

Oct. 26, 2018

Mary Nichols Chair California Air Resources Board 1001 I ST Sacramento, CA 95814 Hitachi Zosen Inova U.S.A. LLC 3930 E. Jones Bridge Rd, Suite 200 Norcross, GA 30092

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RE: Hitachi Zosen Inova, Comments on Electrify America's Cycle 2 Proposed Investment Plan

Hitachi Zosen Inova (HZI) appreciates the opportunity to provide feedback to the California Air Resources Board (CARB) on Electrify America's (EA's) Cycle 2 Investment Plan.

HZI strongly supports California's pioneering role and activites in the areas of clean energy and decarbonizing transportation sector. HZI believes that such effort will incentivize clean and low-carbon fuels, which will play a key role in achieving California's GHG emission reduction targets and many co-benefit goals including reductions in oxides of nitrogen (NOx) and particulate matter (PM).

HZI, headquartered in Zurich, is a global leader in energy from waste and other renewable resources. HZI delivers complete turnkey plants and system solutions for energy recovery from waste and other renewable resources. HZI has 13 subsidiaries and locations, and more than 600 reference projects worldwide. The subsidiaries that are most relevant to the EA's Cycle 2 Investment Plan are: Hitachi Zosen Inova U.S.A. LLC (HZI USA), based in the US; and Hitachi Zosen Inova ETOGAS GmbH (HZI ETOGAS), based in Germany.

HZI USA meets the specific needs of the north and central American markets, and covers a wide range of industry areas including: energy from waste, anaerobic digestion (AD), biomethane upgrade, waste water treatment, hazardous waste management, and some functions related to power-to-gas.

HZI ETOGAS develops and builds turnkey power-to-gas plants based on in-house proprietary technologies. Product segments are power-to-hydrogen, power-to-methane, and hydrogen-to-methane. In 2013 HZI ETOGAS built the largest power-to-methane plant (6.3 MW) for Audi in Germany, which is currently in operation. With our in-house electrolyser and methanation reformer technologies, HZI ETOGAS is uniquely positioned to offer a range of renewable and low carbon solutions to enable zero and near-zero emission vehicles and industrial processes.

While we applaud CARB's leadship and achievements in spurring clean energy and fuel inverstment in California, HZI is highly concerned about EA's proposed investment plan and the direction it leads the State. Without additional investments in hydrogen production, distribution, and fueling infrastructure, we are concened that California will fall short on achieving its goals on GHG emission reduction and zero emission transportation, as battery



technology still has issues on range, cost, recharing time, charging availability for multi-family residences.

Therefore, HZI urges the Board to require EA to submit a revised plan that includes investments in hydrogen production, distribution, and fueling infrastructure, and shows a balanced investment in ZEV infrastructure in support of California's climate and energy goals.

Hydrogen is real. There have been many multi-megawatt systems installed or announced worldwide in recent years. HZI, among other hydrogen suppliers are ready to invest in California on this important technology. Your support will be important for us to succeed in bringing projects and investment in hydorgen and related areas to California.

We look forward to working with CARB and Electrify America to further refine its Cycle 2 Investment Plan. Please feel free to contact us at: Jens Keiser, Director Business Development & Strategy for Power-to-Gas, E-Mail: jens.keiser@hz-inova.com, for any clarification, questions, or concerns.

Respectfully,

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