

TESTIMONY OF
RHONE RESCH, PRESIDENT & CEO
SOLAR ENERGY INDUSTRIES ASSOCIATION

BEFORE THE
HOUSE COMMITTEE ON NATURAL RESOURCES

HEARING ON
IDENTIFYING ROADBLOCKS TO WIND AND SOLAR ENERGY
ON PUBLIC LANDS AND WATERS, PART II:
THE WIND AND SOLAR INDUSTRY PERSPECTIVE

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Mr. Chairman and Members of the Committee,

Thank you for the opportunity to submit testimony on roadblocks to solar energy development on public lands. I am Rhone Resch, the President and CEO of the Solar Energy Industries Association (SEIA). I am testifying on behalf of our 1,000 member companies and 100,000 American citizens employed by the solar industry. SEIA represents the entire solar industry, encompassing all major solar technologies (photovoltaics, concentrating solar power and solar water heating¹) and all points in the value chain, including financiers, project developers, component manufacturers and solar installers. Before I begin my testimony, let me thank Chairman Hastings and Ranking Member Markey for their leadership and support of solar energy. We are grateful that the Committee recognizes the important role that our public lands play in the deployment of solar energy.

I. Introduction

Established in 1974, the Solar Energy Industries Association is the national trade association of the U.S. solar energy industry. Through advocacy and education, SEIA and its 1,000 member companies are building a strong solar industry to power America. As the voice of the industry, SEIA works to make solar a mainstream and significant energy source by expanding markets, removing market barriers, strengthening the industry and educating the public on the benefits of solar energy.

We have an opportunity – and perhaps an obligation – to craft policies today that will guarantee a clean energy future for tomorrow, one in which our energy comes from renewable, domestic sources. Today’s hearing is an important step in securing that future. Developers face many hurdles in bringing a solar project to fruition, whether on public or private lands. Below we make recommendations for ensuring the long-term policy certainty needed to make solar energy a substantial part of our energy supply in the United States:

- Retain maximum flexibility for solar developers to site projects on public lands without being restricted to zones.
- Establish a cost recovery mechanism and consistent timeframes to expedite the Section 10 consultation process performed by the U.S. Fish and Wildlife Service.
- Extend the 1603 Treasury Program, which allows solar and other renewable energy developers to receive a direct federal grant in lieu of taking the investment tax credit, which is already in place.

¹ For more information on each of these solar technologies, see http://seia.org/cs/solar_technology_and_products.

- Continue support for the DOE Loan Guarantee Program and/or establish a Clean Energy Bank to provide long-term, low-cost financing to those deploying solar.
- Grant long-term clean energy contracting authority for federal agencies to reap the benefits of solar energy.

II. Overview and Recent Highlights of the U.S. Solar Industry

At a time of high unemployment and difficult economic conditions, the solar industry has become the fastest growing U.S. energy sector and one of the fastest growing industries across the entire economy. In 2010, the solar industry grew at a rate of 67 percent and now employs Americans in all 50 states. Last year, 956 megawatts (MW) of photovoltaics (PV) and concentrating solar power (CSP) technologies were installed, as well as 2.4 million square feet of solar water heating collectors. This phenomenal growth is the result of private investment, technological innovation, a maturing industry and smart federal and state policies. The federal government has received a strong return on its investment of public dollars, with benefits to our economy that far exceed their costs.

Solar is an energy source available in every U.S. Congressional district.² At this time, Germany leads the world in solar installations with a solar resource equivalent to that of the state of Alaska. Given our vast solar resources, we could easily lead the world in solar deployment. The vast majority of Americans would no doubt support such a goal: 94% of Americans think it is important for the nation to develop and use solar energy.³

Solar energy has many benefits, including the ability to be tapped in a variety of circumstances – in power plants, in residential and commercial applications, and even off-grid in remote areas where no other electric infrastructure exists. Solar also generates electricity during peak demand, when we need it most and electricity is most expensive.

The solar industry is maturing rapidly. Major companies like GE, Dupont and Applied Materials have solar divisions. Utilities from Florida Power & Light to PSEG and Arizona Public Service Company own solar assets in their generation fleet. Other energy players are increasingly investing in solar, such as NRG Energy, AREVA and Westinghouse. Even Google is making a major play, putting a 1.6 MW distributed solar generation system on its Mountain View, California campus and investing \$168 million in the Ivanpah Solar Electric Generating System, a solar power plant which uses BrightSource Energy's proprietary power tower technology.

² See PV Resources chart at Attachment 1, comparing the United States to Germany and Spain.

³ 2010 SCHOTT Solar Barometer™. See details at http://seia.org/cs/news_detail?pressrelease.id=1061.

Like most products, solar energy's costs decrease as more and more solar is installed. The policies in place today to incentivize solar deployment not only yield dividends now, they act as a catalyst, driving down future costs. The right policy underpinnings can shave years off of the organic price drops analysts expect.

With increased deployment of solar energy, solar manufacturing and supply chain production have followed. For example:

- In 2010, REC Silicon, which produces solar-grade polysilicon in Moses Lake, Washington, expanded capacity and production to meet growing domestic demand. The facility produces 27% of all solar-grade polysilicon in the U.S. and employs 550 people in Chairman Hastings's district.
- A 280 MW concentrating solar power plant is under construction in Gila Bend, Arizona, employing up to 2,000 people in Representative Grijalva's district during construction of the facility. Through supply chain purchases from companies around the country, the plant supports hundreds of jobs in every region.
- Early in 2011, a 19 MW PV plant, the largest solar plant in Colorado and one of the largest in the country, came online in Representative Tipton's district. The plant produces enough clean solar energy to power nearly 4,000 homes, and this is just the beginning. A larger 30 MW plant is under construction nearby, and is expected to become operational later this year.

