

**THE ADMINISTRATION'S BET ON ABOUND SOLAR:
ASSESSING THE COSTS TO THE AMERICAN
TAXPAYERS**

HEARING

BEFORE THE
SUBCOMMITTEE ON REGULATORY AFFAIRS,
STIMULUS OVERSIGHT AND GOVERNMENT
SPENDING

OF THE
COMMITTEE ON OVERSIGHT
AND GOVERNMENT REFORM
HOUSE OF REPRESENTATIVES

ONE HUNDRED TWELFTH CONGRESS

SECOND SESSION

JULY 18, 2012

Serial No. 112-167

Printed for the use of the Committee on Oversight and Government Reform



Available via the World Wide Web: <http://www.fdsys.gov>
<http://www.house.gov/reform>

U.S. GOVERNMENT PRINTING OFFICE

75-588 PDF

WASHINGTON : 2012

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2104 Mail: Stop IDCC, Washington, DC 20402-0001

COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM

DARRELL E. ISSA, California, *Chairman*

DAN BURTON, Indiana	ELLJAH E. CUMMINGS, Maryland, <i>Ranking Minority Member</i>
JOHN L. MICA, Florida	EDOLPHUS TOWNS, New York
TODD RUSSELL PLATTS, Pennsylvania	CAROLYN B. MALONEY, New York
MICHAEL R. TURNER, Ohio	ELEANOR HOLMES NORTON, District of Columbia
PATRICK T. McHENRY, North Carolina	DENNIS J. KUCINICH, Ohio
JIM JORDAN, Ohio	JOHN F. TIERNEY, Massachusetts
JASON CHAFFETZ, Utah	WM. LACY CLAY, Missouri
CONNIE MACK, Florida	STEPHEN F. LYNCH, Massachusetts
TIM WALBERG, Michigan	JIM COOPER, Tennessee
JAMES LANKFORD, Oklahoma	GERALD E. CONNOLLY, Virginia
JUSTIN AMASH, Michigan	MIKE QUIGLEY, Illinois
ANN MARIE BUERKLE, New York	DANNY K. DAVIS, Illinois
PAUL A. GOSAR, Arizona	BRUCE L. BRALEY, Iowa
RAÚL R. LABRADOR, Idaho	PETER WELCH, Vermont
PATRICK MEEHAN, Pennsylvania	JOHN A. YARMUTH, Kentucky
SCOTT DESJARLAIS, Tennessee	CHRISTOPHER S. MURPHY, Connecticut
JOE WALSH, Illinois	JACKIE SPEIER, California
TREY GOWDY, South Carolina	
DENNIS A. ROSS, Florida	
FRANK C. GUINTA, New Hampshire	
BLAKE FARENTHOLD, Texas	
MIKE KELLY, Pennsylvania	

LAWRENCE J. BRADY, *Staff Director*

JOHN D. CUADERES, *Deputy Staff Director*

ROBERT BORDEN, *General Counsel*

LINDA A. GOOD, *Chief Clerk*

DAVID RAPALLO, *Minority Staff Director*

SUBCOMMITTEE ON REGULATORY AFFAIRS, STIMULUS OVERSIGHT AND GOVERNMENT
SPENDING

JIM JORDAN, Ohio, *Chairman*

ANN MARIE BUERKLE, New York, <i>Vice Chairwoman</i>	DENNIS J. KUCINICH, Ohio, <i>Ranking Minority Member</i>
CONNIE MACK, Florida	JIM COOPER, Tennessee
RAÚL R. LABRADOR, Idaho	JACKIE SPEIER, California
SCOTT DESJARLAIS, Tennessee	BRUCE L. BRALEY, Iowa
FRANK C. GUINTA, New Hampshire	
MIKE KELLY, Pennsylvania	

CONTENTS

Hearing held on July 18, 2012	Page 1
WITNESSES	
Mr. Craig Witsoe, Former Chief Executive Officer, Abound Solar, Inc. Oral Statement	10
Written Statement	12
Mr. Tom Tiller, Former Chairman of the Board Abound Solar, Inc. Oral Statement	15
Written Statement	17
Mr. David Frantz, Acting Executive Director, Loan Programs Office, U.S. Department of Energy Oral Statement	21
Written Statement	24
Mr. Jonathan Silver, Former Executive Director, Loan Program Office, U.S. Department of Energy Oral Statement	29
Written Statement	32
Ms. Veronique De Rugy, Senior Research Fellow, Mercatus Center at George Mason University Oral Statement	72
Written Statement	74
Mr. Gregory Kats, President, Capital E Oral Statement	85
Written Statement	87
APPENDIX	
Continuation of this Committee's oversight of the Department of Energy's effort to promote green energy	105

**THE ADMINISTRATION'S BET ON ABOUND
SOLAR: ASSESSING THE COSTS TO THE
AMERICAN TAXPAYERS**

Wednesday, July 18, 2012,

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON REGULATORY AFFAIRS, STIMULUS
OVERSIGHT, AND GOVERNMENT SPENDING,
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM,
Washington, D.C.

The subcommittee met, pursuant to call, at 10:05 a.m., in Room 2154, Rayburn House Office Building, Hon. Jim Jordan [chairman of the subcommittee] presiding.

Present: Representatives Jordan, Buerkle, Labrador, DesJarlais, Guinta, Kelly, Kucinich, and Welch.

Also Present: Representatives Issa, Gowdy, and Cummings.

Staff Present: Will L. Boyington, Majority Staff Assistant; Molly Boyl, Majority Parliamentarian; Lawrence J. Brady, Majority Staff Director; Drew Colliatie, Majority Staff Assistant; John Cuaderes, Majority Deputy Staff Director; Adam P. Fromm, Majority Director of Member Liaison and Committee Operations; Linda Good, Majority Chief Clerk; Tyler Grimm, Majority Professional Staff Member; Christopher Hixon, Majority Deputy Chief Counsel, Oversight; Mark D. Marin, Majority Director of Oversight; Laura L. Rush, Majority Deputy Chief Clerk; Jeff Solsby, Majority Senior Communications Advisor; Jaron Bourke, Minority Director of Administration; Ashley Etienne, Minority Director of Communications; Susanne Sachsman Grooms, Minority Chief Counsel; Jennifer Hoffman, Minority Press Secretary; Nicholas Kamau, Minority Counsel; Chris Knauer, Minority Senior Investigator; Adam Koshkin, Minority Staff Assistant; Brian Quinn, Minority Counsel; Dave Rapallo, Minority Staff Director; and Donald Sherman, Minority Counsel.

Mr. JORDAN. The hearing on the Administration's Bet on Abound Solar: Assessing the Cost to the American Taxpayers will come to order.

You guys know the routine; we do our opening. You have to listen to us for a few minutes and then we will give you each five minutes for your testimony. I know we have several other members coming. We had conference meetings this morning, so they will be here shortly. But we will get started. I will do my opening statement, then we will turn to the gentleman from Ohio for his.

Today's hearing continues this Committee's oversight of the Department of Energy's efforts to promote green energy. After Solyndra went bankrupt in August of last year, major questions

arose about the nature of the decision-making process at the Department of Energy and how safe American taxpayers were in light of the risks associated with the decisions made by political appointees at the Department.

It is becoming abundantly clear that billions of dollars of the public's money was put at undue risk. The Committee's investigation has revealed a pattern of incompetence, carelessness, and cronyism at President Obama's Department of Energy. The DOE Inspector General has testified that the money given to the Department via the stimulus was akin to attaching "a garden hose to a fire hydrant." DOE was flooded with cash and did not have the infrastructure to spend it in a sound fashion.

Abound Solar received a \$400 million loan guarantee from DOE and is the third major bankruptcy within the loan's portfolio. This decision to grant this company taxpayer support will end up costing taxpayers up to \$70 million.

Had it not been for the attention drawn to problems with the loan program, DOE officials could have continued running the office in a cavalier fashion and the losses may have been much greater.

As defenders of the Administration's green energy agenda are likely to point out, letters were written by both Democrats and Republicans to the DOE supporting Abound. Ultimately, however, the decision to issue this loan guarantee, despite overwhelming evidence that the company was a bad bet, fell on the shoulders of the Department of Energy.

To a large degree, this decision rested with the two individuals testifying here today, the former and current heads of DOE's loan program office, Mr. Silver and Mr. Frantz. These two political appointees at the front lines of the loan program were responsible for safeguarding taxpayers from undue risk, and they failed in that task. In the case of Mr. Silver, instead of protecting taxpayers, evidence has emerged that he actively aided companies in pushing through their loan guarantees, despite the risk to taxpayers.

The close political and financial ties many of these companies had to the Obama Administration are remarkable. We have a trillion dollar deficit, sky-high unemployment, and instead of getting people back to work, taxdollars were directed to friends and political allies. Allowing the DOE to play venture capitalist gods with the people's money is a mistake we should never allow to happen again.

For nearly two months, Chairman Issa and I have been requesting that Secretary Chu come back to testify before the Committee to explain developments uncovered in our investigation. So far, Secretary Chu has been unwilling to come and explain these developments. In fact, the Department of Energy has obstructed our efforts at every step of the way.

Just this week the DOE actively interfered with our efforts to obtain documents from Mr. Silver prior to this hearing. Many people don't realize that the Obama Administration is not the first to experience the folly of loan guarantees. When President Carter authorized \$20 billion for an alternative energy loan guarantee program, taxpayers lost a tremendous amount of money. Afterward, many agreed we should never issue loan guarantee for clean en-

ergy projects again. That debacle is detailed in the Committee's report released in March of this year.

However, there are another three companies in bankruptcy and, unfortunately, it seems safe to say that Abound will not be the last to fail.

I did not vote for the stimulus which provided these funds and, frankly, I find it absurd that the President is trying to force expensive so-called green energy down the throats of the American people. However, despite my disagreements on the policy, I think we can all agree that there is something fundamentally flawed about the implementation of this policy by the Department of Energy and its Loan Program Office, which has rewarded friends of the Administration at the expense of the American people.

With that, I will yield to the gentleman from Ohio for his opening statement.

Mr. KUCINICH. Thank you very much, Mr. Chairman. I welcome the opportunity to hear from the witnesses today, and although I am sure that each of you will provide the Subcommittee with valuable testimony, I am concerned that my colleagues in the Majority have other interests.

