Clean Energy Technologies: An Updated Inventory of the Potential Contribution to the U.S. Electricity Resource Mix

John A. "Skip" Laitner Anna Monis Shipley R. Neal Elliott

American Council for an Energy-Efficient Economy 1001 Connecticut Avenue, NW, Suite 801 Washington, DC 20036 o: (202) 478-6365 email: jslaitner@aceee.org

April 27, 2007

Abstract

The nation's power system faces a diverse and broad set of challenges. These range from increased financial competitiveness to demands for increased quality, reliability and reduced carbon dioxide emissions and other air pollutants. Yet, there remains a large set of clean recycled energy technologies that appear to be cost-effective but greatly underutilized. This paper highlights the findings of an updated assessment of these "new" clean generation technologies as they might contribute to the nation's power supply. The preliminary results indicate that there is an economic potential that on the order of 100,000 megawatts (MW) of untapped electrical capacity. This electrical capacity is capable of producing more than 700 terawatt-hours (TWh) of electricity, saving an estimated 18 percent of current U.S. electricity consumption.