

**Legislative Bulletin.....October 22, 2009**

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**H.R. 3585—Solar Technology Roadmap Act of 2009**

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**(Giffords, D-AZ)**

**Key Conservative Concerns**

*Take Away Points*

- **Excessive Spending:** H.R. 3585 would authorize appropriations totaling \$2.25 billion over five years – a significant amount of new spending during a weak economy.
- **Corporate Influence:** The bill allows representatives of the solar industry to influence where to direct taxpayer money that could benefit their companies. Additionally, the bill exempts representatives from the Federal Advisory Committee Act – intended to provide an open and transparent process.
- **Potentially Duplicative:** The National Renewable Energy Laboratory already has a Solar Energy Technologies Program that supports research and development of photovoltaic and solar thermal technology. H.R. 3585 is unclear to whether this program will be continued or terminated before it completes projects scheduled to be finished in 2015.
- **Little Return from Federal Hand-outs:** The government has been heavily subsidizing the solar industry for well over thirty years with little progress – solar energy only accounts for 1% of the 7% of total renewable energy consumed in the U.S.

*For more details on these concerns, see below*

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**Order of Business:** The bill is expected to be considered on Thursday, October 22, 2009, under a structured rule ([H.Res.846](#)) providing for one hour of general debate and making in order eleven amendments. The rule waives all points of order against consideration of the bill, except earmark and “pay-go” violations. The rule allows one motion to recommit with or without instructions. The RSC will summarize each amendment made in order in a separate document.

**Summary:** Authorizing approximately \$2.25 billion over fiscal years 2011 through 2015, H.R. 3585 would require the Secretary of Energy to provide for guidance on the implementation of

solar technology needs in the United States and create a Solar Technology Roadmap Committee to manufacture a “road map” for solar technology. Additionally, the bill also repeal several existing laws related to solar research and development and reauthorize four solar research activities for three additional years first authorized under the Energy Independence and Security Act of 2007. Specifically, the bill would:

***New Solar Research & Development Program:*** The Secretary of Energy will develop a research and demonstration program dedicated towards all “appropriate” forms of solar technology research and development and provide competitively awarded projects to:

- Academic institutions, national laboratories, Federal research agencies, State research agencies, nonprofit research organizations, industrial entities, or consortia thereof for research, development, and demonstration activities; and
- Industry-led consortia for research, development, and demonstration of advanced techniques for manufacturing a variety of solar energy products.

This section of H.R. 3585 also contains a provision expressing it is the sense of Congress that at least 75% of solar funding conducted by DOE after 2014 shall support activities identified by and recommended under the Solar Technology Roadmap. Specifically, the bill authorizes for each fiscal year and the minimum percentage dedicated to activities identified by and recommended under the Solar Technology Roadmap for each year, as follows:

- \$350,000,000 for fiscal year 2011
- \$400,000,000 for fiscal year 2012 at least 30%
- \$450,000,000 for fiscal year 2013 at least 45%
- \$500,000,000 for fiscal year 2014 at least 60%
- \$550,000,000 for fiscal year 2015 at least 75%

The bill also reauthorizes several solar research activities established in the Energy Independence and Security Act of 2007 including a \$2.5 million program for solar air conditioning research and development and a \$3.5 million program for daylight systems and direct solar light pipe technology through 2015.

***Solar Technology Roadmap Committee:*** Within four months of the bill’s enactment, the Secretary must establish a “Solar Technology Roadmap Committee” consisting of at least 11 members appointed by the Secretary. At least 1/3 of the total members of the committee must include representatives of “different sectors of the domestic solar technology industry, including manufacturers and equipment suppliers.” Of the members appointed originally to the Solar Technology Roadmap Committee, approximately 1/3 shall be appointed for a 2-year term, approximately 1/3 shall be appointed for a 3-year term, and approximately 1/3 shall be appointed for a 4-year term. While the bill sets up guidelines every effort to ensure that no individual appointed to serve on the Committee has a conflict of interest, the bill exempts Committee members from being subject to the Federal Advisory Committee Act.

***Solar Technology Roadmap:*** The legislation requires that within 18 months of enactment that the Committee provide the Secretary the best current estimate of the near-term (up to 2 years), mid-term (up to 7 years), and long-term (up to 15 years) research, development, and demonstration needs in solar technology, and provide guidance to the solar technology research, development, and demonstration activities supported by the federal government. The committee is aimed at specifically focusing on the production challenges of intermittency, transience, storage, and

scaling in order to determine which solar-related technological solutions are appropriate for various applications and how to store excess solar energy.

***Solar Technology Demonstration Projects:*** The bill establishes a program to provide grants for demonstration projects to support the development of solar energy production, consistent with details to be provided in the Solar Technology Roadmap. The grant program must consist of at least ten photovoltaic projects ranging from 1 to 3 megawatts in size and 2 to 3 solar projects greater than 30 megawatts in size. Federal assistance for each project must be limited to 50% of the total project cost, and limits total authorizations for projects under this section \$300 million over the course of the Act.

***Photovoltaic Recycling:*** Section II of the bill establishes a grant program for research, development, and demonstration activities to increase reuse and recycling of photovoltaic devices. The goal of the new program is to increase the efficiency of photovoltaic device recycling and maximize the recovery of valuable raw materials for use in new products while minimizing the life-cycle environmental impacts such as greenhouse gas emissions and water usage.