And even before we received a single document from the Department of Energy or one of the loan guarantee recipients, our Chairman called the 1705 program a broad scandal, characterized by allegations of pay-to-play relationships, and yet we found no evidence of such a scandal or cronyism. And I think it is really important for this Committee to proceed from facts. We may assume some things, but we shouldn't be making statements based on our assumptions; we should be making statements based on facts that the Committee process uncovers. I think that is a much more serious way to proceed with the work of this Committee.

What this Committee has discovered is that Democrats and Republicans alike have consistently supported the loan guarantee program, whether here in Congress, in State Houses across this Country, or in the private investor community. Meanwhile, throughout this investigation, there is a real scandal that has been underneath it that we need to address, and that is the systematic, illegal dumping of subsidized Chinese solar panels in the U.S. So we are attacking our own business people here. Meanwhile, the Chinese are eating our lunch in this market while we are fighting with each other. It doesn't make any sense at all.

In December 2011, the United States International Trade Commission found that the American solar industry "materially injured by reason of imports from China." In May the Department of Commerce reached a preliminary determination that China was dumping solar panels in U.S. markets. Now, this is in violation of U.S. trade law. Now, there is an effort to level the playing field, so the Commerce Department proposed a 30 percent tariff on Chinese solar panels.

Today you will hear from the former heads of Abound Solar about how illegal Chinese dumping hurt its ability to compete and ultimately contributed to the company's bankruptcy. We will also hear again from Greg Kats, a venture capitalist with substantial experience in the renewable energy sector, who will tell us that China's aggressive actions threaten U.S. businesses and job cre-

ation, and we should be investing more, investing more, not less, in green technology to promote our economic and environmental future.

I mean, think about it, Members. If we direct our attention to attacking each other and wipe out opportunities for American businesses to be able to grow in this sector, China then seizes the market and we basically open the door for it to happen while they are dumping. So we have anti-competitive conduct happening with one of our major trading partners, and instead of focusing on that, which they are still trying to do, and I would urge my colleagues on this Committee we should spend some time looking at this. This is something we should be able to work together on. And if we are able to do that, then we might look at the question of the U.S. solar industry in a different light.

Do they have troubles? Yes. Is it our responsibility to look at those troubles? Absolutely. I have never said that this Committee doesn't have an obligation to look at the problems within the U.S. solar industry and the financing packages. We should do that. That is what we should do.

But there is another issue going on here that needs to be addressed, because if we wreck the opportunity for entrepreneurs in the solar industry to be able to succeed, and ignore what China is doing with their dumping of subsidized solar panels in the U.S., we are going to wake up someday and ask, hey, what happened, how come America isn't in this solar panel business and China has the whole game?

So just a few thoughts for my friends today before we start this hearing. Thank you.

Mr. JORDAN. I thank the gentleman.

I will now yield to the gentleman of the full Committee, the gentleman from California, Mr. Issa.

Mr. ISSA. Thank you, Mr. Chairman.

My good friend from Ohio, Mr. Kucinich, points out that China cleaned our clock in the solar panel business. The question that this hearing is not on is why is anyone surprised. China wasn't a new competitor. China effectively dominates fabrication of chips and other affordable semiconductors. You don't get your toys or your clothing from Cleveland, my hometown, Mr. Kucinich's hometown.

So we could have a discussion, as this Committee has, on how Secretary Chu's folly of believing that mandating a market and then funding a market of production in the U.S. somehow was going to stop the market forces that had done so well in so many other areas of the electronics industry from taking effect. We can have that discussion, but not as long as this Administration continues to have an attack on unsubsidized forms of energy, continues to attack every possible way in which we could compete against China with affordable energy.

The fact is this hearing today is on freedom of information. This is on the Presidential Records Act. This is on every law that requires that the Executive Branch maintain records that are available to Congress, to the public, and to the Archives of the President.

Jonathan Silver is not the first, nor is he likely to be the only, person that we will discover decided that Gmail or Hotmail was a convenient way to keep out of the limelight, if you will, and the accountability their communication. Certainly today, as we look at some of the loan-related emails, Jonathan Silver and others were scheming to ensure that the right people got their loan guarantees and, in fact, many of the emails are clearly outside the element of pure merit and public accountability.

Mr. Chairman, this loan guarantee scandal will go on and we will discover, as we already have, that Secretary Chu, Secretary Bryson, and others actively created a market and falsely allowed it to appear as though it would succeed, ultimately leading to the inevitable bankruptcies.

But today the most important, thing, Mr. Chairman, that I want you to get out of this hearing, and that we all need to get out of this hearing, is the idea that Gmail or Hotmail is a great way to circumvent laws that make your communications in the Executive Branch public record can be abrogated simply by opening a free account. That is what I am concerned about here today. That is ultimately a scandal that did not begin on the watch of this President.

There is no question that with Chairman Waxman there were questions about emails. I remember some about emails to the Republican National Committee and the Chairman, when he sat in your chair, Mr. Jordan, in fact, Chairman Waxman issuing subpoenas.

But in this case we are not looking for some backdoor communications on politics with a political entity; we are looking at the day-to-day business of political and career individuals at key cabinet positions, key administration positions routinely circumventing the very laws that are in place to create accountability.

Mr. Chairman, I appreciate the work you did in getting the compliance for today's hearing.

Quite frankly, Mr. Silver, I appreciate you and your attorney's willingness to quickly act and produce documents directly to us.

I will, once again, look at the Ranking Member of the Subcommittee and say when are you going to say shame on your Administration for trying to block our legitimate discovery? The Secretary and the Department of Energy specifically tried to prevent us from getting these documents, asking Mr. Silver's attorney, ordering him, effectively, to deliver the documents to them so that they could limit and redact them, so they could decide what Congress was entitled to.

The imperial presidency must end. The imperial presidency must end, and it will not end until my colleagues on the other side of the aisle recognize that it is not acceptable under this President, and if we don't stop it under this Administration, we can count on administrations to come of either party simply ignoring Congress and the oversight, and running by executive fiat a government.

That is not the America I grew up in; Mr. Kucinich, it is not the America you grew up in; Mr. Cummings, it is not the America you grew up in; and I don't want it to be the one that our children grow up in.

With that, I yield back.

Mr. KUCINICH. I ask unanimous consent to respond to my friend.

Mr. JORDAN. I thank the gentleman.

The gentleman from Ohio is recognized.

Mr. KUCINICH. I think most members here know that I am not someone who reflexively defends the Administration. I mean, you are looking at one of the few Democrats who actually took this Administration to court on a constitutional issue. And I defend the right of this Committee to get information. We are in a partisan climate here that makes it a little bit testy and I understand that.

So I am here with the intention of saying, on the bigger issue, not the Chair's right to get information, not the Committee's right to inquire; on a larger issue here. We have China wiping us out on the solar industry and I am just concerned that we be sensitive to American business interests.

And there is one other thing that my friend mentioned to me, Mr. Jordan, and certainly not the topic of this hearing, but look at how bad this is. I mean, when you have China even supplying the uniforms for the U.S. Olympic team, it shows you we are missing out something here. Why couldn't they have been made in America?

So we want to make solar panels in America. How can we do it? I would say that given the business acumen of the Chair, and it is severely extraordinary, I am sure that you could provide some suggestions to the Administration on how they could run the program better. But as far as inquiring and providing documents, after a while I don't know where this goes, but I am glad to be here. We have the right to ask questions and I am hopeful we will pursue this question about China.

Thanks.

Mr. JORDAN. I thank the gentleman.

The gentleman from Maryland, the Ranking Member of the full Committee, is recognized.

Mr. CUMMINGS. Thank you very much, Mr. Chairman. I thank you for calling this hearing and I am looking forward to the testimony of the witnesses. I have already heard the word falsely; I have heard the word scandal; even heard you, Mr. Chairman, say the President rewarded contracts to friends of the Administration at the expense of the American people. We have not heard one syllable yet from the witnesses, and I refuse to draw conclusions before I hear from them, and I think that is what this hearing is all about.

I do say to all of the gentlemen who are seated that you have heard the words uttered here, and I hope that you will have a response to them.

I want to emphasize one point, which is that one of the most significant struggles Abound faced involved the alleged dumping of Chinese solar panels into the market. While some may play that down, I think that is very significant.

I want to highlight what this allegation actually means. It means that China is accused of selling solar panels into the United States at prices lower than their actual cost to make them. Why would they do that? They would do that to undermine United States businesses, you know, the job creators that we hear about so often.

In my opinion, this is the main issue we should be focusing on today, instead of turning this into an election year campaign issue.

One argument used to attack the Department's Loan Guarantee Program has been that it exposed taxpayers to excessive risk as a result of DOE's bias towards approving loans without regard to warning signs. These conclusions are contrary to the facts.

Today we will hear from an industry expert who will explain why, despite the failure of some projects like Abound, the risks of the Department's Loan Guarantee Program are substantially lower than Congress expected when they created the program. Current and former employees will testify about the Department's effort to minimize these risks both in the overall portfolio and in the individual transactions.

The Department structured its program to protect the taxpayers. For example, Abound's loan guarantee was structured to require the company to achieve certain milestones before it could draw down funds in allotted amounts. When it could not meet some of these milestones, it was prohibited from receiving additional payments. As a result, Abound's draws were limited to about \$70 million on a loan guarantee of \$400 million.

As indicated in the chart behind me, the total value of the loan program Congress created was about \$16 billion. Recognizing that there were risks involved in the program, Congress set aside about \$2.5 billion to cover any potential losses in the portfolio. To date, however, losses have been only a small fraction of that amount. Certainly, we wish that there were no losses. There have been \$648 million, or about one-quarter of the amount Congress anticipated.

Contrary to the Majority's repeated claims, the Committee has identified no evidence of political cronyism within the Department's loan program. Abound's project received support from the entire, and let me repeat that, the entire Indiana congressional delegation, that is, Republicans and Democrats; and the Majority has not involved Indiana Governor Mitch Daniels to testify today regarding his personal, personal support for Abound, including his offer to provide tax credits so Abound would house the manufacturing plant in his State. So when I hear words like, rewarded, President Obama rewarded contracts to his friends at the expense of the American people, well, I guess Mitch Daniels must be one of those friends.

The failure of Abound is a disappointing reality, but a close look at the program reveals that applicants received wide bipartisan support, that very little taxpayer money has been lost, and that the program has resulted in some of the largest renewable energy projects in the world.

