

Select Committee on Energy Independence and Global Warming

“Solar Heats Up: Accelerating Widespread Deployment”

September 24, 2009

1:30 pm

2318 Rayburn House Office Building

Witness Questions for the Record

Frank DeRosa, CEO, NextLight Renewable Power, LLC

- 1) How do you handle issues with water, which are so prevalent on the West coast, yet is so important for functions such as cooling and cleaning solar panels so that they may operate more efficiently?
- 2) How much does the success of your business depend on federal and state mandates that require utilities to incorporate renewable energy into their portfolio? From a business perspective, if not for these requirements, would solar energy be financially viable?
- 3) How much experience does NextLight have with transmission siting as it relates to incorporating solar energy into the power grid?
- 4) You state that NextLight's mission is to "develop competitively priced, utility-scale renewable generating facilities using proven solar technologies," but you also state that your biggest obstacle is the "up-front capital cost of renewable energy projects." Can you provide a competitively priced product without massive federal and state subsidies?
- 5) How competitive is the price of the energy you generate as compared to the same amount generated by fossil fuels? Will the use of solar result in higher bills?
- 6) On what do you base your assessment that "the private capital markets will not fully recover until at least 2012?"
- 7) What incentive do taxpayers have to support the creation of a "Green Bank" that would assume great risk by financing new innovations deemed too risky by conventional banks? If a project fails, it is the American taxpayers who would have to foot the bill.
- 8) Are you familiar with the experiences of the Spanish government's efforts to subsidize renewable energies over the past several years, and the results of those efforts? As a businessman, what lessons can the US learn from Spain's actions?

Dr. Stephanie Burns, Chairman, President, and CEO, Dow Corning Corporation

- 1) Where does Dow Corning manufacture polycrystalline silicon? How does this product make solar energy competitive with energy produced by fossil fuels such as coal and natural gas?
- 2) Dow Corning has numerous manufacturing facilities based in China. Given your stated commitment to the environment and China's excessive reliance on coal-fired electricity, why has your company located so many of its plants in a country so dependent on a carbon-intensive fuel?
- 3) If Congress passes a cap-and-tax system, which further increases the cost of production in the United States, how will your company's operations be affected?
- 4) What manufacturing byproducts are created in the production of solar material? Can you talk about environmental concerns that must be considered when disposing of solar material? How does Dow Corning handle the disposition of such materials and at what cost?
- 5) You note that Dow Corning is "making solar power less expensive to both produce and use." Do you believe solar power will reach a point that federal subsidies are no longer necessary?
- 6) Mr. De Rosa explains in his testimony that capital financing is the most significant challenge for his company to advance solar power, yet Dow Corning has invested over \$4.5 billion in solar technology over the past 4 years. How do you reconcile the massive solar investments Dow Corning has made with the financing challenges described by NextLight?
- 7) Are you familiar with the experiences of the Spanish government's efforts to subsidize renewable energies over the past several years, and the results of those efforts? Should the US government look to Spain as a model to imitate?

Steven Kline, Vice President, Corporate Environmental and Federal Affairs and Chief Sustainability Officer, PG&E

- 1) If not for federal and state mandates, would you incorporate renewable energy into your company's portfolio?
- 2) Do you believe that your customers will end up paying more for their electric bills because of PG&E's inclusion of renewables in its portfolio?
- 3) What challenges involving federal lands has PG&E encountered in its attempts to expand the development of solar energy?
- 4) Media reports have indicated that California Sen. Diane Feinstein is expected to introduce a bill that will place a large part of the Mojave Desert off limits to solar and wind construction. How would this affect PG&E's ability to expand its solar projects given the desirability of that land for solar panels?
- 5) Do you approve of California Governor Arnold Schwarzenegger's recent Executive Order increasing the state's Renewable Portfolio Standard (RPS) to 33% by 2020? A major difference between the Executive Order and similar legislation passed by the state legislature is that the Governor's order allows utilities to access all their renewable power from other Western states, instead of facing some in-state supply restrictions, as specified in the state legislature's bills? What are your thoughts on this?
- 6) Have you had any conversations with officials within California about your suggestion of better state and federal cooperation on transmission siting? What reaction, if any, have you received?
- 7) Regarding the creation of a "Green Bank," what incentive do taxpayers have to support a new federal entity that would assume great risk by financing new innovations deemed too risky by other conventional banks?

Nada Culver, Senior counsel, The Wilderness Society

- 1) The permitting process for solar is burdensome and restrictive. Do you support streamlining the permitting process or are you willing to forego certain solar installations altogether?
- 2) The Wilderness Society proposes a number of high demands and hurdles for project developers to overcome, specifically because of the footprint and quantity of land required. Due to the smaller footprint per unit of energy output for nuclear, is nuclear energy a more environmentally friendly source of energy to pursue?
- 3) Your testimony notes that if land is used for solar development that you support “additions of lands and resources should equal or exceed the value of any resources or values which are lost.” Who would be the final arbiter in appraising the value of such property?
- 4) Media reports have indicated that California Sen. Diane Feinstein is expected to introduce a bill that will place a large part of the Mojave Desert off limits to solar and wind construction. Does your organization support such legislation? How would this affect the Department of Interior’s (DOI) plans to identify lands for solar and wind construction?
- 5) Can you further detail your recommendation that “mitigation for impacts to water resources could be addressed by purchase and retirement of water rights to offset groundwater pumping by the project?” How much of a factor is that in the DOI’s consideration of land for solar construction?
- 6) Thus far, how much land has DOI designated as Solar Energy Study Areas (SESAs)? How long before DOI makes a determination on what will be designated as Solar Energy Zones (SEZ)? Can the process be expedited?
- 7) If, as you testify, already disturbed lands such as abandoned mines, developed oil and gas fields, fallow agricultural lands, etc provide opportunities for solar energy development, then why don’t developers look at such pieces of land to begin with?

Dr. Gabriel Calzada Álvarez, Associate Professor of Economics at the King Juan Carlos University in Madrid, Spain

- 1) What lessons can the US learn from the Spanish experience?
- 2) Have you received any responses from your invitations to the members of the U.S. Administration to brief them on your report and its conclusions?
- 3) Your report was criticized by the National Renewable Energy Laboratory (NREL). Do you have a response to that?
- 4) What was the Spanish government's response to your report?
- 5) In your opinion, to what extent, if at all, should governments subsidize renewable energies? What is the best way to make renewable energies like solar more efficient and competitive with fossil fuel based energy?