



June 22, 2021

David Hochschild Chair California Energy Commission 1516 Ninth Street, Sacramento, CA 95814	Mary Nichols Chair California Air Resources Board 1001 I Street Sacramento, CA 95814	Liane Randolph Commissioner California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA 94102
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Dear Chair Hochschild, Chair Nichols, and Commissioner Randolph,

National Hydropower Association (NHA) appreciates the opportunity to comment on California's plan for the development of resources required to achieve the goals of S.B. 100. Our comments focus on how the different types of hydropower in California can contribute to decarbonization.

Conventional Hydropower: The Brattle Group recently authored a report titled *Leveraging Flexible Hydro in Wholesale Markets: Principles for Maximizing Hydro's Value*, which details how to optimize existing hydropower assets to achieve a renewable and reliable electric grid.¹

Conduit Hydropower: The California Energy Commission released the *California's In-conduit Hydropower Implementation Guidebook* in 2019 which found California has 414 MWs of untapped in-conduit hydropower potential.²

Pumped Storage: There is nearly 3,000 MWs of new pumped storage in the development pipeline in California.³ Essential to the construction of these facilities is the valuation of the services they provide, which the U.S. Department of Energy detailed in its *Pumped Storage Hydropower Valuation Guidebook*.⁴

Marine Energy: The National Renewable Energy Laboratory's (NREL) 2021 report *Marine Energy in the United States: An Overview of Opportunities* estimates 13 million homes in California could be powered by marine energy, which includes waves, tidal currents, ocean currents, ocean thermal gradients, and river currents.⁵

Thank you for consideration of our comments and we look forward to working with you to develop the resources necessary to accomplish the goals of S.B. 100

Sincerely,

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¹ Leveraging Flexible Hydro in Wholesale Markets: Principles for Maximizing Hydro's Value (2021). Available [here](#).

² CEC-500-2020-030: California's In-conduit Hydropower Implementation Guidebook (2019). Available [here](#).

³ A full list of new pumped storage developments can be found on FERC's website [here](#).

⁴ Pumped Storage Hydropower Valuation Guidebook (2021). Available [here](#).

⁵ NREL Marine Energy in the United States: An Overview of Opportunities (2021). Available [here](#).