I go back to what Mr. Kucinich said a few minutes ago. You know, when we talk about taxing the rich, what we constantly hear is we have to protect the job creators. You hear that over and over and over again as talking points. Well, you know, these businesses are job creators, and some businesses do not do as well as others, but I want us to keep in mind this Chinese issue; it is significant and hopefully the testimony today will shed more light on this so that we will be able to draw some conclusions based on facts, and not allegations.

Thank you very much.

Mr. JORDAN. I thank the gentleman. I would just say only in Washington would the loss of taxpayer money be viewed as a suc-

cess when it wasn't quite as much as we thought it might have been.

Mr. CUMMINGS. Would the Chairman yield?

Mr. JORDAN. I would be happy to yield.

Mr. CUMMINGS. Mr. Chairman, nobody said that. I didn't say that.

Mr. JORDAN. You didn't say that, but that is what the chart said.

Mr. CUMMINGS. All right, fine.

Mr. JORDAN. Said we lost money—

Mr. CUMMINGS. Let me—

Mr. JORDAN. I would just make one point: the program isn't over yet. We just had the third—we may have a lot more coming, we don't know. That is what we are trying to get at.

Mr. CUMMINGS. Mr. Chairman, I understand that and I agree. The fact is what I was trying to say is that Congress apparently anticipated that there would be losses, and you are right, the program is not over. In business, and I have been in business, sometimes you do have to take risks; and unfortunately we had some factors in this situation that I think hurt this company. Certainly, all of us wish that there would be no losses, but in any business you are going to have some losses.

If you are talking about a whole group of businesses you are going to have some losses at some point. I am not saying that it was great. Nobody wants to lose a dime. But Congress apparently anticipated losses, and all I am saying is that only a fraction of that has been used, that money set aside for the guarantee.

Mr. JORDAN. I think the gentleman underscores the fundamental point: in business, when there are losses, the people who suffer the losses are the people in the private sector, not the American taxpayer; and that is a key distinction between this program and what happens in the marketplace.

The gentleman from Pennsylvania wishes to make an opening statement and is recognized.

Mr. KELLY. Thank you, Mr. Chairman, and thank you for holding this. I think the key to this is we are talking about protecting job creators, but basically it is protecting the American taxpayers. That is who has underwritten all these different loans. So when we talk about that, I think it is fascinating, and we will get a chance, maybe, later on to look at what their status was as they were being considered for these loans. In the real world, no bank, no lender would have given these monies out.

So how do you navigate that territory? I think it is going to be fascinating, but we will take a look at it and take a look at how ratings actually are reflected and what an A status means, what a B status means, as you go down the line and see the number of these companies that, really, in the real world would not have been able to receive funding.

Mr. Chairman, I appreciate you holding the hearing and it is about protecting taxpayers' investments.

Mr. JORDAN. I thank the gentleman.

The gentlelady from New York, the Vice Chairman of the Subcommittee is recognized, Ms. Buerkle.

Ms. BUERKLE. Thank you, Mr. Chairman.

Good morning to our panelists this morning.

Just a couple of brief opening remarks.

I want to just respond to the gentleman from Ohio and his comments. We are not here attacking our own businesses. That is not what this hearing is about. This hearing is the legitimate role of the Oversight Committee, and what we are doing here this morning is protecting the American taxpayers. We are in a climate right now where there is so much discussion about raising taxes on the American people, and if anyone can justify raising taxes on the American people, when we are throwing, at this point, \$70 million out the window, it is inexcusable. It is just, we cannot raise taxes on the American people when this kind of waste is going on and we are abusing and misusing the American taxpayers' dollars.

I also want to make just one other comment, and that is why we want to emulate China. This is the United States of America. We believe in free enterprise. We believe that an individual can grow a dream and should be able to do that without the help of the Government, and it is that individual who will grow that dream. It is his hard work, it is his staying up at night, worrying about a bottom line. That is the essence of the United States of America.

So it is not my desire to ever wish for, hope for, look at China and say that is what we want to look like. We are the United States of America, the greatest nation in the history of mankind.

I yield back. Thank you, Mr. Chairman.

Mr. JORDAN. I thank the gentlelady.

Any other member wish to make a statement?

[No response.]

Mr. JORDAN. If not, we will get to our panel. Eight members of Congress, we got that done in half an hour. That is a pretty good clip, Mr. Ranking Member.

We will start with Mr. Craig Witsoe is the former Chief Executive Officer of Abound Solar. We welcome you to the Committee today.

Mr. Tom Tiller is former Chairman of the Board at Abound Solar. Thank you for being with us.

Mr. Davis Frantz is the Acting Executive Director of the Loan Programs Office at the U.S. Department of Energy; and Mr. Jonathan Silver is the former Executive Director of the Loan Program at the Department of Energy.

You guys know the deal. We have to swear you in per the rules of the Committee, so if you would please stand and raise your right hand.

Do you solemnly swear or affirm that the testimony you are about to give will be the truth, the whole truth, and nothing but the truth?

[Witnesses respond in the affirmative.]

Mr. JORDAN. Let the record show everyone answered in the affirmative.

We will go down the line, starting with Mr. Witsoe. You guys know you get five minutes, more or less, but keep it at five if you can, and then we will get to the Committee's questions.

So, Mr. Witsoe, you are recognized for your five minutes.

WITNESS STATEMENTS**STATEMENT OF CRAIG WITSOE**

Mr. WITSOE. Thank you, Mr. Chairman. As you said, my name is Craig Witsoe. I served as the CEO of Abound Solar for the eight months prior to July 2nd, when the company, unfortunately, suspended operations under the Chapter 7 bankruptcy filing.

First, I would like to say that we are very grateful for the dedication and the hard work of our talented employees; the support and the integrity of our investors and the board members; and, of course, for the support granted under the DOE Loan Guarantee Program. We do hope that today's discussions will be beneficial to better understand how the U.S. can best compete in this important, but also very challenging, global solar panel market.

Abound was formed as a startup company in 2007 based on advanced research started in the late 1980s at Colorado State University, in collaboration with the National Science Foundation, as well as the National Renewable Energy Lab. We had research and development, along with advanced manufacturing in Colorado, and had planned an additional manufacturing expansion in Indiana.

Abound produced thin-film Cadmium Telluride, or Cad-Tel, solar panels, and this was important because many agree that, if produced in large quantities, at large scale, Cad-Tel panels can be made in America at lower cost per watt than the traditional crystalline-silicon modules produced by many Chinese companies today.

At the time our DOE loan was originated, Abound and First Solar were the two companies in the world with significant Cad-Tel production experience. In October of 2011, General Electric also announced that they would build the Country's largest U.S. solar panel manufacturing plant, also based in Colorado, and that they would use Cad-Tel technology as well. In recent months, Abound was cooperating with the U.S. Photovoltaic Manufacturing Consortium and NREL to encourage industry collaboration which could further accelerate the U.S. advancement of Cad-Tel.

Abound's funding came from more than \$300 million in private investment and the \$70 million that we have mentioned today from the potential \$400 million authorized under the 1705 DOE Loan Guarantee Program. Funds were used to complete and start up two production lines in Colorado, which enabled a nearly doubling of panel efficiency, from 45 watts per panel in 2009 to 85 watts per panel in 2012.

Abound's technology and business had made solid progress until about the second half of 2011, when the panel prices dropped by 50 percent in a year due to very aggressive price cutting from Chinese competitors using the older crystalline-silicon technology. With a reported over \$30 billion in government subsidies, Chinese panel makers were able to sell below cost and put Abound out of business before we were big enough to pose a real competitive threat to China's rapidly growing market share.

Given these challenging market conditions, the DOE didn't release any further funds to Abound after August of 2011, including reimbursement for significant funds Abound had already spent to complete its second manufacturing line in Colorado. While we understood the increasing market risk driving this decision and un-

derstood the technical justifications in the loan documents, we also knew that it put enormous financial strain on our small company.

In February of 2012, Abound made the very difficult decision to cease production of its first generation of panels, conserve our cash, and focus our resources on accelerating development of a higher efficiency, next-generation module. This module had already been verified by NREL to produce a very competitive 85 watts per panel.

We believed that this next-generation product, along with further private financing, could keep the company competitive and enable a restart of production in Colorado. Abound hired a reputable outside firm to lead a process of soliciting the needed private financing and, from a large pool of identified potential investors, made final management presentations and facility tours to interested parties in mid-May, as well as late June of this year.

Unfortunately, in the end, the involved parties were unable to agree upon terms and negotiations were ended, and on June 28th we announced to our employees that Abound would have to suspend all operations.

This very fast and severe decline in the market conditions for solar panels has affected many U.S. companies, ranging from startups like Abound to even the largest U.S. corporations. The same week that Abound announced its closure, GE, also citing market price declines due to Chinese competition, unfortunately announced that it would delay its own Cad-Tel solar panel production plans by at least 18 months while it worked on a next-generation, higher efficiency module.

Around the world there are similar accounts of the impact of aggressive actions by China. While Abound was in agreement with the recent Commerce Department decisions to place U.S. import tariffs on Chinese modules, these actions were simply too late for our company.

This isn't the way that any of us wanted Abound's story to end, certainly, but we hope that the technology we have developed can still, in some form, help the U.S. to better compete in the next generations of solar panel manufacturing. We are very appreciative of the investments of our investors, as well as the DOE.

Our former employees should be proud of their technical innovations and their personal courage to pursue new technology for American manufacturing and not give up until all reasonable paths were exhausted. Abound believes that competitive solar energy can be important to the U.S. energy security and job creation, and that the longer-term consistent renewable energy policy can encourage further private investment.

I hope that today's discussion will be constructive and helpful to our common goal that the U.S. regain competitiveness in this sector and prevent the loss of technology leadership.

Thank you.

[Prepared statement of Mr. Witsoe follows:]

Statement of Craig Witsoe

**Before the Subcommittee on Regulatory Affairs, Stimulus Oversight and
Government Spending,
U. S. House of Representatives Committee on Oversight and Government Reform**

July 18, 2012

Mr. Chairman and Members of the Subcommittee

My name is Craig Witsoe. I served as CEO of Abound Solar, for the eight months prior to July 2, 2012 when the company suspended operations under a Chapter 7 bankruptcy filing. First, I would like to say that we are very grateful for the dedication and hard work of our talented employees, the support and integrity of our investors and board members, and of the support granted under the Department of Energy (DOE) loan guarantee program. We hope that today's discussions will be beneficial to better understand how the U.S. can best compete in the important, but very challenging, global solar panel market.