More solar energy highlights by Congressional district can be found at Attachment 2.

Last year was also a noteworthy year for the Bureau of Land Management's (BLM) solar efforts: it issued the first nine permits for construction of utility-scale solar power projects on public lands in the entire history of the agency. Today, work is underway at three of the sites and several other utility-scale solar power plants are under construction in the Southwest, employing hundreds of workers from the region. In addition, the supply chains behind each of those facilities are turning out highly reflective mirrors, precision-crafted receiver tubes, steel posts and thousands of other components in Alabama, Michigan, New Mexico, Pennsylvania, Tennessee and Virginia.

As you can see, 2010 was an exciting year for the U.S. solar industry. But we're not stopping there: the SEIA Board of Directors set out a goal for the industry to install 10 gigawatts – 10,000 MW – annually by 2015.

III. Solar Power Plant Developers Face Persistent Challenges

Solar power plant developers face persistent hurdles in bringing a project to completion, whether the solar plant is sited on public or private lands. In the public lands arena, the Department of the Interior (DOI), thanks to the leadership of Secretary Salazar, prioritized the permitting of renewable energy projects, and SEIA commends DOI, BLM and the U.S. Fish and Wildlife Service (USFWS) for their efforts.

The overarching challenge for any industry is policy certainty. When companies are deciding where to build their next manufacturing facility, when and where to spend \$1 billion constructing a new power plant or how many employees to add this year, they need a high degree of confidence in the future. This is true for public lands policy as well as tax, finance and energy policies.

A. Public Lands Policy: The Programmatic Environmental Impact Statement for Solar Energy

In 2008, BLM initiated a major undertaking studying and preparing a programmatic environmental impact statement (PEIS) for solar development in six Southwest states.⁴ When final, the PEIS will establish policy for solar development on public lands for the next two decades. As part of the study process, BLM proposed and analyzed 24 “solar energy study areas” on existing public lands which could be codified as “solar energy zones” and which would encourage solar energy development within their boundaries. BLM released the Draft PEIS in December 2010 and the public comment period recently closed.⁵

A fundamental policy decision to be made in the final PEIS is whether solar energy development will be allowed across 22 million acres of public lands in the Southwest, with benefits accruing to those projects located within the solar energy zones, or if solar development will be restricted to only lands within the identified zones. Recognizing that not every acre of BLM-managed land is appropriate for solar development,⁶ the solar industry is nevertheless concerned that permitting development exclusively within the solar energy zones is overly

⁴ While the PEIS is intended to set policy for all lands managed by BLM, the six states studied were Arizona, California, Colorado, Nevada, New Mexico and Utah.

⁵ SEIA’s full comments on the Draft PEIS are available at http://www.seia.org/galleries/pdf/Final_PEIS_Comments_5.2.11.pdf.

⁶ Indeed, BLM’s Preferred Alternative in the Draft PEIS takes approximately 77 million acres off the table for solar energy development and puts forth rules for the remaining lands.

restrictive, would thwart development and would undermine the renewable energy goals Congress set out for BLM in the *Energy Policy Act of 2005*.⁷

Our public lands have been used for a wide variety of economic and recreational activities over the last century, and solar must be one of those acceptable uses. In fact, three out of four Americans approve of solar energy development on public lands.⁸ BLM should not adopt the solar energy zone-only alternative presented in the Draft PEIS. Instead, BLM should adopt the Preferred Alternative identified in the Draft PEIS and work to make the solar energy zones themselves more attractive to project developers.

Much more needs to be known about the solar energy zones to make them a useful option for solar energy developers. Only a cursory review of the zones has been conducted, and neither BLM nor a developer can affirmatively state that a solar power plant belongs within any of the zones. Not enough is known regarding the biological and cultural resources within these zones. As a result, a developer that seeks to site a power plant within such a zone will still expend a great deal of effort and money studying the site in order to receive a permit for development. The solar energy zones were intended to ease the way for development, providing a sort of “pre-approval” that such acres are suitable for solar power plants. But in their current state, the solar energy zones do not provide real incentives for solar development within their boundaries.

B. Public Lands Policy: Early Stakeholder Input is Preferable when Crafting New Policies

In 2010, the Department of the Interior faced the daunting task of permitting solar energy projects at a pace the department had never before attempted, while simultaneously crafting the policies necessary to carry out such permitting. Even now there are many new policies coming out of BLM and USFWS in Instruction Memorandum (IM) format. The pace of these releases is challenging for both developers and field office staff to react to and the regulatory continuity between the field offices is not consistent. In many cases, guidance has been crafted based on policies from other industries that BLM oversees, with limited applicability to solar energy.

As a recent example, the U.S. Fish and Wildlife Service issued draft Eagle Conservation Plan Guidance for wind developers. Just after this document’s release, some regional USFWS staff began requiring solar developers to comply with the guidelines contained therein. Such a

⁷ Section 211 of the *Energy Policy Act of 2005* (P.L. 109-58) establishes a goal for DOI of approving 10,000 MW of non-hydropower renewable energy projects on public lands by 2015.

