



April 30, 2015

California Energy Commission Dockets Office, MS-4
1516 Ninth St.
Sacramento, CA

Re: Research Opportunities in Carbon Capture and Utilization in California

To the California Energy Commission:

SRI International is pleased to see *Research Opportunities for Application of Carbon Capture Technologies to California Natural Gas Power Plants* on the CEC's natural gas research agenda.

The U.S. Department of Energy, through its Office of Fossil Energy and the Advanced Research Projects Agency-Energy, have invested many millions of dollars to develop multiple technologies to remove carbon dioxide from flue gas streams. Funding has also been provided to demonstrate many of the technologies on slip flue gas streams from coal fired power plants, but to date no significant funding has been available to collect performance data using real or simulated flue streams from natural gas fired power plants. This data is essential for modeling system performance.

SRI recommends the California Energy Commission allocate \$2M to fund two to three proof-of-concept demonstrations of technologies that are already in development for use at coal fired power plants but also show promise for use on natural gas fired power plants. These demonstrations will generate data that can be used to more accurately model performance under conditions relevant to California.

Natural gas-fired generation has been the dominant source of electricity in California for many years, fueling about 43% of electricity consumptionⁱ. According to the Air Resources Board's Greenhouse Gas Inventory, in-state electricity generation from natural gas emitted about 45 million metric tons of CO₂ in 2012ⁱⁱ. Successful deployment of carbon capture technology (and subsequent utilization or sequestration) will help California meet its goals to reduce greenhouse gas emissions.

Sincerely,

A handwritten signature in black ink that reads 'Barbara Heydorn'.

Barbara Heydorn
Director, Center of Excellence in Energy

ⁱ <http://energyalmanac.ca.gov/naturalgas/overview.html>

ⁱⁱ http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_00-12_2014-03-24.pdf