Abound was formed as a start-up company in 2007 based on advanced photovoltaic research started in the late 1980s at Colorado State University in collaboration with the National Science Foundation (NSF) and the National Renewable Energy Laboratory (NREL). We had research and development along with advanced manufacturing in Colorado, and had planned an additional manufacturing expansion in Indiana. Abound produced 'thin film' Cadmium Telluride or 'Cad-Tel' solar panels. Many agree that, if produced in large quantities, Cad-Tel panels can be made in America at lower cost per watt than the traditional crystalline-silicon modules produced by many Chinese companies today.

At the time our DOE loan was originated, Abound and First Solar were the two companies in the world with significant Cad-Tel production experience. In October 2011, General Electric announced the country's largest U.S. solar panel manufacturing plant to be based in Colorado would also use Cad-Tel as its technology for solar panel production. In recent months, Abound was cooperating with the US Photovoltaic Manufacturing Consortium (PVMC) and NREL to encourage industry collaboration which could further accelerate U.S. advancement of Cad-Tel technology.

Abound's funding came from more than \$300 million in private investment and about \$70 million drawn from a potential \$400 million authorized under the section 1705 DOE loan guarantee program. Funds were used to complete and start up two production lines in Colorado which enabled a nearly doubling of panel efficiency from 45 watts/panel in 2009 to 85 watts/panel in 2012.

Abound's technology and business made solid progress until the second half of 2011 when panel prices dropped by 50 percent in a year due to aggressive price-cutting from Chinese competitors using older crystalline-silicon technology. With over \$30 billion in reported government subsidies, Chinese panel makers were able to sell below cost and put Abound out of business before we were big enough to pose a real competitive threat to China's rapidly growing market share.

Given these challenging market conditions, the DOE did not release further funds to Abound after August 2011, including reimbursement for significant funds Abound had spent to complete its second manufacturing line in Colorado. While we understood the increasing market risks driving this decision, and understood the technical justifications in the loan documents, we also knew that it put enormous financial strain on our small company.

In February 2012, Abound made the difficult decision to cease production of its first generation panels, conserve cash, and focus resources on accelerating development of a higher efficiency next generation module. This module had already been verified by NREL to produce a competitive 85 watts per panel. We believed that this next generation product, along with further private financing, could keep the company competitive and enable a re-start of production in Colorado. Abound hired a reputable outside firm to lead a process of soliciting the needed private financing and, from a large pool of identified potential investors, made final management presentations and facility tours to interested parties in mid-May through late-June of this year. Unfortunately, in the end, the involved parties were unable to agree on terms, and negotiations were ended. On June 28, 2012, we announced to our employees that Abound would have to suspend all operations.

The very fast and severe decline in market conditions for solar panels has affected many U.S. companies, ranging from start-ups like Abound to the largest corporations. The same week Abound announced its closure, GE, also citing market price declines due to Chinese competition, announced that it would delay its own Cad-Tel solar panel production plans by at least 18 months while it worked on a next generation, higher efficiency module. Around the world, there are similar accounts of the impact of aggressive actions by China. While Abound was in agreement with the recent Commerce Department decisions to place U.S. import tariffs on Chinese modules, these actions were simply too late for our company.

This is not the way that any of us wanted Abound's story to end. But, we hope that the technology we have developed can still, in some form, help the U.S. to better compete in the next generations of solar panel manufacturing. We are very appreciative of the investments of our private investors as well as the Department of Energy. Our former employees should be proud of their technical innovations and of their personal courage to pursue new technology for American manufacturing and not give up until all reasonable paths were exhausted. Abound believes that competitive solar energy can be important to U.S. energy security and job creation; and that longer term, consistent renewable energy policy can encourage further private investment. I hope that today's discussion will be constructive and helpful to our common goal that the U.S. regain competitiveness in this sector and prevent loss of technology leadership.

I look forward to addressing the questions that the members of the Subcommittee may have.

Mr. JORDAN. Thank you.
Mr. Tiller?

STATEMENT OF TOM TILLER

Mr. TILLER. Good morning, Mr. Chairman, Ranking Member Kucinich, and members of the Committee. My name is Tom Tiller. From January 2010 until June 2012 I worked for Abound Solar, first as Chief Executive Officer and then as Chairman of the Board.

Abound, as you know, filed for bankruptcy on July 2nd, 2012. On June 28th, 2012, when we suspended operations, I also resigned as Chairman. Declaring bankruptcy was extremely disappointing for all of us who cared deeply about Abound and who had invested our own time, our own money, and our own effort in trying to make this company a success. The Department of Energy was our partner in that effort, and I am personally disappointed that the company was not able to provide the DOE and the American taxpayers with a positive return on its investment. I appreciate the opportunity to appear this morning and speak to you about my time at Abound.

I came to Abound after spending nearly 10 years as CEO of Polaris Industries, a \$2.4 billion global leader in the power sports industry. During my time at Polaris, we successfully introduced more than 150 new products and tripled the value of the company. Prior to Polaris, I had worked at GE in a variety of engineering and senior leadership positions. All together, I have spent nearly 30 years running and supporting American manufacturing operations of technology-based companies.

The opportunity to join Abound was unique and exciting. The company was involved in the cutting edge of solar energy innovation and had a proprietary manufacturing technology that has the potential to significantly reduce the cost of solar power. The culture of the company was also infectious. People were excited to do something that mattered for the Country. I believed in the technology and, more importantly, the outstanding people that the Company had at all levels, enough to make a professional commitment and a personal financial investment in the business.

It is my view that for any company to be successful in the solar industry, it needs two things: winning technology and the scale necessary to drive down cost. At Abound, that meant the company needed to develop and execute an aggressive growth plan that would enable it to quickly develop its products at large scale.

Most of the capital that Abound raised to fund this plan was equity financing raised from professional investors. Indeed, in addition to obtaining a loan from DOE, we raised approximately \$300 million of equity. I can assure you that with every round of equity financing, informed outsiders conducted their own independent analysis of the current state of the company in an effort to ensure they would receive a good return on their investment. Many times teams of investors and engineers met Abound's people and went through the plant, the patents, the manufacturing process, and the financial plans. Ultimately, these seasoned professionals made the decision that investing in this company was a good bet.

The DOE's review of the Abound loan application was well underway when I joined the company in January of 2010. During my

time with the company, there were many inquiries, visits, data requests, and technical and financial evaluations from DOE. The company prepared and revised detailed financial models and answered hundreds of questions.

In the end, it took nearly two years to complete the application and approval process for the Abound DOE loan, which closed in December 2010. Although the total DOE loan amount was for \$400 million, Abound only drew down about \$70 million, which was used for the construction of manufacturing lines in Colorado. The company stopped drawing down DOE funds entirely in the third quarter of 2011.

Any investment in a new business carries risk. Some may ask why Abound ultimately succumbed to that risk, even with approximately \$300 million in private investment and \$70 million from the DOE. In my view, the single most important reason was that there was an abrupt and major change in the market for solar panels which reduced the selling price of Abound's products and made it extremely difficult for an early stage company like Abound to scale in these changed market conditions.

Over the past 25 years or so, the solar market has grown rapidly and consistently, with a considerable acceleration in 2009 and 2010. Things changed when the Chinese government reportedly provided approximately \$35 billion in subsidies to the major Chinese solar producers. These investments resulted in substantially more production capacity than could possibly be absorbed by the market, so the price of solar panels fell dramatically, by more than 50 percent in just one year. Such a severe market change made it difficult for Abound and others to survive.

No one is more disappointed than I am that Abound was not successful. I am saddened by this result for the nearly 400 employees who made such a tremendous contribution to the company, the investors who invested hundreds of millions of dollars, the communities that supported and believed in Abound's vision, the suppliers who partnered with the company at every stage, and the customers who trusted the company to provide a long-term energy solution.

I appreciate the chance that the private investors and DOE took when they chose to support the company and its role in the future of American renewable energy technology. Unfortunately, we were not able to succeed.

With that overview, I am happy to answer any questions that the members of the Subcommittee may have.

[Prepared statement of Mr. Tiller follows:]

Statement of Thomas Tiller

**Before the Subcommittee on Regulatory Affairs, Stimulus Oversight and
Government Spending, United States House of Representatives Committee on
Oversight and Government Reform**

July 18, 2012

Good morning Mr. Chairman, Ranking Member Kucinich, and members of the Subcommittee. My name is Tom Tiller. From January 2010 until June 2012, I worked for Abound Solar, first as Chief Executive Officer, and then as Chairman of the Board. Abound, as you know, filed for bankruptcy on July 2, 2012. On June 28, 2012, when we suspended our operations, I also resigned as Chairman. Declaring bankruptcy was extremely disappointing for all of us who cared deeply about Abound, and who had invested our time, money, and effort into trying to make the company a success. The Department of Energy was our partner in that effort, and I am personally disappointed that the company was not able to provide the DOE with a positive return on its investment. I appreciate the opportunity to appear this morning and speak to you about my time at Abound.

I came to Abound after spending nearly ten years as CEO of Polaris Industries, a \$2.4 billion global leader in the power sports industry. During my time at Polaris, we successfully introduced more than 150 new products and tripled the value of the company. Prior to Polaris, I had worked for GE in a variety of engineering and senior leadership positions. All together I have spent nearly 30 years running and supporting American manufacturing operations of technology based companies.

The opportunity to join Abound was unique and exciting. The company was involved in the cutting edge of solar energy innovation, and had a proprietary manufacturing technology that has the potential to significantly reduce the cost of solar power. The culture at the company was

also infectious -- people were excited to do something that mattered for the country. I believed in the technology -- and, more importantly, the outstanding people that the company had at all levels -- enough to both make a professional commitment and a personal financial investment in the business.

It is my view that, to be successful, any solar company needs two things -- winning technology and the scale necessary to drive to down cost. At Abound, that meant the company needed to develop and execute an aggressive growth plan that would enable it to quickly develop its products at a large scale.