⁸ View poll details at http://seia.org/cs/news_detail?pressrelease.id=769.

standard is wholly inappropriate, given that the guidance was written for another industry and is only in draft form. A solar developer cannot reasonably be expected to comply with guidance for wind development.⁹ USFWS should ensure that no regional or field offices are applying any aspect of this guidance to solar power projects. In addition, USFWS should have to make a threshold determination of a project's adverse impact on eagles prior to applying any Eagle Guidance to a renewable energy project. Without a threshold finding, USFWS has no way of knowing whether the proposed Guidance is applicable or appropriate for a given project. Moreover, without an initial understanding of a project's impact, USFWS cannot determine whether the Guidance will even be effective at monitoring and protecting eagles and their environment.

Similarly, BLM's Instruction Memorandum establishing performance and reclamation bond requirements for solar energy projects¹⁰ relies heavily on the requirements for the mining industry. A solar power plant's footprint and potential impact on public lands are far different than mining and other extraction activities, and that should be recognized by the agency and reflected in policy decisions.

Finally, the rent policy BLM established for solar energy produces excessive charges to developers. In some instances, the BLM rent is double what a developer would pay for nearby private land. Developing on public lands also comes with other costs to the developer not seen for private lands: increased processing time, mitigation fees, restoration and revegetation bonding. Each of these extra costs will deter solar development on public lands, contrary to the goals of the Administration and Congress. In addition, charging high rents by BLM will lead to higher rents in the private sector, which will further damage the economics of future solar projects.

C. Private Lands Policy: Section 10 Consultations from USFWS Are Not Timely

A perennial challenge faced by solar developers (and many others) is that of securing a timely Section 10 consultation¹¹ from USFWS. Many in the solar industry are developing projects on

⁹ SEIA's full comments to USFWS regarding the Eagle Conservation Plan Guidance are enclosed here as Attachment 3.

¹⁰ See IM 2011-003, available at http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction/2011/IM_2011-003.html.

¹¹ The Endangered Species Act (ESA) prohibits anyone from committing a "take" (kill, injure, harass, etc.) of any listed species without appropriate authorizations from the USFWS. 16 U.S.C. § 1531 *et seq.* However, Section 10 of the ESA provides exceptions to this rule, such as permits, when a "take" is likely to occur during a proposed activity. *Id.* at § 1539(a)(1)(B). Obtaining a permit can be a long and arduous

private lands and, due to biological considerations, need permits to be issued by the U.S. Fish and Wildlife Service to proceed with their project.¹² Projects without a federal nexus (i.e., projects that are not funded, authorized, or carried out by a federal agency) may linger for years at the back of the queue while USFWS staff provides Biological Opinions and incidental take statements (if needed) to other applicants whose projects are on public lands or otherwise have a federal nexus (e.g., a recipient of a Department of Energy loan guarantee).

This is not a matter of undue preferential treatment, but of insufficient staff resources. Indeed, in Fiscal Year 2010 alone, USFWS performed over 30,000 consultations with federal agencies under Section 7 of the *Endangered Species Act*, leaving little time for staff to provide Section 10 consultations.¹³ To address this staffing challenge, SEIA recommends establishing a cost recovery mechanism through which applicants could reimburse USFWS for contracting independent, non-biased scientists and permit experts to expedite the consultation and review and process. This process is used today by BLM in processing right-of-way applications.¹⁴ In addition, we recommend that USFWS establish a consistent timeframe for Section 10 consultations, enabling solar projects on private lands to move forward in a timely fashion.

D. Tax Policy: Recent Success Demonstrates the Value of Certainty

The *Energy Policy Act of 2005* created tax incentives for solar energy. Specifically, the measure provided a 30% investment tax credit (ITC) for commercial and residential solar energy systems. Congress subsequently improved and extended the ITC through 2016. The multiple-year extension of the residential and commercial solar ITC gave entrepreneurs the policy certainty needed to invest in solar energy projects. As a result, the industry has grown by 800% since the

process for projects without a federal nexus as it requires the permit applicant (and not USFWS) to determine the effects of the project on endangered species and their habit, design a Habitat Conservation Plan (HCP), provide a long-term commitment to species conservation, and request a consultation with the USFWS. During consultation, the Service and the applicant discuss the proposed project and the species likely to be affected as well as mitigation and conservation measures for habitat maintenance, enhancement, and protection, coincident with development. There is no formal timeline associated with Section 10 consultation. However, preparation of and agreement by all parties involved in the HCP can take several years. In addition, it can take months to years for the USFWS to review and approve the HCP and issue an incidental take permit.

¹² Section 10(a) of the ESA requires preparation and approval (by USFWS/NMFS) of a Habitat Conservation Plan before USFWS can authorize the project or issue an Incidental Take Permit.

¹³ <http://www.fws.gov/endangered/esa-library/pdf/consultations.pdf>

¹⁴ See 43 U.S.C. § 1764 (“The Secretary concerned may ... require an applicant for or holder of a right-of-way to reimburse the United States for all reasonable administrative and other costs incurred in processing an application for such right-of-way...”) and 43 CFR § 2804.14, which dictates that an applicant pay “full reasonable costs” for certain applications.

ITC was implemented in 2006. Cumulative solar capacity in the U.S. now exceeds 2,600 MW, enough to power more than a half million homes.

The 2008 economic crisis rendered solar and other renewable energy tax incentives of little immediate value. Prior to the financial crisis, many large renewable energy projects relied upon third-party tax equity investors to monetize the value of federal renewable energy incentives. The economic downturn drastically reduced the availability of tax equity, severely limiting the financing available for renewable energy projects.

