



VANTAGE POINT

To the California Energy Commission ("CEC"):

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COMMENTS OF VANTAGEPOINT VENTURE PARTNERS

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Re: Ivanpah Solar Electric Generating System (07-AFC-5; CEC-700-2008-013-FSA/DEIS DES-09-46)

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The following comments with respect to the BrightSource ISEGS facility are being provided to the CEC and the BLM by VantagePoint Venture Partners. We are one of the United States' largest venture capital firms and a world leader in investing in clean energy technologies. Our firm has already committed nearly one billion dollars of capital to building clean energy companies such as BrightSource. We have also backed the leading companies in thin film solar, LED lighting, electric vehicles, energy storage and management, smart grid and energy efficiency, biofuels, and more. Most of these companies are headquartered in and providing new jobs in the State of California. Since beginning operations in 1996, we have invested in 38 California companies, which have generated more than 6,300 new jobs to date.



We are pleased that the permitting process has reached its present stage, with the drafting of the Final Staff Assessment / Draft Environmental Impact Statement. The completion of this step marks an essential milestone in the construction of California's first utility-scale solar energy project in nearly two decades. With this document, we are contributing our perspective to the final steps in the decision-making process.

VantagePoint believes strongly that the move to clean energy represents both the beginning of the greatest economic transformation of our time and an essential step in addressing climate change. As a result, we are very pleased that our home state of California has taken a leadership role both in taking advantage of this economic opportunity, and in leading the environmental charge toward a clean energy future.

We are focusing our comments on three areas: 1) The importance of BrightSource to the State of California's ability to meet its energy needs and goals; 2) The broader economic, environmental, and political context for this permitting decision; and 3) The importance of renewable energy companies and environmental protectors working together for our state's long-term future.

The importance of BrightSource to California's ability to meet its energy needs and goals

California's renewable portfolio standards ("RPS") are based upon massive amounts of governmental findings the world-over that we need to address the challenges of greenhouse gas emissions. The result is that we have an RPS that is among the highest in the country, at 20% by 2010, and an even more ambitious requirement of 33% of energy generation from renewable sources per the Governor's Executive Order S-21-09, which implements California's AB 32 climate change law. In order to meet these goals – and to meet the growing energy needs of the California population – the construction of utility-scale renewable power plants is essential. Energy efficiency and distributed renewable generation, like rooftop solar panels, will have a substantial impact in reducing our state's overall energy use and in adding to our available power. But even after these are pursued to the maximum, we will still need new utility-scale renewable power plants to meet our state's energy needs and goals.

Solar power is particularly well suited to California, given the substantial amounts of high-quality sun which the state receives. High-quality sun often hits quite close to major population centers as well, which reduces the transmission challenges which can be so difficult for some other renewable energy sources such as large-scale wind farms. California utilities have invested substantially in solar power contracts in order to meet the state's RPS. PG&E, which provides energy to more than 5 million customers, is currently contracted to receive 62% of its renewable energy from solar sources. Of this power, 39% will come from concentrated solar thermal alone – of which BrightSource represents close to 2/3 of PG&E's solar thermal commitments. In other words, PG&E, as one key example, is counting on BrightSource to provide 24% of the renewable energy it needs to meet our state's Renewable Portfolio Standards.

As investors we have done extensive research, analysis and due diligence, and we have leveraged significant work by outside technical experts. It is our view that BrightSource's solar thermal technology is one of the best and cheapest sources of renewable energy available today. Even without taking into account the need for storage, the cost per watt is already very close to the cost of wind, which is currently the leading renewable energy technology in the U.S. Furthermore, when you consider the cost of the energy storage capacity needed for mass deployment of wind, this kind of solar thermal power compares



even more favorably due to its built-in power-smoothing characteristics and its closeness to the daily load profile for energy in California. Solar thermal power towers can also be combined with natural-gas firing plants for even better economics at large scale.

California utilities should and will invest in a diverse portfolio of renewable energy sources, but everything we have learned and seen as CleanTech investors indicates that solar thermal power will play an essential part in California utilities' energy portfolios. Furthermore, BrightSource's technology is far more environmentally friendly (particularly in lower water use) than that of virtually all of its competitors.

BrightSource has thus far laid the groundwork for a very successful growth trajectory. It has partnered with a number of industry leaders including its signing of a partnership agreement with leading EPC firm Bechtel for the Ivanpah project. This project has also been listed as a "fast-track" priority for qualifying for funding under the 2009 American Recovery and Investment Act (ARRA), and it has also been selected as one of sixteen short-listed applicants for receiving funding under the U.S. Department of Energy (DOE) 1703 program established by the 2005 Energy Policy Act. (It is the only utility-scale solar project so selected.) BrightSource's signed contracts with PG&E and Southern California Edison, at a total of 2.6 GW, also far outstrip those of any other solar thermal company. In total, BrightSource's contracts currently account for more than one third of all solar thermal contracts in the United States.

BrightSource has, in fact, become something of an emblem and star within the entire CleanTech industry, with multiple media sources identifying the company as being uniquely promising. It is regularly ranked anywhere from one of the top ten to the very best company in the entire CleanTech space.

In short, this Ivanpah project is not merely "one among many," of which there will be many more to come. BrightSource Energy, through projects like this one, is uniquely positioned to serve as a powerful force in California's ability to meet its energy needs and goals; there is currently no comparable substitute in the renewable energy market. Consequently, to impede this project would substantially impact the ability of California utilities to meet our state's renewable energy targets overall. It would also be highly unfortunate for the State to give up the opportunity to take advantage of what could potentially be a very substantial amount of federal funding support, especially during a time of state budget crisis. BrightSource is poised and ready to scale up now, and the federal government is poised to very likely support this. But if this project and company do not get off the ground now, it could be many years before another similarly promising and well-equipped provider can arise to take its place.