Most of the capital that Abound raised to fund this plan was equity financing raised from professional investors. Indeed, in addition to obtaining a loan from the DOE, we raised approximately \$300 million of equity. I can assure you that with every round of equity financing, informed outsiders conducted their own independent analysis of the current state of company in an effort to ensure that they would receive a good return on their investment. Many times teams of investors and engineers met Abound's people and went through the plant, the patents, the manufacturing process, and the financial plans. Ultimately these seasoned professionals made the decision that investing in this company was a good bet.

The DOE's review of the Abound loan application was well under way when I joined the company in January 2010. During my time with the company, there were many inquiries, visits, data requests, and technical and financial evaluations. The company prepared and revised detailed financial models and answered hundreds of questions. In the end, it took nearly two years to complete the application and approval process for the Abound DOE loan, which closed in December 2010. Although the total DOE loan amount was for \$400 million, Abound only

drew down about \$70 million, which was to be used for the construction of the manufacturing lines in Colorado. The company stopped drawing down DOE funds entirely in the third quarter of 2011.

Any investment in a new business carries risk. Some may ask why Abound ultimately succumbed to that risk, even with approximately \$300 million in private investment and \$70 million from the DOE. In my view, the single most important reason was that there was a very abrupt and major change in the market for solar panels, which reduced the selling price of Abound's products and made it extremely difficult for an early stage company like Abound to scale in those changed market conditions.

Over the past twenty five years or so, the solar market has grown rapidly and consistently, with a considerable acceleration in 2009 and 2010. Things changed when the Chinese government reportedly provided approximately \$35B in subsidies to the major Chinese solar producers. These investments resulted in substantially more production capacity than could possibly be absorbed by the market. The price of solar panels fell dramatically, by more than 50% in just over one year. Such a severe market change made it difficult for Abound and others to survive.

No one is more disappointed than I am that Abound was not successful. I am saddened by this result for the nearly 400 employees who made such a tremendous contribution to the company, the investors who invested hundreds of millions of dollars, the communities that supported and believed in Abound's vision, the suppliers who partnered with the company at every stage, and the customers who trusted the company to provide a long term energy solution.

I appreciate the chance that the private investors and the DOE took when they chose to support the company and its role in the future of American renewable energy technology. Unfortunately, we were not able to succeed.

With that overview, I'm happy to answer any questions that the members of the Subcommittee may have.

Mr. JORDAN. Thank you.
Mr. Frantz?

STATEMENT OF DAVID FRANTZ

Mr. FRANTZ. Chairman Jordan, Ranking Member Kucinich, and members of the Committee, thank you very much for the opportunity to testify before you today. My name is David Frantz and I am the Acting Executive Director of the Department of Energy's Loan Programs Office, the LPO. In the way of an introduction, I would emphasize the point that I am a career member of the Senior Executive Service of the U.S. Government; I am not a political appointee.

I was the first employee of the LPO. Prior to joining the Department to stand up the program, I previously served over 10 years with the Overseas Private Investment Corporation as Senior Management Project Finance Position, underwriting and structuring major energy infrastructure projects around the world. Prior to this government service, my 40-year career has been entirely devoted to project finance in the private sector. Previously, I served as a U.S. Naval officer and I am a Vietnam combat veteran.

Before highlighting the progress we have made over the past five years, I would also like to acknowledge and commend the LPO staff for their unswerving commitment and diligent work associated with accomplishments of the program. The staff is one of the finest project finance teams assembled in the world today, and its record over the past years unprecedented by world standards.

I would hasten to add that the GAO, in its recent audit of the DOE Loan Guarantee, has acknowledged that commercial lenders interviewed by GAO stated that LPO's underwriting and due diligence standards are as rigorous as or more rigorous than those in the private sector.

As of today, the LPO has committed or closed \$35 billion in direct loans or loan guarantees, which finance nearly three dozen projects, with total project costs greater than \$55 billion. When the Section 1705 program ended, on September 30th, 2011, it included a portfolio of over \$16 billion and 28 renewable projects. Collectively, the LPO projects are expected to support approximately 60,000 jobs.

Earlier this year, an independent consultant, Herb Allison, evaluated both the monitoring efforts of the Loan Programs Office and its portfolio. Mr. Allison's report concluded that the estimated long-term cost of outstanding portfolio is \$2.7 billion, roughly \$200 million lower than the Department's most recent estimate.

As the global energy opportunity grows, so does the competition. Countries throughout Europe, Asia, and the Western Hemisphere have decided that energy technologies are critical to their national economic security in the 21st century. Many countries have established supportive policies and are making major investments in everything from renewables to electric vehicles to smart grids and the next generation of biofuels. In 2010 alone, China provided more than \$30 billion in credit to the country's largest solar manufacturing through the government controlled China Development Bank.

Through the Loan Program, the Department is working to answer the challenge from China and other countries by supporting a large number of solar projects.

With respect to the Abound transaction specifically, in December 2010, as you have heard, the Department issued a loan guarantee to Abound Solar Manufacturing to manufacture the next-generation solar panels. It was intended to partially finance construction of two solar panel production lines in the existing facility in Colorado and the acquisition and buildout of a second facility in Tipton, Indiana.

Abound developed and demonstrated a process for producing thin-film solar panels at a cost that was expected to be substantially less than the traditional solar panels. When the cost of polysilicon was high, Abound's technology offered the promise of a lower cost alternative that would be built here in the United States. As of December 2011, Abound had raised more than \$300 million, as the officers have indicated, in private equity from large and established investors and venture capital firms.

By the time DOE offered Abound a conditional commitment in the summer of 2010, the price of polysilicon had begun to fall. However, prior to financial close, the Department's independent market consultant for the transaction believed, as did the Department, that the price of polysilicon would continue to drop, but only by approximately 2 percent a year over the next 10 years.

Instead, prices continued to fall much more than projected, including a 47 percent decline in 2011. So while the market experts concluded that the average selling price for PV cells would decrease approximately 20 percent, they actually decreased 47 percent last year alone.

As Mr. Allison's report noted, DOE has the ability to reduce or mitigate risk in a portfolio over time and has robust tools for protecting itself from elective risk. One of those tools is financial and technical milestones that must be met before additional funds are disbursed. When the price of the solar panels dropped, Abound's product was no longer cost-competitive and the company was unable to meet some of those financial milestones.

Accordingly, in August 2011, the Department halted disbursement on the loan and of the \$400 million loan Abound was originally approved for, the Department disbursed approximately \$68 million. Because of the strong protections DOE put in place, the Department has already protected more than 80 percent of the original loan and expects to recover a portion of outstanding loan through the course of bankruptcy proceedings.

Securing America's economic leadership in the future requires that we support innovation and deployment today. The troubles of some segments in the solar manufacturing market should not overshadow the great work the Department's loan programs have done to date, or the need to continue to find ways to support clean energy development in this Country.

That said, developing a robust clean energy manufacturing sector in the United States is crucial to our long-term national interests and would help enable American companies work to attain tools needed to succeed in this competitive space. And one of the most

important tools, as our global competitors have learned, is financing on reasonable terms, wisely targeted and responsibly deployed.

The question is whether we will take advantage of this or whether we will simply cede leadership in clean energy to other nations and watch as tens of thousands of jobs are created overseas. We were once the leaders in this field and we can be again, all the while with the interest of the U.S. taxpayer as its foremost concern.

Thank you, Mr. Chairman, and I look forward to your questions.
[Prepared statement of Mr. Frantz follows:]

**Written Statement of David G. Frantz
Acting Executive Director of the Loan Programs Office
U.S. Department of Energy
Before the
Subcommittee on Regulatory Affairs, Stimulus Oversight and
Government Spending
Committee on Oversight and Government Reform
United States House of Representatives**

July 18, 2012

Introduction

Chairmen Jordan, Ranking Member Kucinich, and Members of the Committee, thank you for the opportunity to testify before you today. My name is David Frantz, and I am the Acting Executive Director of the Department of Energy's (DOE) Loan Programs Office (LPO). I was the first Federal employee hired for the Loan Guarantee Program, and served as its first Director when I joined, moving from the Overseas Private Investment Corporation (OPIC) on August 5, 2007.

The LPO administers two federal loan guarantee programs – Section 1703 and 1705 – for energy technology projects authorized by Title XVII of the Energy Policy Act (EPA), as amended. It also administers direct loans for the Advanced Technology Vehicles Manufacturing (ATVM) program as authorized under Section 136 of the Energy Independence and Security Act of 2007 (EISA).

DOE's loan programs are a critical part of our nation's commitment to clean energy, and I welcome the opportunity to discuss the Loan Programs Office with you.

Background on the Loan Programs

The Section 1703 program was established to support the U.S. deployment of new, innovative technology projects that avoid, reduce, or sequester greenhouse gas emissions. Currently, the program has \$18.5 billion in loan guarantee authority for nuclear power projects, \$1.5 billion in authority for energy efficiency and renewable energy projects, \$8 billion in authority for advanced fossil projects, \$4 billion of authority allocated for front-end nuclear projects, and \$2 billion of authority that is not allocated to a specific technology sector. Under this authority, the applicant is required to pay the credit subsidy cost of the loan guarantee for their project. In addition, the FY 2011 Continuing Resolution provided approximately \$170 million to pay the credit subsidy cost of loan guarantees for renewable energy and energy efficiency projects.

The Section 1705 program was created as part of the American Recovery and Reinvestment Act of 2009 (ARRA) to jump-start the country's clean energy sector by supporting various renewable energy projects that had difficulty securing financing in a tight credit market. Section 1705 pursued additional objectives and exhibited slightly different programmatic features than Section 1703. Most notably, applicants under Section 1705 were not required to pay the credit subsidy costs associated with the loan guarantees they received. Those costs were paid through funds appropriated by Congress.

The ATVM Program was established to expand U.S. business opportunities for advanced automotive technologies that contribute to energy independence and security. Section 136 of EISA 2007 authorizes

DOE to finance U.S.-based businesses for manufacturing advanced technology vehicles or vehicle components and for engineering integration facilities. The FY 2009 Continuing Resolution provided up to \$25 billion in direct loan authority for the ATVM program, with \$7.5 billion in appropriated credit subsidy.

Recent Accomplishments

DOE Loan Programs Office represents the largest single source of debt financing for clean energy projects in the United States (public or private). This financing has served to augment the capacity of capital markets to finance innovative and large-scale clean energy projects.