In response to the dramatic decline in available capital, Congress enacted the Section 1603 Treasury Program. This program allows solar and other renewable energy developers to receive a direct federal grant in lieu of taking the ITC that is already in place. This simplifies financing for renewable energy projects and provides access to capital at a time when project developers' tax burdens are inadequate to capitalize on tax incentives and tax equity financing is both scarce and expensive.

By any objective measure, the Section 1603 Treasury Program has been a resounding success. Due in large part to the liquidity provided by this important incentive, the solar industry grew 67% in 2010, making it one of the fastest growing industry sectors in the U.S. economy. Due in large part to reliable, consistent federal policy, solar costs continue to decline. Last year, installed costs fell by 20%, and from the year 2000 to the present, the per-watt price of photovoltaics has declined by 40%. Solar is a diverse technology, and costs will continue to drop as the industry achieves greater efficiencies and economies of scale.

E. Energy Policy: Long-Term Commitments to Renewable Energy Are Vital

Solar power plants are sizable assets that have a useful life of 30 or more years. In order for a proposed solar project to be built, it needs a long-term buyer of its electricity (typically through a bilateral contract with a utility called a power purchase agreement or PPA) and a long-term loan from a bank, financing the project at a reasonable interest rate. Federal policies are needed to provide certainty regarding the financial underpinnings of projects. Such policies include the Department of Energy (DOE) Loan Guarantee Program or a Clean Energy Bank. State-level renewable portfolio standards have incentivized utilities to sign long-term contracts with solar providers. Federal agencies face similar RPS goals for the energy they use, but lack the authority to similarly enter into long-term contracts with solar providers. Long-term clean energy contracting authority should be granted so the federal government can enjoy the same benefits of solar energy that utilities and homeowners do.

DOE's loan guarantee program was initially created by the *Energy Policy Act of 2005* in

recognition of the great challenges that large nuclear, renewable and other low-carbon energy projects face obtaining affordable long-term financing in the commercial marketplace. In today's economic climate, these programs are critical to attract investment in nuclear, clean coal and renewable energy projects. Until the financial community witnesses the successful completion of several of these projects, it will continue to charge substantial premiums or not lend to those projects at all. In addition to reducing component costs, access to long-term debt at a low interest rate is key to ensuring that solar power plants are cost-competitive with other electricity sources. We urge Congress to provide sufficient funding to the Section 1703 DOE Loan Guarantee Program in Fiscal Year 2012 to continue the timely processing and reward of loan guarantees to all of the projects deserving of DOE support.

Another way to accomplish this goal would be to establish a Clean Energy Bank or Clean Energy Deployment Administration (CEDA). As envisioned in H.R. 2454 (2009), CEDA could directly provide loans to an applicant that deploys a clean energy technology. CEDA would also continue to provide loan guarantees, similar to the current DOE Loan Guarantee Program.

On the purchasing side of the ledger, only the Department of Defense currently has the authority to enter into contracts of longer than 10 years with energy providers.¹⁵ However, most solar energy projects require a 20- to 30-year contract in order to be financially viable and provide electricity at a rate at or below the retail price. Unlike other sources of electric generation, solar power plants mainly consist of the up-front cost of installing the infrastructure and solar equipment. Ongoing operations and maintenance costs are quite low, and the fuel is free. Therefore, the longer the term of the contract, the cheaper the electricity is on a per-unit basis. If a buyer wants a 10-year contract, the entire cost of the power plant must be amortized and recovered over only 10 years. If the buyer can sign a 30-year contract, however, the equipment costs are spread over 30 years instead.

Nellis Air Force Base, outside of Las Vegas, Nevada, illustrates the potential of long-term clean energy contracting. There, the U.S. Air Force contracted for electricity via a 14 megawatt solar PV installation. In addition to providing 25% of the electricity needed annually for base operations, the solar project is saving the base over \$1 million each year in lower electricity costs.¹⁶ Solar projects can similarly save other federal agencies millions on their utility bills over the next several decades, but these solar projects cannot move forward until civilian agencies have the authority to sign a long-term contract. Extending the contracting authority to match

¹⁵ See 10 U.S.C. § 2922a.

¹⁶ Department of Defense Strategic Sustainability Performance Plan FY2010, page I-5.