**Additional Background:** In 1953, Bell Laboratories developed the first silicon solar cell capable of generating a measurable electric current. However, the technology remained far from practical costing approximately \$300 per watt. The Arab Oil Embargo of 1973 brought massive investment in subsidies and research with the hope solar photovoltaic costs could eventually become competitive with fossil fuels. These investments, a number of which were spearheaded by Exxon, brought the price down from \$100 per watt to around \$20 per watt. Throughout the next thirty years, the government and private industry have been involved in a number of ventures to develop and increase the efficiency of solar power. A brief timeline of the history of solar power can be viewed [here](#).

**RSC Fun Fact:** Fossil fuels and green fuels can coexist – many offshore oil rigs use solar cells to power the waning lights on the top of the rigs.

### ***Democrat Inconsistency Alert!***

- ***Corporate Pandering:*** Democrats consistently accuse Republicans of acquiescing to the wishes of major corporations. This bill creates an advisory committee responsible for doling out more than a billion in taxpayer dollars that could be comprised of up to 50% of individuals representing the solar industry. So-called “green industries” must be exempt from Democratic rhetoric or corporate welfare.

**Conservative Concerns:** Some conservative have expressed concerns about the bill’s overall authorization levels of \$2.25 billion over 5 years. At a time when the Administration recently announced that it finished the 2009 fiscal year with a \$1.42 trillion dollar budget deficit, many conservatives may question the need for an additional program to promote the development of solar energy at the DOE. Additionally, concerns have been expressed to the centralized nature of this program, which establishes a “road map” through government sponsored research and development projects. Instead, many conservatives would argue that relieving the tax burden, regulatory burden, and liability burden on private-sector solar energy companies (as well as other businesses) is the appropriate solution.

Some conservatives have expressed reservations over the framework of the Solar Technology Roadmap Committee. Requiring at least 1/3 of all participants to be included in a committee responsible for rewarding well over \$1 billion in grants to participants that can benefit their own corporate interests is an obvious conflict of interest. It is even more concerning that the bill explicitly exempts participants from the *Federal Advisory Committee Act*. This Act was passed in 1972 to ensure that advice by the various advisory committees formed over the years is objective and accessible to the public.

Some conservatives have also questioned the need for H.R. 3585 because the program appears to be potentially duplicative of existing programs which could continue beyond enactment of the bill. In addition to the number of grants and tax incentives to encourage growth and development in solar power, the DOE already operates the [Solar Energy Technologies Program](#) (SETP) at the [National Renewable Energy Laboratory](#) located in Golden, Colorado. The purpose of this program is to “to develop cost-competitive solar energy systems for America. More than \$170 million is spent each year in research and development (R&D) on two solar electric technologies with the greatest potential to reach cost competitiveness by 2015.”

While H.R. 3585 repeals several acts dealing with solar research and development at the DOE dating as far back as 1974, H.R. 3585 is unclear as to what will happen to programs like those at NREL. SETP has a number of research and development projects that will not be completed until 2015. Some conservatives have expressed concern that H.R. 3585 will result in either duplication of programs the roadmap committee will develop or cause to the cancellation of research and development programs that have already cost taxpayers millions before achieving any results.

Additionally, some conservatives may question the utility of this program since little progress has been made in making solar a viable low cost option to provide energy. In 1978, the Wall Street Journal predicted that solar power would meet the needs of 20% over energy demand by 2000. Today, after billions in taxpayer investment, solar power still only makes up 1% of the 7% of renewable energy consumed each year in the United States according to the Energy Information Agency.

**Committee Action:** On September 16, 2009, the bill was introduced and referred to the Committee on Science and Technology. On September 30, 2009, the subcommittee on Energy and Environment held a mark-up and reported the bill to the full committee by voice vote. On October, 7, 2009, the full committee held a mark-up and ordered the bill to be reported by a voice vote.

**Administration Position:** While no Statement of Administration is available, the Department of Energy has written to the committee “While the Department of Energy (DOE) welcomes the support that the proposed legislation would provide to solar research and development, the proposal to require *the support of activities identified by a dedicated Solar Technology Roadmap Committee may be inconsistent with the objective of maximizing the public benefits of the solar program.*”

**Cost to Taxpayers:** According to CBO, H.R. 3585 would authorize appropriations totaling \$2.25 billion over the 2011-2015 period. Additionally, CBO estimates “that implementing the legislation would cost about \$1.4 billion over the 2011-2014 period and about \$840 million after 2014.”

**Does the Bill Expand the Size and Scope of the Federal Government?:** Yes, the legislation creates a Solar Technology Roadmap Committee in the Department of Energy to provide guidance for developing federal solar technology needs and developing a “road map” for determining future solar technology needs.

**Does the Bill Contain Any New State-Government, Local-Government, or Private-Sector Mandates?:** No.

**Does the Bill Comply with House Rules Regarding Earmarks/Limited Tax Benefits/Limited Tariff Benefits?:** According to Committee Report 111-302, H.R. 3585 does not contain any congressional earmarks, limited tax benefits, or limited tariff benefits as defined in House Rule XXI, clause 9(d), 9(e), and 9(f).

**Constitutional Authority:** The committee report for H.R. 3585 cites Constitutional Authority in Article I, Section 8, but *fails* to cite a foregoing power to what this clause reflects.

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