As of today, the LPO has committed or closed \$35 billion in direct loans and loan guarantees, which finance nearly three dozen projects, with total project costs greater than \$55 billion. When the Section 1705 program ended on September 30, 2011, it included a portfolio of over \$16 billion in loan guarantees for 28 renewable energy projects. Collectively, LPO projects are expected to support nearly 60,000 jobs and deploy alternative energy that will save nearly 300 million gallons of gasoline per year. Of LPO's 19 generation projects, six are already complete and nine are sending power to the electricity grid. LPO projects include:

- The first two all-electric vehicle manufacturing facilities in the United States
- One of the world's largest wind farms
- One of the country's first commercial-scale cellulosic ethanol plants
- The first new commercial nuclear power plant to receive a combined construction and operating license and be built in the United States in the last three decades (conditional commitment)
- One of the first large-scale distributed photovoltaic projects, which places solar panels on commercial rooftops across 28 states
- Several of the world's largest solar generation facilities including:
 - The largest utility scale photovoltaic generation facility
 - The largest concentrated solar power plants in the world, two of which have the world's largest thermal energy storage systems

I would like to highlight three projects to demonstrate how projects funded by the LPO are able to fulfill the legislative intent of their respective program.

The 290 megawatt Agua Caliente solar generation project, owned by NRG Solar, LLC and MidAmerican Energy Holdings Company, is based in Yuma County, Arizona and will be the world's largest solar photovoltaic installation when fully operational. The project is already more than 70 percent complete. More than 3.3 million solar panels, spanning more than 2,300 acres, have been installed, and the project has started delivering clean, renewable energy to the power grid. For the more than 1,300 workers at peak construction, the project means steady employment, marketable skills, and the opportunity to play a critical role in shaping the nation's energy economy. The impact of this project is seen beyond the project site. Last year, First Solar, the engineering, procurement and construction contractor for Agua Caliente and other projects, spent more than \$1 billion with U.S. suppliers across 38 states. Major domestic suppliers of steel fabrications and electrical equipment for Agua Caliente and other First Solar-supported projects include an Arizona-based division of Omco, Connecticut-based 4 Highway Safety Corp., Texas-based Powerhohm, and SMA Americas of Colorado. In addition, the project is using approximately 39,000 tons of American steel.

The 392 megawatt Ivanpah Solar Generating Complex, which is owned by NRG Energy, Inc., Google and BrightSource Energy, Inc., is located in Baker, California. The Complex is one of the largest infrastructure projects in the nation and the largest solar thermal plant under construction in the world. There are more than 1,700 workers currently on site, including manual construction workers, engineers, biologists and project managers. The impact of this project is also seen beyond the project site. For example, Ivanpah's steel supplier, Gestamp Solar Steel, built a new facility in Surprise, Arizona to keep up with orders. In addition, Michigan-based Guardian Industries started supplying 160,000 of its EcoGuard Solar Boost mirrors in November 2011. The Ivanpah Complex is approximately one-third complete.

And finally, with support from its Advanced Technology Vehicles Manufacturing loan, Ford Motors is helping to position the U.S. auto industry as a leader in fuel-efficient vehicles worldwide. Ford's ATVM projects have and will continue to raise the fuel efficiency of more than a dozen popular vehicles, including the Focus, Escape, Taurus, and F-150 trucks, representing approximately two million new vehicles annually. Furthermore, the ATVM loan program has assisted Ford to upgrade a number of key manufacturing facilities, enabling Ford to assemble high quality vehicles while transforming approximately 33,000 employees in the United States to clean engineering and manufacturing jobs in factories across six states – Illinois, Kentucky, Michigan, Missouri, New York and Ohio – and beyond throughout the supply chain.

LPO's entire portfolio of projects is now managed by the Portfolio Management Division, which employs industry "best practices" in asset management and portfolio monitoring processes and systems. Many of these have also been successfully employed for decades at federal institutions, as well as leading private lending institutions across the country.

Current Status of Loan Portfolio

In the Independent Consultants Report, Herb Allison evaluated both the monitoring efforts of the Loan Programs Office and its portfolio. As part of this effort, he and his team reviewed each active loan in the portfolio. They looked at the risk factors behind each loan and estimated the costs of each loan. Mr. Allison's report concluded that the Department is using the appropriate risk factors in assessing each loan. In some cases, the report recommended minor differences in the weights given to each factor.

The Federal Credit Reform Act defines the cost of these loan programs as the estimated long-term cost to the government, including the risk of default net of recoveries; for each loan, the subsidy estimate can be thought of as similar to a loan loss reserve. Congress appropriated \$10 billion in credit subsidy under the Federal Credit Reform Act for Title XVII and the Advanced Vehicle Loan Programs. Not all of the appropriated credit subsidy has been obligated.

While the portfolio includes loans to a range of projects that carry different levels of risk, the report finds that the Department of Energy has reasonably estimated the costs of these risks. In fact, Mr. Allison estimates that the estimated long-term cost of the outstanding portfolio is \$2.7 billion, roughly \$200 million lower than Department's most recent estimate.

Global Clean Energy Context

As the global clean energy opportunity grows, so does the competition. Countries throughout Europe, Asia, and the Western Hemisphere have decided that energy technologies are critical to their national and economic security in the 21st century. Many countries have established supportive policies and are making major investments in everything from renewables to electric vehicles to smart grids and the next generation of biofuels.

These countries are determined to win the global clean energy race. And by any measure, they are already reaping rewards on their investments. Americans invented the silicon solar cell, developed modern wind turbines for electricity generation, and developed lithium ion batteries, but we are no longer the leader in these industries. Denmark is home to the world's largest wind manufacturer, and Japan and Korea lead in advanced battery manufacturing, although the United States is making strong gains. China has surged into the solar manufacturing lead. In 2010, alone, China provided more than \$30 billion in credit to the country's largest solar manufacturers through the government-controlled China Development Bank.¹

To win the clean energy jobs of the future, the United States must do more than invent technologies; we must also manufacture them, deploy them here at home, and sell them around the world. The production of energy technologies benefits from scale. Simply put, we cannot have a competitive clean energy industry without programs that help spur deployment and markets. Not every company, nor every investment, will be a success — but America will be stronger and more competitive if we continue to support and build a thriving clean energy industry here at home.

Through the Loan Program, the Department is working to answer the challenge from China and other countries by supporting a large number of solar projects. The vast majority of those are power generating projects that benefit from falling prices for solar panels and — as the Independent Report by Herb Allison noted earlier this year — carry very limited risk to the taxpayer because they have firm contracts in place with utilities to buy the power they produce.

Of our total guaranteed loan volume in the Sec. 1705 portfolio, about 35% supports solar generating projects — which benefit from falling prices. Less than 4% supports solar manufacturers — which are suffering from the collapse of pricing for solar modules driven in part by what the Commerce Department has found to be unfair practices by competitors in China.

Abound Transaction

On December 9, 2010, DOE issued a \$400 million loan guarantee to Abound Solar Manufacturing, LLC (Abound), an innovative start-up manufacturer of next-generation solar panels. Financing obtained with the loan guarantee was intended to partially finance construction of two solar panel production lines at an existing facility in Longmont, Colorado and the acquisition and build out of a second solar manufacturing facility in Tipton, Indiana. The Tipton facility was an abandoned auto parts manufacturing facility that federal, state and local officials supported converting to solar manufacturing.

¹ Bloomberg New Energy Finance, China Development Bank — how it came to be a giant lender to clean energy, March 11, 2011.

Using cadmium telluride thin-film photovoltaic modules, Abound developed and demonstrated a process for producing thin-film solar panels at a cost that was expected to be substantially less than traditional solar panels. When the cost of polysilicon was high, Abound's technology offered the promise of a lower cost alternative that would be built here the United States. As of December 2011, Abound had raised more than \$300 million in private equity financing from large and established energy investors and venture capital firms, including BP Alternative Energy, the Invus Group, and many others.

By the time DOE offered Abound a conditional commitment, the price of polysilicon had begun to fall. However, prior to financial close, the Department's independent market consultant for the transaction believed, as did DOE, that the price of polysilicon would continue to drop, but only by approximately 2% per year over the next 10 years.

Instead, prices continued to fall much more than projected, including a 47 percent decline in 2011. So, while market experts concluded that the average selling price for PV cells would decrease approximately 20% between 2010-2020, they actually decreased 47% last year alone.

As Mr. Allison's report noted, DOE has the ability to reduce or mitigate risk in the portfolio over time and has "robust tools" for protecting itself from elective risk. When the price of solar panels dropped, Abound's product was no longer cost competitive. As a result, the company was unable to meet some of the financial milestones built into the loan agreement to protect the taxpayers and — in August 2011 — the Department halted disbursements on the loan. Of the \$400 million that Abound was originally approved for, the Department only disbursed approximately \$68 million to the company. Because of the strong protections DOE put in place, the Department has already protected more than 80 percent of the original loan amount and expects to recover a portion of the outstanding loan through the course of bankruptcy proceedings.

The Department takes our responsibility to U.S. taxpayers seriously, and we are looking closely at Mr. Allison's recommendations for additional improvements. The Department strives to be an active manager continuously monitoring projects, their market environments, and other identified risks to seize all opportunities to minimize exposure to loss.

Conclusion

Securing America's economic leadership in the future requires that we support innovation and deployment today. The troubles of some segments in the solar manufacturing market should not overshadow the great work that the Department's loan programs have done to date, or the need to continue to find ways to support clean energy deployment in this country.

That said, developing a robust clean energy manufacturing sector in the United States is crucial to our long-term national interests, and would help enable American companies and workers to attain the tools needed to succeed in this competitive space. And one of the most important tools — as our global competitors have learned — is financing on reasonable terms, wisely targeted and responsibly deployed. The question is whether we are willing to take on this challenge, or whether we will simply cede leadership in clean energy to other nations and watch as tens of thousands of jobs are created overseas. We were once the leaders in this field, and we can be again.

Mr. Chairman, I thank the members of the committee and I look forward to answering your questions.

Mr. JORDAN. Thank you.
Mr. Silver.