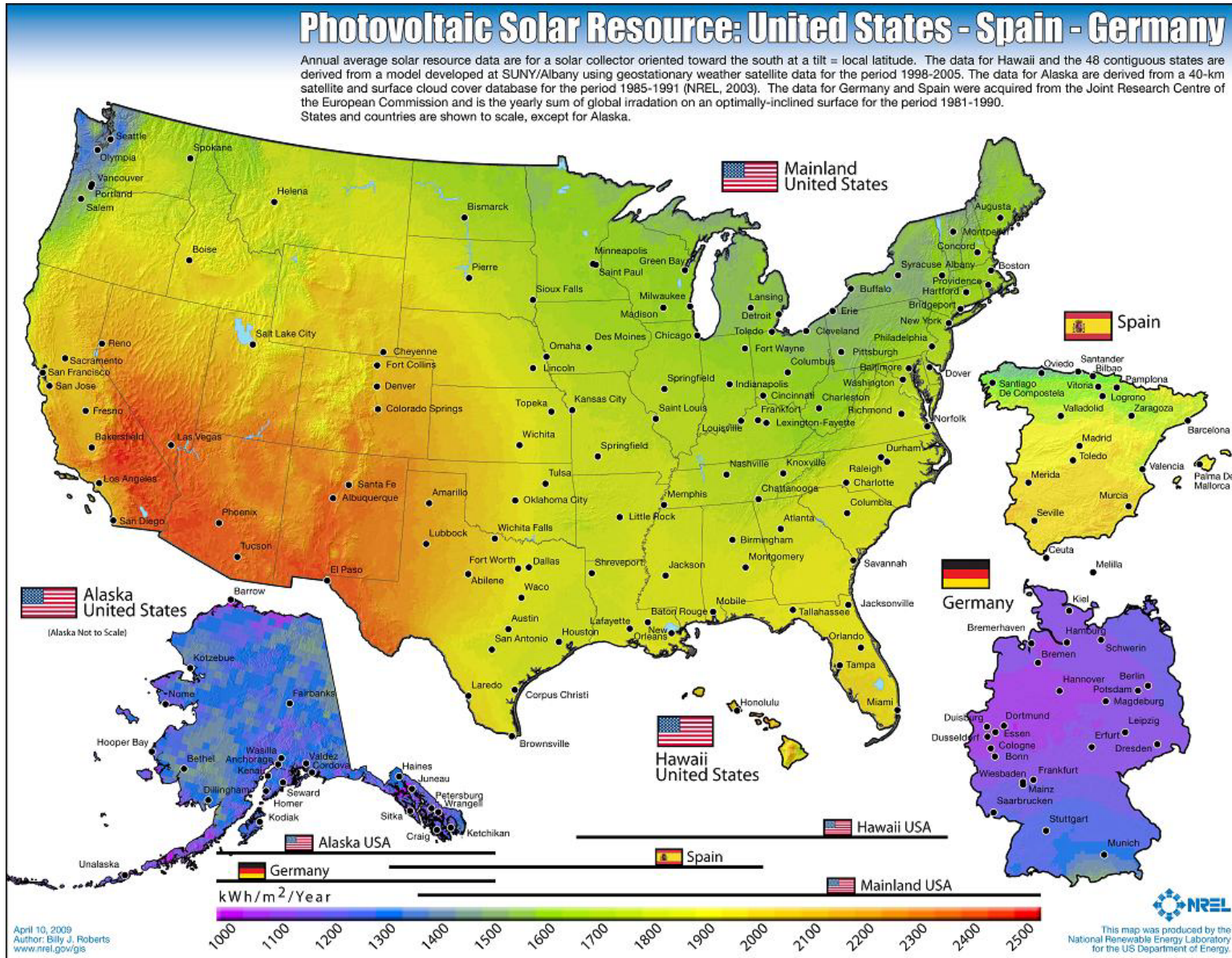
the life of the solar project would benefit solar companies and the public by securing long-term sources of clean energy.

IV. Conclusion

Again, thank you for inviting SEIA to submit this testimony. We look forward to working with the Committee to establish long-term, stable policies which remove roadblocks, promote job creation and ensure the deployment of solar energy technologies on public lands.

ATTACHMENT 1

MAP OF U.S. SOLAR RESOURCES COMPARED TO GERMANY AND SPAIN



ATTACHMENT 2

SOLAR INDUSTRY HIGHLIGHTS BY CONGRESSIONAL DISTRICT

Alaska, At-Large – Rep. Don Young

- There are 15 companies providing solar jobs in Alaska
- Alaskan owned and operated Polar Wire Products manufactures "arctic grade" wire and electrical equipment used extensively in alternative energy systems

Arizona, 1st District – Rep. Paul Gosar

- Solargenix's Saguaro Solar Power Plant, a 1-MW CSP Trough Plant in Red Rock is online
- Arizona Public Service built the Prescott Solar Power Plant, a 3-MW PV Plant in Prescott
- Global Solar Energy built the Springerville Generation Station Solar System, a 5-MW Thin-Film PV Plant in Springerville

Arizona, 7th District – Raul Grijalva

- Abengoa is constructing its Solana Project, a 280-MW trough CSP plant, in Gila Bend
- First Solar is constructing the 17-MW Paloma Solar thin-film PV plant in Gila Bend
- Solon is constructing the Cotton Center, a 17-MW PV plant in Gila Bend

California, 4th District – Rep. Tom McClintock

- SunEdison, a global solar developer, has an office in McClellan
- SolarRoofs.com, a solar water heating and cooling manufacturing company, is headquartered in Carmichael
- United Natural Foods is installing a 1.19 MW solar PV array on its roof in Rocklin

California, 10th District – Rep. John Garamendi

- SolarBOS, a designer and manufacturer of electrical "Balance of System" products for the solar industry is based in Livermore
- Amerimade, also based in Livermore, manufactures a variety of PV systems and parts

California, 19th District – Rep. Jeff Denham

- 10 companies in California's 19th Congressional district are creating solar jobs
- MRL Industries, Inc. manufactures solar industry-related heating products and services in its Sonora factory

California, 20th District – Rep. Jim Costa

- Cleantech America Inc.'s CalRENEW-1 5-MW Thin-Film PV Project in Mendota is online
- There are 1,053 companies creating solar jobs in California

California, 38th District – Rep. Grace Napolitano

- The Los Angeles Unified School District is partnering with SunPower Corporation to install a 1 MW solar panel array on top of its General Stores Warehouse in Pico Rivera