The broader economic, environmental, and political context for this decision

As professional CleanTech investors, one perspective we bring to the table is our view of the broader context in which this decision is being made, and how that context is relevant to this particular permitting decision. There is far more hanging in the balance with this decision than just the renewable power that will be generated by this project. The success of this project could impact the entire trajectory of the clean energy economy, not just in California, but also in the United States overall – which in turn has significant ramifications for our economic competitiveness as a nation.



The President has underscored the relevance of clean energy to our national competitiveness on numerous occasions. He has spoken out on this issue expressly, saying "the nation that wins [this] competition will be the nation to lead the global economy – I'm convinced of that, and I want America to be that nation." Professional venture capital investors have also recognized the critical importance of this economic transformation frontier. VC investments in CleanTech have been steadily increasing over the last several years – from a mere 2% of total national VC investments in 2006 up to 15% of national VC investments in 2008. VC firms invested more than \$4 billion into emerging U.S. CleanTech companies in 2008.

As a firm, we have dedicated ourselves and the funds of our limited partners (which include both of California's two largest pension funds – CalSTRS and CalPERS) to identifying the best entrepreneurial companies in the sectors we invest in – those companies that we believe have the potential to both become category leaders and to transform their industries. But our ability to continue our work and to back these leaders in clean energy, water and materials, is highly dependent upon their ability to raise capital in the financial markets and their ability to bring products to market in a timely manner.

At present, many, if not most, of these companies face considerable threats to their existence as a result of a variety of national and local governmental processes that, while specifically designed to assist these companies, have, in fact, dragged on far longer than originally contemplated. These delays introduce significant new risks to our collective ability to accomplish our clean energy objectives.

This is why this particular permitting decision is so critical and will have ramifications far beyond just this project and even beyond the State of California. BrightSource, with this project, is one of the first significant, high-profile, new renewable generation companies in this country – definitely the first utility-scale solar plant – to reach this important moment in its development. Investors throughout California and the U.S., as well as overseas, are closely watching the success of this project for what it indicates about the overall viability of an entrepreneurial, rapid-growth clean energy industry in California and the U.S.

If this project were to be denied or delayed, it would send shockwaves throughout the private investment community. Future venture capital and other private equity investments into renewable energy generation could drop significantly. If this were to happen, California could find itself facing significant challenges in meeting its own renewable energy standards, and a ripple effect within the financial community could extend this challenge throughout the United States.

There are important economic ramifications to this decision as well. Venture capital has historically played a crucial role in generating new enterprises and new jobs, and this is especially true in California. California's economy is one of the largest in the world, and it is fueled in part by a strong venture capital community and spirit of entrepreneurship. In 2008, 43% of VC investing in the U.S. overall came from Silicon Valley, and not surprisingly, a greater proportion of job openings in start-up companies are also concentrated in California. According to a recent study by the National Venture Capital Association, 39% of the start-up job openings in the country today are located in California (about 4,200 out of 11,000). And CleanTech has the potential to be a major source of VC-supported future job creation. A recent study led by UC Berkeley, Yale University, and the University of Illinois indicated that the passing of the current federal climate change legislation alone could lead to the creation of as many as 1.9 million jobs in the U.S., in part from new businesses that would arise to respond to new incentives and mandates.



However, venture capitalists have a fiduciary duty to their investors to put their money to work in places that can generate real returns – and thus they cannot invest in places where the odds, including regulatory odds, are stacked against successful company growth. Investments into future CleanTech companies will go where they are most likely to be successful. California is currently a highly appealing environment for this sector given its size, location, and the many quality sites for power production. But if the process of permitting is perceived as simply too difficult to get through, in order to build new energy generation here, California is likely to lose future CleanTech investments to other states or even to other countries. For just one comparative example, in 2008, Germany put into place ten times as much solar capacity as California, through strong coordination between the public and private sectors – despite the fact that Germany is only about twice as large as California, population-wise, and has lower quality sun.

The importance of renewable energy companies and environmental protectors working together

With regard to the long-term future of our state, renewable energy generation and the protection of critical biological resources go closely hand in hand. The greatest long-term threat to plant and animal life of all kinds – especially in the desert – is the risk of fundamental, non-reversible climate change. This threatens to eradicate entire species. If we hope to combat this effectively, we have no choice but to build clean energy sources as quickly as possible, while also increasing our energy efficiency.

It is our hope and vision that California environmental organizations, led by the federal and state agencies like the CEC and BLM who work closely with them to protect our precious environmental resources, can find a way to focus their efforts on long-term, state-wide environmental goals. Prolonged battles over site-specific issues could, in fact, obscure bigger environmental gains and progress. In the case of the rare plants being discussed for this particular permitting decision, it seems very likely to us that the additional resources that this project will generate for researching and supporting these plants across the California desert at large, combined with BrightSource's contribution to reduced carbon emissions, will in fact do more to ensure the long-term survival of these plants in California than would leaving the contested land used primarily for unmonitored cattle-grazing and off-road vehicle use.

It is not easy to build new renewable energy generation facilities. The decision that you are about to make presents a new opportunity for meaningful partnership between the public sector and private sector -a critical opportunity for which the CEC and BLM have an opportunity to play a high-profile leadership role. By rapidly striking the right balance among everything that you need to consider, you can make California a clear leader within the U.S. in our effort to achieve a clean energy future. And this endeavor will bring positive benefits to California for years to come, both economically and environmentally.

We very much appreciate the efforts that the CEC, the BLM, and all of the staff involved have made to reach this critical point. Without your tireless efforts, none of this would be possible. And we are proud to be working alongside you to make California into not only a national leader but also a global leader in the fight against climate change and the pursuit of a clean energy future.