STATEMENT OF JONATHAN SILVER

Mr. SILVER. Chairman Jordan, Ranking Member Kucinich, and members of the Subcommittee, my name is Jonathan Silver. I am the former Executive Director of the Loan Programs Office at the Department of Energy. Currently, I am a senior visiting fellow at Third Way, a centrist think tank where I work on energy policy and energy finance. I am also a senior advisor on energy investments for a leading private equity firm and sit on the board of several energy companies.

My work on the Loan Program was based on more than 25 years of business experience as a management consultant at McKinsey & Company, an executive with experience in managing complex organizations, a managing director of one of the Country's largest and most successful hedge funds, and as the cofounder of a successful venture capital firm. In addition, I have served in government before, as a senior policy advisor to both the Secretaries of Commerce and Interior, and have testified a number of times before Congress.

Although I have not been with the program for close to a year, it is my privilege today to join Mr. Frantz in representing the efforts of the nearly 200 program professionals and the many private sector advisors who worked day and night over the past few years to successfully implement this congressionally mandated program. I remind the members that the Loan Program Office is an implementing agency, not a policy making group. Its work is driven by congressional legislation.

We are proud of the program and, on the whole, the Loan Program has been a success. While acknowledging the inevitable and expected losses, we should remember that this program also provided financing for such projects as the world's largest wind farm, the world's largest PV solar plant, the world's largest concentrated solar power facility, a new generation of electric vehicles, and the first nuclear power plant to be built in the U.S. in the last 30 years. These projects will generate enough clean energy to power millions of homes and businesses, save hundreds of millions of gallons of gas a year, and generate tens of thousands of jobs.

Even more important, the portfolio is actually in good shape. Nine solar projects and several wind farms are already generating power. To date, total losses on the portfolio are under 3 percent. This compares favorably to loss ratios in the private sector for far less innovative energy projects. The loss on the Abound project represents a fraction of 1 percent of the total 1705 financings. No losses are desirable, but the dialogue around the early outcomes is out of proportion to the actual results.

Because I am no longer at the Department, I do not have access to the analysis done for the Abound project. As a result, I cannot comment in detail about the transaction. What I can do, however, is give you a flavor for what we tried to do on this and every project.

Abound had a unique manufacturing process which, at scale, would significantly lower the cost of producing thin-film panels. The technology was analyzed multiple times, including by the Bush

Administration, which thought highly enough of it to award the company millions of dollars for development. The Abound loan team would have included finance, technical, scientific, legal, and environmental career professionals, supplemented by independent engineering, legal, financial, and accounting firms.

The loan would have gone through multiple reviews independent of the Loan Programs Office, including detailed reviews by career credit professionals at DOE and career staff at OMB, Treasury, and the National Economic Council. The transaction structure, known as production line financing, was created to manage the risk in this transaction.

Among many other requirements, applicants had to demonstrate sufficient financial backing from the private sector. Abound raised over \$300 million in private equity before the Government issued its loan. The loan was designed with significant technical and financial milestones. When dramatic changes in the solar panel market made it impossible for the company to meet some of those, the remainder of the loan was frozen.

Congress clearly understood that these projects would entail risk. That is why it initially set aside \$10 billion to cover potential losses before a single loan was ever made. Three independent analyses of the portfolio have now been done, including reviews by the Congressional Research Service, Bloomberg Energy, and a comprehensive review of the portfolio by Herb Allison, a former Bush Administration Treasury official. All of them concluded that the transactions were well structured and that potential losses were likely to be meaningfully below the loss reserve established by Congress.

Even though Congress planned for losses, losses hurt. These are taxpayer dollars and we worked hard to ensure that they were protected to the fullest extent possible. Applicants will tell you that our term sheets were tough and were designed to protect our Government.

When a loan fails, we can, and should, seek to understand what happened, and oversight is an important tool in doing this. We should start with the facts. Industry dynamics change; other countries compete with us, sometimes unfairly; new technologies and new business models emerge.

This loan, like all the loans underwritten by career professionals supported by us as specialists. It was reviewed by career professionals from multiple Executive Branch offices. It was not rushed; the review took place over several years. It was not given to friends.

Indeed, no one in the loan program had any idea what individuals were involved in this or any other transaction, nor did we care. And, as has been reported, there were a large number of Democratic and Republican investors in these deals, which ultimately is not surprising. Investors care about returns, not politics, and after they did their own independent analyses, they committed billions of equity dollars to these projects. Our work followed and built on theirs.

Investors care about profits, but all Americans care about ensuring that the Country remains strong and competitive in the 21st century. The next decade is about energy competition, and clean and renewable energy is the global market battleground. Other

countries understand this. China, Korea, Japan, India, the UK, Germany, Italy, and a host of others are moving rapidly to seek a piece of this vast new market. The winners will enjoy more and better jobs, lower energy prices, greater energy security, and better health and environmental outcomes.

If the United States is to compete successfully in next-generation energy, we need to support it, just as we have traditional sources of energy in the past. Thank you.

[Prepared statement of Mr. Silver follows:]

Testimony of Jonathan M. Silver

House Committee on Oversight and Reform,
Subcommittee on Regulatory Affairs, Stimulus Oversight and Government Spending

Wednesday, July 18, 2012

2154 Rayburn House Office Building

10:00am.

Chairman Jordan, Ranking Member Kucinich and Members of the Subcommittee, you requested that I visit with you this morning about the Abound Solar loan. I am pleased to do so.

Background

By way of introduction, I am the former Executive Director of the Loan Programs Office at the Department of Energy. I came to the loan program after 29 years in business, finance and government, including work at management consulting firm, McKinsey and Company; senior management roles in several large operating companies; a stint as a Managing Director at one of the largest hedge funds in the country and as co-founder of a successful venture capital firm. I have also prior served as a senior advisor to the Secretaries of Commerce, Interior and Treasury in an earlier Administration.

Although I have not been with the loan programs office for nearly a year, it is my privilege today to represent here the efforts of nearly 200 professionals who worked tirelessly over the last few years to successfully create build and implement this Congressionally mandated program. These individuals came from some of the nation's top investment and commercial banks, engineering and scientific organizations and legal and accounting firms to serve their country, and in every transaction, they were ably assisted by numerous private sector independent engineering firms, financial advisory firms, law firms and others who provided due diligence assistance and analytic support on every aspect of these large and complex projects. They built a strong and impressive portfolio, as the final report on the program by former Bush-appointed Treasury official and former McCain Presidential Campaign National Finance Chair, Herb Allison made clear.

The Loan Portfolio

In less than three years, the loan guarantee program underwrote 32 projects in more than 20 states. These include financings for the world's largest wind farm; the world's largest photovoltaic solar generation facility; and several of the world's largest concentrated solar power plants, two of which incorporate the world's largest thermal energy storage systems.

This is also the program providing financing for one of the country's first commercial-scale cellulosic ethanol plants; for the first two all-electric vehicle manufacturing facilities in the United States, and for the first nuclear power plant to be built in the United States in the last 30 years.

On the whole, this is a successful portfolio. Of the 19 generation projects in the portfolio, for example, six are already complete and nine are sending power to the grid. The portfolio supports nearly 60,000 direct and construction jobs, tens of thousands of additional indirect jobs and has fostered the creation of whole new industries throughout the supply chains. The loan guarantees generated \$56 billion

in total project investment and the projects will generate enough clean energy to power several million homes and businesses and take the gas equivalent of more than 4 million cars a year off the road.

While not every investment will succeed, the portfolio is in good shape. The funds represented by investments that have failed represent less than 3% of the total portfolio. This is a record the private sector would consider remarkable, but is particularly impressive for a portfolio of technologically innovative projects being built at commercial scale for the first time anywhere. The expected loss on the Abound transaction, which we are here to discuss today, represents less than four one thousandths of one percent of the total financings.

That is because we never lost sight of the fact that the funds loaned and/or guaranteed to these projects by the loan office are taxpayer dollars. Each and every individual in the loan office, at the Department of Energy and in the Administration, took that responsibility seriously. It is part of the reason the program was occasionally accused, sometimes by Members of this Committee, of moving too slowly in committing funds.

Congress clearly understood that these innovative projects entailed risk when it appropriated almost \$10 billion dollars to cover potential losses to the program before a single loan was made. But, to suggest that anyone who worked on these loans, was not focused on protecting the taxpayer, is flatly inaccurate.

The Loan Process

As I said, I have not been at the Department of Energy for quite some time and the Abound Solar loan was underwritten more than a year before I left. So, I am nearly two years removed from those discussions and from all of the discussions of the hundreds of loan applications we reviewed. Because I am no longer an employee of the Department of Energy, I did not have available to me any of the notes and papers related to the investment that would have enabled me to prepare for this hearing or to be as responsive as possible to the Subcommittee's inquiry.

As a result, I will do my best to respond to your questions, but I am afraid I cannot comment in any detail on the specifics of the transaction or the work papers and products that went into the decision-making on the project.

What I can do, however, is speak a bit about how we did the work we did, how we organized our due diligence and how we thought through the key issues on every project. Although I don't have any specifics before me, I am confident the details of the Abound transaction are no different.

Each loan application was assigned an origination professional, who served essentially as project manager and led the negotiations on deal terms. In addition, every project had a science and technology officer appointed to it to shepherd the

internal and external technology and independent engineering analyses that were done.

Market analysis, competitor research, price and cost estimates were undertaken, evaluated and validated by both internal and outside experts. The applicants, not the taxpayer, paid for all of this work, including the outside experts hired by the loan office. Issues raised during due diligence required resolution before the proposed loan package could be forwarded on for still further review and consideration by additional senior credit and loan committees elsewhere in the Department of Energy.

Every project was assigned a member of the loan program's legal team, who, in turn, worked with outside counsel, on the many complex legal issues that frequently arose. Finally, an environmental review was performed for every project that required one. None of this legal or regulatory work was paid for by the taxpayers either, since applicants were charged submission and review fees which covered the cost of this work.

It is worth noting that the members of the loan office professional staff were all career employees or independent professional contractors and consultants. In addition, the members of the senior credit review committee, the group that reviewed the detailed financial terms of the underlying credit instrument, and which was independent of the loan program operation, were also all career professionals.

These projects took a long time to develop and to analyze. While I do not have the specifics on the Abound Solar transaction, it often took up to several years for these projects to gain approval. This is in addition to any time the applicant may have spent with other DOE offices before interacting with the loan program. Abound, for example, received financial support for continued development of its promising technology from the DOE's inventions and innovations program and from NREL's thin film partnership. Funding from both programs occurred during the Bush Administration and after due diligence on the underlying technology. The loan program made use of that material as well in its analysis.