Colorado, 3rd District – Rep. Scott Tipton

- SunPower's Greater Sandhill Solar Plant, a 19-MW PV plant is online in Alamosa County
- SunEdison's Alamosa PV Solar Plant, an 8-MW PV plant is operational
- SunPower and Iberdola are constructing the 30-MW PV San Luis Valley Solar Ranch in Alamosa County

Colorado, 5th District – Rep. Doug Lamborn

- Three Phases/Green Rock Capital built a 2-MW PV plant on Fort Collins Army Base
- Diamond Wire Material Technologies, a diamond wire cutting technology manufacturer serving the global solar industry, is headquartered in Colorado Springs

Colorado, 6th District – Rep. Mike Coffman

- Douglas County School System began construction this year on a 3.1-MW solar system
- ProtoFlex Corporation, a thin film coating manufacturer is headquartered in Centennial

Florida, 2nd District – Rep. Steve Southerland II

- There are 8 companies creating solar jobs in Florida's second Congressional district
- There are four utility-scale solar power projects online in Florida, two projects under construction, and 6 projects under development

Florida, 25th District – Rep. David Rivera

- There are 236 companies creating solar jobs in Florida
- Quantum Solar America, LLC, a PV module manufacturer, is headquartered in Miami

Georgia, 10th District – Rep. Pal Broun

- US Battery, a solar battery manufacturing company, has a branch in Augusta
- The ROOKER company, an industrial real estate firm, is constructing a 115-kW PV system

Hawaii, 1st District – Rep. Colleen Hanabusa

- Sopogy's 5-MW concentrating solar power project in Oahu is under construction
- Hoku Corporation, headquartered in Honolulu, manufactures solar grade polysilicon

Idaho, 1st District – Rep. Raul Labrador

- Voodoo Solar, a residential solar installer, is headquartered in Cocolalla

Louisiana, 3rd District – Rep. Jeff Landry

- An AGC Flat Glass Inc commercial glass fabrication facility is in nearby Baton Rouge

Louisiana, 4th District – Rep. John Fleming

- Another of AGC Flat Glass Inc's commercial glass fabrication facilities is in Opelousas

Maryland, 1st District – Rep. Andy Harris

- PowerUp Corporation, a solar PV project distributor, has an office in nearby Chase, Maryland

Maryland, 3rd District – Rep. John Sarbanes

- Constellation Energy installed a 750-kW PV system on a Millersville government building
- Constellation Energy installed a 500-kW PV system on Coppin State University's rooftop

Massachusetts, 5th District – Rep. Niki Tsongas

- Rivermoor Energy is constructing a 1-MW PV plant in Haverhill

Massachusetts, 7th District – Rep. Edward Markey

- 1366 Technologies in North Lexington is commercializing a new manufacturing process for PV wafers
- Practical Solar, based in nearby Boston, manufactures and supplies solar heliostats

Michigan, 1st District – Rep. Dan Benishek

- Phoenix Navigation and Guidance Inc. in Munising is building solar turbogenerators
- SES Flexcharge USA, based in Charlevoix, manufactures custom PV systems
- The world's largest manufacturer of polycrystalline silicon used in solar panels is Hemlock Semiconductor located in the district next door

Michigan, 5th District – Rep. Dale E. Kildee

- 79 Michigan companies are creating solar jobs, six are in the fifth Congressional district
- Mersen USA Ultra Carbon Division, a manufacturer of advanced materials and solutions for high temperatures, is based in Bay City

New Jersey, 3rd District – Rep. Jon Runyan

- The east coast regional office of SunPower Corporation, a large designer, manufacturer and distributor of solar PV panels, is located in nearby Trenton
- There is one utility-scale solar power plant operating in New Jersey, four plants under construction, and seven plants under development

New Jersey, 6th District – Rep. Frank Pallone, Jr.

- America Capital Energy is constructing 5-MW PV Yardville Solar Farm in Hamilton
- Aston Solar, headquartered in Piscataway, is a solar energy product manufacturer, distributor, system integrator, and services provider

New Jersey, 12th District – Rep. Rush Holt

- American Capital Energy and SunEdison are constructing the Trenton Solar Farm, a 1 MW ground-mounted PV system in nearby Trenton
- 201 companies are creating solar jobs in New Jersey; 28 are in the 12th district

New Mexico, 1st District – Rep. Martin Heinrich

- First Solar's 2-MW thin film PV facility in Albuquerque is online
- 60 companies are creating solar jobs in Arizona; 23 are in the first Congressional district
- Schott Solar, Inc., a global PV receiver tech manufacturer, is headquartered in Albuquerque

New Mexico, 3rd District – Rep. Ben Ray Lujan

- Chevron's 1 -MW concentrating PV plant is operating in Questa
- First Solar's 30-MW thin film PV facility is online in Cimarron

Ohio, 6th District – Rep. Bill Johnson

- New Harvest Ventures/Agile Energy are developing the 50-MW PV Turning Point Solar Project in Cumberland
- There are 65 companies creating solar jobs in Ohio, and 3 are in the sixth district of Ohio

Ohio, 13th District – Rep. Betty Sutton

- Akron Metro Regional Transit Authority's 480-kW rooftop PV project in Akron is online
- Westlake Metals Company, in North Ridgeville, manufactures metal for solar projects

Oklahoma, 2nd District – Dan Boren

- 19 companies are creating solar jobs in Oklahoma

Oregon, 4th District – Rep. Peter DeFazio

- 94 companies are creating solar jobs in Oregon. Pacific Metal Fabricators, LLC, a sheet metal manufacturer for solar power projects, is headquartered in Eugene
- Industrial Finishes and the Pepsi Cola Bottling Company have each installed two of the largest PV projects in the Northwest on their Eugene facilities' rooftops

Pennsylvania, 5th District – Rep. Glenn Thompson

- 288 companies are creating solar jobs in Pennsylvania, and five are in the fifth district
- There is one utility-scale solar power project online in Pennsylvania, three projects under construction and three projects under development

South Carolina, 3rd District – Rep. Jeff Duncan

- Ulbrich, in Westminster, supplies copper wire used in solar panels.

