DOCKETED	
Docket Number:	21-RPS-02
Project Title:	Renewables Portfolio Standard 10th Edition Guidebook Update
TN #:	263845
Document Title:	Mainspring Energy Comments - Mainspring Energy Comments on RPS 10th Edition Guidebook Update
Description:	N/A
Filer:	System
Organization:	Mainspring Energy
Submitter Role:	Public
Submission Date:	6/4/2025 2:28:45 PM
Docketed Date:	6/4/2025

Comment Received From: Mainspring Energy Submitted On: 6/4/2025 Docket Number: 21-RPS-02

# Mainspring Energy Comments on RPS 10th Edition Guidebook Update

See attached letter.

Additional submitted attachment is included below.

Mainspring Energy 3601 Haven Avenue Menlo Park, CA 94025 mainspringenergy.com

June 5, 2025

California Energy Commission 715 P Street Sacramento, California 95814



## Re: Scoping Meeting on Proposed Updates for the Renewables Portfolio Standard Guidebook, Tenth Edition

Mainspring Energy, Inc. (Mainspring) appreciates the opportunity to submit comments to the California Energy Commission (CEC) pertaining to the Scoping Meeting on Proposed Updates for the Renewables Portfolio Standard Guidebook, Tenth Edition released May 21, 2025. Specifically, we appreciate that linear generators will be added as an RPS-eligible resource, and that linear generators will have the same fuel eligibility requirements as fuel cells. We strongly support the goals of the Renewable Portfolio Standard (RPS) to update the Guidebook with language pursuant to AB 1921 (Papan), that expands the definition of renewable electrical generating facilities to include linear generators using renewable fuels.

Mainspring is a leading California-headquartered manufacturer of linear generators, which deliver local power that is dispatchable and renewable fuel-flexible. Mainspring's linear generator offers a unique non-combustion capacity and energy solution that simultaneously addresses the critical need of reducing greenhouse gas and criteria air pollutant emissions, while also enhancing grid reliability and resilience.

With the recent signing of AB 1921 (Papan), we appreciate CEC's quick action to update the RPS Guidebook and include the provisions of the bill. This legislation maintains technological neutrality and provides a level playing field for fuel cells and linear generators. Linear generators offer the same capabilities as fuel cells to produce renewable electricity.

#### Summary of Recommendations

- 1. Addition of linear generators to Chapter 2 of Energy Resource Eligibility Requirements.
- 2. Maintain compliance with RPS with potential fuel switching.
- 3. Support the addition of hydrogen being added as a renewable fuel.

#### Proposed Amendments

#### 1. Addition of Linear Generators to Chapter 2 of Energy Resource Eligibility Requirements.

We respectfully request the following language (in bold) added to include Linear Generators based on the revised version of the RPS Eligibility Guidebook Ninth Edition from 2017 (<u>TN217317</u>).

A) In Chapter 2: Energy Resource Eligibility Requirements we request these additions:

#### G. Linear Generator Using Renewable Fuel

A facility that uses **one or more linear generators** may qualify for RPS certification if the facility uses either an RPS-eligible renewable energy resource, qualifying hydrogen gas, or both, as described below.

1. Linear Generator Using an RPS-Eligible Renewable Energy Resource

A facility converting gas to electricity in **a linear generator** may qualify for RPS certification if the gas is an RPS-eligible renewable energy resource as described in this guidebook.

## 2. Linear Generator Using Qualifying Hydrogen Gas

A facility converting hydrogen gas to electricity in a **linear generator** may qualify for RPS certification if the hydrogen was derived from a non-fossil-based fuel or feedstock through a process powered using an eligible renewable energy resource. The electricity generated by a facility using this type of hydrogen gas is eligible for the RPS only if the electricity that was used to derive the hydrogen is not also counted toward an RPS compliance obligation or claimed for any other program as renewable generation. The applicant must submit information on the hydrogen production process as part of the application.

B) On Page 29 of Chapter 3.B.1.a of measuring renewable generation from using multiple energy resources we request the following changes:

- a. Thermal Conversion, Linear Generators, and Fuel Cell Technologies.
- All energy resources contributing thermal energy to the system that generates electricity, and any inputs not separately metered, must be accounted for in the measurement method for all thermal conversion technologies. These include, but are not limited to, energy resource use for startup, freeze protection, flame stabilization, supplemental firing, and any input of thermal energy used to maintain, increase, or control the thermal energy within the generation system. Similarly, all energy resources entering a **linear generator or** fuel cell must be considered.

C) In the Glossary of Terms on page 82 we request the definition of linear generator to be defined as:

Linear generator – an integrated system that consists of oscillators, cylinders, electricity conversion equipment, and an associated balance of plant components, and meets all of the following criteria: (1) The system converts the linear motion of oscillators directly into electricity.

(2) The electricity output is dispatchable, and the electricity output is able to be varied across all loads.(3) The system is fuel flexible and capable of operating using multiple fuel types, including renewable fuels, which includes, but is not limited to, hydrogen and biogas.

# 2. Maintain Compliance with RPS with Potential Fuel Switching.

Mainspring strongly supports the overarching objective of ensuring that renewable electricity generation facilities maintain compliance with the RPS Program. The emergence of fuel-flexible generation technologies is a beneficial innovation enabling customers more choice to transition between energy sources while delivering clean, reliable, and safe power across a diverse range of end users both in front of the meter and behind. This adaptability not only enhances grid resilience but also aligns with long-term decarbonization and energy security goals.

As the CEC evaluates fuel switching compliance language, we encourage a technology neutral approach that ensures consistent applications across both fuel cells and linear generators. Should the CEC determine that

registration or documentation is warranted due to fuel flexibility, Mainspring welcomes the opportunity to work with staff on fuel switching compliance language.

#### 3. Support the Addition of Renewable Hydrogen as a Renewable Fuel.

We also support the Green Hydrogen Coalition's comments regarding the need for hydrogen to be considered as a renewable fuel. It can provide multi-day long duration energy storage derived from renewables to provide grid resiliency in parallel with CA's decarbonization efforts.

Sincerely,

Franco Ghadiri

Franco Ghadiri, Policy Representative Mainspring Energy, Inc. Email: <u>franco.ghadiri@mainspringenergy.com</u>