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February 27, 2015  
Eli Harland  
California Energy Commission  
1516 Ninth Street  
Sacramento, California 95814

Subject: Letter of Support for the Center for the Built Environment

Dear Mr. Harland,

Integral Group would like to recommend that the Center for the Built Environment (CBE) be supported as part of the new Electric Program Investment Charge (EPIC) triennial investment program. The center is a key institution in the advancement of building energy performance, bridging the gap between industry and academia since its founding in 1997. Research focuses on being relevant to current concerns in the industry, using state funding to leverage other funding sources. The center supports the adoption of emerging technologies by providing tools, resources, technology transfer, and ongoing involvement in other organizations that develop codes and standards. The center provides long-term continuity to perform full lifecycle research in new products, applications, and supporting the building industry.

With California headed for a low energy future and net zero energy buildings by 2030, the CBE will play a key role in providing the necessary research and industry-ready tools to make these goals a reality. As deep green engineers, Integral Group is actively working with the CBE researchers on developing low energy, effective buildings with high indoor air quality. We have been collaborating with the CBE in advancing indoor air quality, understanding personal comfort, and how buildings can benefit from radiant heating and cooling systems.

The CBE's on-going research, related to radiant systems research and development, directly affects the work that Integral Group performs on a daily basis. We have pioneered the use of radiant systems in many different sectors and climates, and have seen this work grow from small, pilot projects to large scale campuses. Our early projects at the Carnegie Center for Global Ecology at Stanford University and the David Brower Center in Berkeley, California have led to large scale projects like Infosys SBD1 in Hyderabad, India and the Google Bay View Campus in Mountain View, California.

As a leader in developing radiant projects, Integral Group specialize in the design of simple, elegant, cost-effective systems for high-performance buildings. We provide a full range of building systems design, sustainability consulting and energy analysis services. Located in thirteen offices across North America, along with an international network of affiliates, our passion for sustainable design runs deep. Our designs have evolved considerably based on lessons learned from past projects the CBE has studied and published, yet more data and wider experience is needed.

On-going support of the CBE would allow them to further leverage their other funding and resources to accelerate low energy buildings. Integral Group has served on the Industry Advisory Board for the past decade and continues to work on collaborative research and field studies.

Please contact me at 510.604.8867 or e-mail [khydes@integralgroup.com](mailto:khydes@integralgroup.com) if you have any questions about our participation.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Hydes", is written over a large, stylized scribble.

Kevin Hydes, PE, P.Eng, C.Eng, RAIC (hon), FCIBSE, LEED Fellow  
CEO & Founder  
Integral Group

Cc'd with Neil Bulger, Integral Group, in recognition of this letter of support.