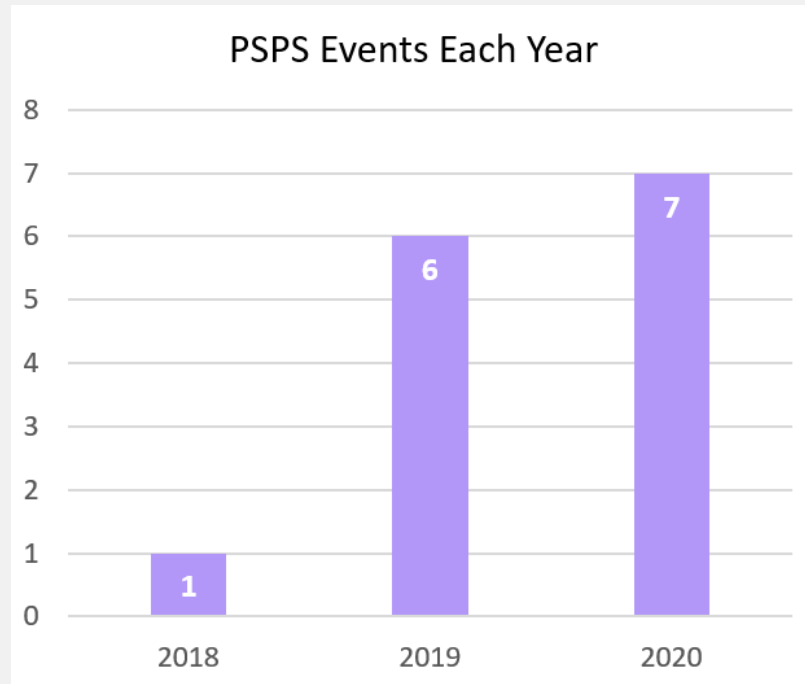
Repairs Associated With a PSPS Event

- A water district informed staff that power may not be restored immediately if SCE needs to make repairs associated with the PSPS event
- According to SCE, power lines are inspected following a PSPS event and prior to being restored
- PSPS event may have ended and an all clear issued however, individual lines may need repairs
- Engines may need to continue running after a PSPS event has ended until power is restored
- Staff will be reaching out to SCE to confirm if these types of activities are tracked and can be verified

PSPS Data

Introduction

- From October 2018 to December 2020, 14 PSPS events occurred within South Coast AQMD jurisdiction
- During a PSPS event, only portions of a circuit may be shutoff
 - Power shutoff hours and customers affected will vary for specific locations within the circuit



2018 – 2019 PSPS Event Data

Year	PSPS Event	Circuits Shutoff ¹	Range of Duration* ¹	Average Duration ¹	Range of Affected Customers* ¹	Total Affected Customers ¹
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

*Data ranges obtained from minimum and maximum data depicted by an individual circuit in each PSPS event

¹Circuits (portions) where PSPS event did not impact any customers have been removed

2020 PSPS Event Data

Year	PSPS Event	Circuits Shutoff ¹	Range of Duration* ¹	Average Duration ¹	Range of Affected Customers* ¹	Total Affected Customers ¹
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

*Data ranges obtained from minimum and maximum data depicted by an individual circuit in each PSPS event

¹Circuits (portions) where PSPS event did not impact any customers have been removed

PSPS Event Data Summary

- There has been an increasing trend in the number of PSPS events and number of affected customers each year
- During a PSPS event, only portions of a circuit will be shutoff and the duration of a circuit shutoff will vary for each circuit
 - The longest duration was 80 hours
 - The shortest duration was 2 hours
- The same circuit can be shutoff in multiple PSPS events throughout the year but may not affect the same customers each time

Preliminary Rule Concepts to Address Emergency Engine Operation Due to PSPS Events

Background

- During a PSPS event, essential public services need to maintain power to provide continuous services for the public and protect public health and safety
- Under the current regulatory structure, operators that exceed the 200 hour limitation can petition the Hearing Board
- In light of the increasing number of PSPS events, staff recognizes the need to maintain essential public services during a PSPS event and regulatory certainty
- South Coast AQMD Rule 118 grants the Executive Officer the ability to suspend certain South Coast AQMD rules during a State of Emergency
 - Although Rule 118 can provide limited exemptions during a State of Emergency, PSPS events are preemptive actions and do not qualify as a State of Emergency

PR 118.1 - Public Safety Provisions for Stationary Emergency Standby Engines

- Staff concept is for PR 118.1 to address emergency standby engines exceeding the Rule 1110.2 200 hour operating limit due to PSPS events
- Alternative to amending Rule 1110.2 to focus on PSPS events
- PR 118.1 is optional and available if a facility exceeds the 200 hour limit due to a PSPS event

PR 118.1 Applicability

- PR 118.1 will apply to
 - Essential Public Services as defined in Rule 1302
 - Health Facilities as defined in California Health and Safety Code Section 1250
 - Cell towers
- PR 118.1 would only apply to operation of stationary standby emergency engines during
 - PSPS events
 - Utility repairs due to a PSPS event

Rule 1302 Essential Public Services Include:

- Sewage treatment facilities
- Prisons
- Police facilities
- Fire fighting facilities
- Schools
- Hospitals
- Construction and operation of landfill gas control or processing facility
- Water delivery operations
- Public transit

PR 118.1 Concepts – Power is Not Shutoff

- An imminent shutoff notification is received of a potential PSPS event but power to a facility is not shutoff
- PR 118.1 will allow up to three hours to be excluded for each imminent shutoff notification if a facility exceeds the 200 hour limit

PR 118.1 Concepts – Power is Shutoff

- Hours of engine operation during a PSPS event can be excluded if a facility exceeds 200 hour limit
- In preparation for a power shutoff, some facilities may need to power up and down engines to ensure continuous operations
- PR 118.1 proposal will allow up to three additional hours to be excluded per PSPS event and per imminent shutoff notification in addition to the hours excluded during a power shutoff

PR 118.1 Reporting Requirements

- Reporting requirements apply only if the engine exceeds the 200 hour limit due to a PSPS event or an imminent shutoff notification
- If the engine exceeds 200 hours due to a PSPS event, the operator shall submit:
 - Engine information
 - Permit number, model year, horsepower rating
 - Operating log, including the date, time, and duration of engine use during each PSPS event
 - PSPS documentation (notifications from utility company) identifying the date and time of:
 - Imminent shutoff
 - Power shutoff
 - Power restoration

Proposed Amended Rule 1470 Update

Rule 1470 and State ATCM Recap

- California Health and Safety Code Section 39666 requires local air districts to implement and enforce state ATCMs or adopt and enforce equally effective or more stringent ATCM requirements than those adopted by the state board
- Working Group Meeting #1 provided overview of Rule 1470 and ATCM requirements and highlighted areas where Rule 1470 was more stringent than ATCM
- Staff is continuing discussions with CARB to ensure any proposed amendments to Rule 1470 will be consistent with state requirements

Next Steps

- Next Working Group Meeting
 - Present PR 118.1 Rule language
- Continue discussions with CARB and stakeholders on PAR 1470

Rule Contacts

Proposed Rule 118.1 and Proposed Amended Rule 1470

Tiffani To
Assistant Air Quality Specialist
909-396-2738
tto@aqmd.gov

Michael Laybourn
Program Supervisor
(909) 396-3066
mlaybourn@aqmd.gov

Jillian Wong
Planning and Rules Manager
(909) 396-3176
jwong1@aqmd.gov

Susan Nakamura
Assistant DEO
(909) 396-3105
snakamura@aqmd.gov