South Dakota, At-Large – Rep. Kristi Noem

- Ellsworth Air Force Base is installing PV systems through its \$7.2 million energy initiative

Tennessee, 2nd District – Rep. John Duncan, Jr.

- Efficient Energy of Tennessee built a 1-MW PV Plant in Knox County
- ATAS, a roof and PV system installer, has an office in Maryville

Tennessee, 3rd District – Rep. Chuck Fleischmann

- Wacker Chemical is investing 1.5 billion in a polysilicon manufacturing plant near Cleveland. The plant will create 650 jobs.
- 39 other companies are creating solar jobs in Tennessee

Texas, 1st District – Rep. Louie Gohmert

- PowerUp Corporation, a solar PV project distributor, has an office in Tyler

Texas, 17th District – Rep. Bill Flores

- Connexa Energy, a renewable products manufacturer/distributor, is in nearby Boerne
- The Cameron Park Zoo in Waco will be installing a 6,000 square foot PV panel system

Utah, 1st District – Rep. Rob Bishop

- Salt Lake City is one of the Department of Energy’s Solar America Cities
- Utah has a goal of installing 10 MW of new solar PV power in Salt Lake City by 2015
- Applied Materials, a global provider of equipment, services and software for manufacturing PV products has a research, development and manufacturing facility in Salt Lake City

Virginia, 1st District – Rep. Robert Wittman

- There are 91 companies creating solar jobs in Virginia, and 6 are in the first district
- Infinite Energy Resources, a renewable energy facilities developer, is based in Fredericksburg

Washington, 4th District – Chairman Doc Hastings

- Infinia Corporation, the manufacturer and supplier for Stirling-based solar power generation systems, is headquartered in Kennewick
- Teanaway Solar Reserve is developing a 75-MW PV project in Cle Elum

American Samoa, At-Large – Del. Eni Faleomavaega

- American Samoa has 616 kW of distributed solar operating at 25 government and commercial buildings

Guam, At-Large – Del. Madeleine Bordallo

- A new 250-kW solar PV system installed at Guam Naval Base will produce an estimated 411,000 kWh of renewable power per year, reducing electricity costs by \$106,050

Northern Mariana Islands, At-Large – Del. Gregorio Kilili Camacho Sablan

- 160 SCHOTT 280-watt PV panels are being installed at Southern Saipan High School thanks to a grant from the *American Recovery and Reinvestment Act of 2009*

Puerto Rico, At-Large – Resident Commissioner Pedro R. Pierluisi

- Walmart and SunEdison are building the biggest solar power project in Puerto Rico on five Walmart-owned stores. The program could expand to 23 stores over five years.

Virgin Islands, At-Large – Del. Donna M.C. Christensen

- The largest solar-powered electricity system in the territory is being installed at King Airport in St. Thomas. The PV panel system is expected to generate 450 kW, supplying 15 percent of the airport’s energy needs.



May 19, 2011

ATTACHMENT 3
SEIA COMMENTS TO USFWS ON
EAGLE CONSERVATION PLAN GUIDANCE

Mr. Jerome Ford
U.S. Fish & Wildlife Service
Attn: Eagle Conservation Plan Guidance
4401 North Fairfax Drive; Mail Stop 4107
Arlington, VA 22203-1610

TRANSMITTED VIA E-MAIL

RE: Eagle Conservation Plan Guidance

Dear Mr. Ford:

On behalf of the Solar Energy Industries Association (SEIA) and its 1,000 members, I would like to express our appreciation for the U.S. Fish and Wildlife Service's (USFWS) ongoing efforts to support the deployment of solar energy projects. The United States has some of the richest solar resources in the world and we should not miss an opportunity to create jobs and generate clean, reliable energy with this inexhaustible, domestic resource. USFWS can simultaneously encourage renewable energy development and protect eagles and their habitat. SEIA and its members would like to meet with USFWS to discuss these critical issues and develop strategies consistent with the dual purpose of protecting wildlife and increasing solar power generation.

Thank you for this opportunity to submit comments on these guidelines for the wind industry. We believe that these guidelines should not apply to the solar industry. We are eager to work with the USFWS to create eagle conservation guidance that facilitates solar power project development.

Best Regards,

Daniel M. Adamson
Vice President of Regulatory Affairs

Contacts

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These Guidelines Should Not Be Applied to the Solar Industry

SEIA appreciates the U.S. Fish and Wildlife Service's (USFWS) efforts to develop Eagle Conservation Plan Guidance. When developed in collaboration with stakeholders and narrowly defined to achieve the conservation goal without unnecessary or inappropriate burdens on regulated entities, guidance of this nature can be beneficial to all parties. To achieve this goal, however, the Guidance should set forth clear standards that will result in improved efficiency for government action, reduced costs and delays to project developers, and clarity on procedures for the involvement of third parties.

