Hopkins, Chris@ARB

Subject: FW: powerpoint from our meeting with Vice Chair Berg

Attachments: slides for Board member mtgs 120721.pdf

From: Michael Ochs < mochs@rvia.org >
Sent: Tuesday, December 7, 2021 10:41 AM

To: Kersnar, Evan@ARB < Evan. Kersnar@arb.ca.gov>

Subject: powerpoint from our meeting with Vice Chair Berg

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Evan,

Vice Chair Berg asked us to send a copy of the powerpoint slide deck we used this afternoon in our meeting with her to be included as part of the public record.

Michael Ochs

Director, Government Affairs 1899 Preston White Drive Reston, VA 20191 D 571 665 5860 mochs@rvia.org



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RVIA's Request that the Board Direct Staff to Modify the Proposed SORE Amendments at the Hearing on December 9, 2021

RV Industry Association (RVIA) Meeting with CARB Board Vice Chair Sandra Berg

Introductions and background on RVIA



Introductions and Background on RVIA

Meeting participants

Jay Landers, Vice President, Government Affairs, RVIA
Michael Ochs, Director, Government Affairs, RVIA
David Tenney, Owner, Manteca Trailer & Motorhome LLC
and President, CA RV Dealers Association
Greg Mitchell, General Manager, ECI Fuel Systems
Dale Kardos, Kardos & Associates LLC, consultant to RVIA
Mike Belote, California Advocates
Terry McHale, Aaron Read & Associates

About RVIA

RVIA is a national trade association representing the manufacturers and suppliers of America's family camping vehicles, including motorhomes, travel trailers, fifth-wheel trailers, truck campers and park models, collectively referred to as Recreation Vehicles or RVs.



Agenda

- 1. Introductions and background on RVIA
- 2. Background of RVs
- 3. Staff's SORE amendments and their applicability to RVs
- 4. RVIA's position on the proposed ZEE standards for RV generators
- 5. Staff's lack of focus on our concerns
- 6. Implications for California businesses and tax revenue for the State
- 7. RVIA's request of the Board to direct staff to modify the proposal



Background on RVs



Background on RVs

- RVs include motorhomes and towable RVs
- RVs are equipped with AC units, heating, cooking refrigeration, lights and other pieces of equipment that use electricity.
- The equipment on board an RV (especially air conditioning and heating) is critical to sustaining life when the unit is operated in hot and cold environments.







Background on RVs

- Most of the time, an RV operates like an electrified home (when plugged into grid power at a campground or park)
- When an RV is used in remote locations where grid power is not available, the air conditioner and other appliances get their electricity via a fixed-mount stationary generator powered by a SORE.
- On average, RVs are used only 22 days per year. The generator is operated only a small fraction of this time.
- RV generator emissions are a very tiny fraction of overall SORE emissions



Staff's SORE amendments and their applicability to RVs



Staff's SORE amendments and their applicability to RVs

- Staff is exempting stationary generators but does not include fixed-mount stationary RV generators in this group of exempt stationary generators.
- RV generators have nothing in common with portable generators and everything in common with exempt stationary generators.



	Generator Type		
Generators Characteristic	Stationary	RV Fixed- Mount Stationary Generator	Portable Generator
Subject to ZEE SORE Requirement?		X	X
Not moved for equipment operation or storage?	X	X	
Not moveable by hand?	X	X	
Bolted to permanent surface?	X	X	
Rarely refueled?	X	X	
Routinely powering very large electrical loads (whole house; 4000 watts/hrs. or more)?	X	X	
Would the battery needed for powering the generator for just one day be twice the size of a Tesla battery and cost > \$20,000?	X	X	
Is the generator routinely required to run multiple days at a time without being refueled?	X	X	
Never tilted?	X	X	
Routinely powering air conditioning to prevent heatstroke?	X	X	
Routinely powering refrigerating units to keep food from spoiling?	X	X	
Annual hours of use are extremely low?	X	X	



Staff's SORE amendments and their applicability to RVs

- Neither stationary generators nor portable generators are defined in the proposed regulation.
- Staff considers portable generators to be "those moved by hand and not bolted to concrete pad or other permanent build surface."
- Staff considers stationary generators to be those "not moved for equipment operation or storage."
- RVIA will consider fixed-mount stationary RV generators to be stationary generators and thus exempt from the SORE regulation until such time that the regulation is amended to indicate otherwise.
- We request that you direct the Staff to modify the rule to clarify how it intends to regulate generators used in RVs.



RVIA's position on the proposed ZEE standards for RV generators



RVIA's position on the proposed ZEE standards for RV generators

- In the event that CARB decides to treat fixed-mount stationary RV generators like portable generators, RVIA asks that the Board direct staff to delay the effective date of the ZEE standards to 2035 for RV generators.
- ZEE solutions for RVs are neither technologically feasible nor cost-effective.
- Costs: \$50,000 to \$100,000 or more.
- Weight increase: minimum of 1000 to 2000 lbs.



RVIA's position on the proposed ZEE standards for RV generators

- Emissions benefits: none/worse (owners will run the large diesel/gas motorhome engine to recharge the batteries)
- RV are essentially already electrified (they are plugged into grid power most of the time). The SORE engine exists only for off-grid charging (a fraction of RV use).
- Battery solutions for RVs will only make sense when the motorhome is electrified for propulsion (the ACT reg will not result in motorhome electrification).



Staff's lack of focus on RV industry concerns



Staff's lack of focus on RV industry concerns

- RVIA has participated in the rulemaking since its inception
 - RVIA filed detailed written comments with CARB in August 2020
 - RVIA met with Staff in May 2021
 - RVIA met with Staff Nov. 17, 2021
 - RVIA filed written comments on Nov. 29, 2021
- Not one rulemaking document issued by Staff in October acknowledged our concerns
- Staff did not conduct a cost effectiveness study for RV generators. They conducted instead a study for portable generators, which have nothing in common with RV generators (see earlier table)
- Staff has indicated that revisions to the proposal can now only be made at the direction of the Board



Implications for California RV businesses and tax revenues for the State



Implications for California RV businesses and tax revenues for the State

- If CARB bans SORE-powered RV generators in 2028, California residents will go to neighboring states to purchase RVs equipped with such generators. Nothing in the law prevents this.
- This will result in a huge loss of sales in CA, so large that many CA RV dealers may go out of business.
- Air quality will be no better or worse as a result of the ban, yet RV dealers in CA will be out of business and tax dollars from the lost sales will go to Nevada and other bordering states.
- One of the current top-selling RV dealers for CA residents is located in Las Vegas.
- Dealers outside CA will be the only beneficiaries of this ban.



RVIA's request of the Board to direct staff to modify the proposal



RVIA's request of the Board to direct staff to modify the proposal

RVIA requests the Board direct staff to modify the proposed regulation to either:

1. Confirm that RV fixed-mount generators will be deemed "stationary" or otherwise exempt

or

2. Defer application of the ZEE standards for RV generators to 2035.

