November 19, 2021

Rajinder Sahota  
Deputy Executive Officer for Climate Change and Research California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

RE: 2022 Scoping Plan – Power Sector Scenario Inputs Technical Workshop

Dear Ms. Sahota,

Thank you for the opportunity to submit comments. I am writing on behalf of the Long Duration Energy Storage Association of California to provide comments in response to CARB’s 2022 Scoping Plan Update workshop on the electricity sector.

The Long Duration Energy Storage Association of California (The LDESAC) represents a diverse mix of long-duration energy storage (LDS or LDES) technologies, and its members offer products and services along every stage of the value chain, from invention to design, engineering, manufacturing, project development, and full-scale renewables integration.[[1]](#footnote-1)

The LDESAC storage technologies currently include pumped hydro, compressed air, liquid air, zinc-air batteries, flow batteries, flywheels, molten salt, electrolytic hydrogen, and repurposed gravity wells. These technologies can be deployed in projects ranging from a few hundred kilowatts to several gigawatts. Some involve site-specific applications, while others can be deployed virtually anywhere. Some, such as pumped storage and concentrating solar thermal, are fully mature and have been commercially deployed around the world for decades, while others like liquid air and zinc, are only now becoming commercially available and require strong public support to advance their deployment.

The diverse LDES technologies help meet California’s public policy goals and provide a critical asset to reliability, resiliency and fighting climate change.

Overall, the LDESAC is supportive of the four scenarios under consideration achieve a power sector greenhouse gas (GHG) emissions target of 30 million metric tons (MMT) or lower by 2030. The LDESAC would like to extend our support to encourage CARB to use the emissions

targets in the draft scenarios and ensure that 30 MMT is the upper limit in the scenarios being considered in the scoping plan. If California is to meet its climate goals, then we need to update the scenarios to reflect the changing environment. A more aggressive 2030 emissions target for the electric sector will better enable California to achieve its economy-wide carbon neutrality goals.

As a result, the LDESAC asks that 30 MMT be set as the upper bound when CARB establishes an updated GHG emissions range for the state’s electric sector as part of the 2022 Scoping Plan Update.

Thank you for considering our views on this element of the 2022 Scoping Plan Update.

Sincerely,

s/Julia Souder Prochnik

Executive Director

**Long Duration Energy Storage Association of California**

1. Our membership includes 247Solar, 7Skyline, Cat Creek Energy, Cupertino Electric, E-Zinc, GE Renewables North America, GreenGen Storage, Highview Power, Hydrostor, H2B2 USA, McMillen Jacobs Associates, Morse Associates, NextEra Energy Resources, RedoxBlox, Renewell Energy, Stantec and Zinc8 Energy Solutions. [↑](#footnote-ref-1)