As discussed in these comments, SEIA appreciates the intent of the Guidance to achieve these objectives. As currently proposed, the Guidance does not provide an effective mechanism for screening out projects affecting eagles and also includes numerous recommended measures that are expensive, burdensome, and unnecessary. While the draft Guidance applies to wind project development, SEIA is concerned that the Guidance will severely hamper, rather than aid, renewable energy development in general, and may specifically adversely affect solar energy projects now and in the future. This is because, as USFWS states, many of the concepts and approaches outlined in this Guidance "can be readily exported to other situations."¹ Thus, SEIA is concerned that many, if not most, of the costly and burdensome guidelines the USFWS is recommending for the wind industry could be applied to the solar industry as well. In fact, SEIA has already heard anecdotes from member companies that USFWS Field Offices have been applying this wind Guidance to their solar power projects. USFWS should ensure that no Regional or Field Offices are applying any aspects of this wind Guidance to solar power projects.

Application of the USFWS Eagle Conservation Plan Guidance, formulated in large part to address the impacts of wind power facilities, to the solar industry is inappropriate for many reasons. First, the solar industry employs different equipment and technologies, and utilizes land differently than the wind industry. Second, the solar industry has fundamentally different impacts than other energy industries. Both of these factors make it doubtful that solar power plants will directly impact eagles. For instance, eagle mortality due to direct strikes into panels or mirrors is extremely unlikely. Indeed, extensive deployment of solar power is a key element of the overall effort to address climate change, a phenomenon that threatens both eagles and their habitat. SEIA appreciates that the USFWS is extremely busy and developing guidance can be a lengthy process. However, guidelines that may be applicable to one industry are often inappropriate or impossible to implement for another industry. Thus applying the same Guidance to both wind and solar projects is unreasonable.

SEIA and its members would appreciate the opportunity to meet with USFWS to discuss these important issues before a decision is made to develop guidelines that would be applied to solar projects. Below are just a few examples of the many concerns that SEIA has with this Guidance.

¹ U.S. Fish & Wildlife Service, "Draft Eagle Conservation Plan Guidance," at p. 8 (Jan. 2011). SEIA is also concerned that USFWS may apply this Eagle Guidance to condors and raptors generally.

USFWS Should Make a Threshold Determination Prior to Applying any Guidance

The Bald and Golden Eagle Protection Act states that anyone who “knowingly, or with wanton disregard for the consequences of his act take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or in any manner any bald eagle commonly known as the American eagle or any golden eagle, alive or dead, or any part, nest, or egg thereof” may be subject to punishment under the Act.² As such, USFWS should have to make a threshold determination of a project’s adverse impact on eagles prior to applying any Eagle Guidance to a renewable energy project. Without a threshold finding, USFWS has no way of knowing whether the proposed Guidance is applicable or appropriate for a given project. Moreover, without an initial understanding of a project’s impact, USFWS cannot determine whether the Guidance will even be effective at monitoring and protecting eagles and their environment. We believe that threshold criteria of this nature would make it clear that solar projects are unlikely to affect eagles. In the rare situation where some impact could occur, any guidance that would apply to solar projects should make it clear that compliance would satisfy all legal requirements for take authorization and absolve the applicant of all liability under the Bald and Golden Eagle Protection Act. In addition, whether in the draft Guidance for wind projects, or guidance for “other situations” the problems discussed below that result in excessive cost and delay should be avoided.

Pre- and Post-Construction Monitoring Is Unnecessarily Burdensome

The Eagle Conservation Plan Guidance provides that most wind projects undertake an initial site assessment; perform site-specific surveys; predict initial eagle fatalities; develop and apply advanced conservation practices and compensatory mitigation; and evaluate post-construction impacts. These multiple steps are extremely expensive and burdensome and most of this cost would be expended at the outset of a project’s timeline, requiring developers to spend significant money with little or no confidence that USFWS will issue a take permit. In addition, this Guidance would further extend an already extremely long permitting process for renewable projects by requiring three years of pre-construction studies and two to five years of post-construction studies for each project, a regulatory burden faced by no other industry. Costly and lengthy monitoring should only be required in situations where the facts dictate.

Furthermore, USFWS expects all projects, regardless of their size or their category, to undertake the pre- and post-construction monitoring. Thus, a small renewable energy project would be required to perform the same initial site assessment as a much larger utility-scale renewable power plant. Also, a “category 3” project that is defined as posing minimal risk to eagles would still have to pay for and conduct the same pre-construction and post-construction surveys as a category 1 or 2 project that poses a high or moderate risk to the eagle population. Pre- and post- construction monitoring and surveying should be tailored to the size and characteristics of a project and should be implemented only for those projects that could seriously harm the eagle population.

² 16 U.S.C. § 668 (2011).

Finally, as USFWS has acknowledged, “effects [of energy facilities on eagles] and how to address them at this time is limited.”³ Thus, it is unclear whether these multiple studies and surveys would be effective or provide a scientifically accurate picture of the proposed energy installation’s impact on eagles. As such, this Guidance and the costly and burdensome steps therein should be applied only after the USFWS has made a threshold determination that the application of the Guidance is necessary. SEIA is eager to work together with USFWS and other interested parties to develop the specifics of such a threshold determination. Establishing a reasonable threshold for application of the Guidance will focus the efforts of USFWS, the renewable industry and others on areas where significant impacts may occur.

³

Guidance at p. 11.