Abound Solar

Why did the loan programs office offer a loan to Abound? The company developed an advanced cadmium telluride, thin film solar panel based on technology developed at Colorado State University. The production process potentially enabled the company to produce panels faster and more efficiently than other manufacturing processes. Because the panels were frameless modules and optimized for use in large commercial projects, they were also expected to reduce balance of system, or installation, costs. The panels were shown to be effective in high temperature and low light environments, which also made them potentially more versatile than other panels. Finally, they were fully recyclable as well.

In addition, a significant private equity investment was among the many items required for potential approval of a loan. According to news reports, Abound raised over \$300 million in private capital before the government completed its review and underwrote a loan guarantee. The funds reportedly come from entities backed by both Democratic and Republican donors.

Beyond the millions of dollars in grants awarded to Abound by the Bush Administration, Bloomberg recently reported that that Abound's investors include Invus Public Equities, co-founded by Raymond Debbane, a major Republican fundraiser, and DCM Venture Capital, a venture fund with two well-known Republican donors on its payroll. Mitch Daniels, the Republican Governor of Indiana, supported tax credits for the company and a number of Republican Members of the House and the state legislatures in Colorado and Indiana wrote letters in support of the company's application for loan. Everyone who wrote or called in to support the company's application had access to information about the company, and, I assume, supported the project on its merits, as we did.

It is also worth noting that the legislation and rule making requires that the loan office work on only projects that have applied to the program. The loan office does not solicit applications nor can it encourage specific applicants to apply.

There is also some real confusion about how the Abound loan is structured. Most of these loan program transactions tie the financings to milestones to ensure that projects are on track and performing appropriately. That is why, in the Abound case, although certain individuals continue to refer to this as a \$400 million plus loan, it is really only a \$400 million "line." About \$70 million has actually been financed.

The Abound transaction structure is known as production line financing. In this form of financing, a first line is financed. If it is successful, measured against both technical and financial milestones, funds are made available for a second line. If the second line is successful, funds are then be made available for the third line, and so on. This approach limits financial exposure, which is what happened here. The actual exposure to the government today is not \$400 million; it is, as I understand it, approximately \$70 million and, after recovery, will likely be smaller still. That's against a total portfolio in the 1705 program of over \$16 billion. Assuming a modest recovery of, say, 20% (and it is likely to be higher), the loss to the government will represent approximately .004% of the 1705 loan portfolio, and even less of the overall loan program investments.

Rationale for, and Benefits of, the Loan Program

Amid questions about specific projects, some have lost sight of why the loan program was established at all. The reason is simple. We have a public need to address a specific market failure: commercial scale energy projects are capital intensive, illiquid and produce bounded and modest returns. In addition, new technologies carry both technology and scaling risks, making these projects

unattractive to the private capital markets. Nonetheless, energy is essential to a successful economy and clean energy is increasingly important to our energy security and our global competitiveness. When the global financial crisis caused the credit markets to dry up, energy infrastructure projects could not get completed. The loan program was intended to redress that.

Congress understood this and appropriated funds which anticipated losses of close to \$10 billion dollars to get these projects up and running. As the non-partisan reports cited above note, the likely loss to the government at this point is less than \$3 billion, well short of what Members of Congress approved and expected.

Beyond the obvious benefits of reducing greenhouse gas emissions and building competitive industries for the future, one essential benefit is that financing projects at commercial scale drives the build-out of supply chains, companies which provide the key parts and services for these larger projects. Without commercial-scale projects to sell to, American suppliers cannot ramp up production, lower their costs, compete successfully in the global market or create jobs.

In addition to the jobs created by the projects themselves, there are significant numbers of jobs created by the suppliers and by the support services which spring up around both the projects and the growing supplier base. A typical job multiplier assigned to large infrastructure projects is 2-3x the number of direct jobs created. These multipliers are not included in the loan programs office official calculations because they cannot be counted exactly. As a result, the numbers used by the program, while significant actually meaningfully undercount the number of jobs related to these projects. It is essential to consider the full employment picture when calculating these figures. It is likely that the jobs created around these projects numbers in the several hundreds of thousands.

There is little doubt that clean and renewable energy will be one of the largest and most important industrial sectors around for world for many, many years to come. However, this industry has different characteristics than, say, software, where it is possible to launch potentially transformative companies on little capital and in a short period of time. As I mentioned, the energy industry, and here I include oil and gas, is characterized by heavy capital investment requirements, illiquidity and bounded returns. That results in the creation of platform companies, those companies large enough to compete in this sector around the world. If you miss the opportunity to create these platform companies, you don't get a second chance.

Other nations get this. There are green banks to support similar investments in this sector being launched in the UK, India, Australia and elsewhere. Korea recently announced a massive incentive package. Most European nations maintain significant incentives for clean energy, even as they seek to find the appropriate balance for what that level of support should be. China, as we all know, has committed billions to the support of its clean energy industry, \$34 billion to the solar manufacturing sector alone.

The United States invented the solar panel. Today 8 of the 10 largest solar panel manufacturers in the world are headquartered outside the United States. It is shameful that America has allowed this migration of intellectual capital and jobs overseas.

Conclusion

In conclusion, it is important to remember that we all share the same goal: to ensure that the United States remains a global leader in the energy sector; that we build out this giant new industrial opportunity in ways which enhance our global competitiveness and our energy security and create opportunities for American businesses to thrive. The jobs follow the success of that effort.

In revolutionary industries, not every company can, or will succeed. That is unrealistic and revisionist with respect to the expectations embodied in the legislation Congress passed. Over the years, hundreds of car companies, oil and gas companies and agricultural companies have failed. Yet, for many decades, the federal government has supported these industries and even specific companies, both directly and indirectly, in an effort to ensure that the country remained a leader in these critical sectors. And, because of ongoing and consistent support, America built successful global competitors in each of these sectors. Are we going to ignore this successful approach because some early efforts failed?

We can, and should, seek to understand the failure of any company that gets government support. But we should look to the facts for our answers. Industry dynamics change; other countries compete with us, sometime unfairly. The recent actions by the Department of Commerce to apply significant tariffs to foreign solar panels indicates that the concerns being voices around predatory pricing were real and contributed meaningfully to the chaos in the US solar panel market.

It is preferable to be reflective of the facts than reflexive about the accusations. These were not loans given to supporters. Indeed, as documented, investors of all political persuasions are interested in the financial potential of clean and renewable energy, as well they should be. The loans were not rushed; indeed, the pressure to complete them came from the sunset provisions in the legislation itself. It is not accurate to claim that the loans were not diligenced properly. The facts make it clear that they were. Applications were reviewed for years, by multiple reviewers, both in and out of government. They were reviewed and approved by professionals exercising their best professional judgment. They went through multiple rounds of reviews; the review process was more rigorous than that employed in the private sector.

Congress should give itself credit for having being prescient enough to recognize just how important this industry is and what America needs to do to compete successfully in it. It should follow through on that vision.

Mr. JORDAN. Thank you, Mr. Silver. Mr. Silver, let me start with you. We are going to start with when you first got the job at the Department of Energy.

If I could have the staff put up the first email.

[Slide.]

Mr. JORDAN. It may be tough to see, but we can bring you a copy if we need to. This is the interview schedule, it says Interview Schedule for Jonathan Silver. This is back in 2009. You were going to interview on a Tuesday with Mr. Steve Isakowitz; Wednesday you had a couple interviews with Dan Poneman, Rod O'Connor; and then Friday with Matt Rogers. So this was when you were applying for the job, you were going to interview with these important folks at the Department of Energy.

Let's go next to the second email.

[Slide.]

Mr. JORDAN. So that was an email on Monday, September 28th. The next one is one that you sent to Mr. Isakowitz, where you say, at the risk of seeming presumptuous, I want to mention that my wife and I are holding a small event for Al Gore at our home this coming Thursday evening, October 1st. So you are applying for the job and yet you are inviting the very folks who are going to be interviewing you for the job to come to a party you are hosting with the former Vice President. Is that kind of a normal practice or do you think maybe someone might think that is a little unusual?

Mr. SILVER. Congressman, I can't answer the question as to whether or not it is unusual or not for others; it would be typical for my wife and I to host events and to invite people to them.

Mr. JORDAN. But the people who are going to decide whether you get the job or not, or they already told you you had the job?

Mr. SILVER. Well, I don't know the date of this and I don't know exactly when I was—

Mr. JORDAN. I will tell you the date. I will tell you the date. It is the day before you got the interview schedule. So you probably knew that you were applying for the job. This was September 27th you sent these guys who were going to be interviewing you. In fact, Mr. Isakowitz was going to be interviewing you two days later, and you sent him an email saying, hey, come on over to a party we are having, Mr. Gore is going to be there.

Mr. SILVER. Just to clarify, obviously, I was talking to them about the job, but I didn't actually apply for the job; they reached out to me. Having said that—

Mr. JORDAN. Wait, wait, wait. You wanted the job. You had an interview schedule that comes out two days after you were inviting them to a party.

Mr. SILVER. Right.

Mr. JORDAN. So obviously you knew Mr. Isakowitz for a time before this? Was he a friend of yours?

Mr. SILVER. No, I had not—his name is Isakowitz.

Mr. JORDAN. So he wasn't even a friend. So that is why you said this seems presumptuous, because you didn't know him.

Mr. SILVER. Right.

Mr. JORDAN. But you invited him to a big party you were having?

Mr. Frantz, when you applied for the job, did you invite the folks who were going to hire you? Did you have a party at your place and, I don't know, did you have Derek Jeter or some—

Mr. FRANTZ. Mr. Chairman, the Department reached out to me based on my background already in government service with the Overseas Private Investment Corporation.

Mr. JORDAN. Okay. And when they reached out to you, did you say, well, the guys who are reaching out to me, was there an interview process?

Mr. FRANTZ. There certainly was, yes.

Mr. JORDAN. Did you invite the folks who were interviewing you and decide whether you would get the job, did you invite them to a party before you got the job?

Mr. FRANTZ. I did not.

Mr. JORDAN. Okay. Okay.

I want to follow up. Let's go to the next one, where Mr. Isakowitz says thanks for the invite, but I need more details. In fact, our general counsel—which is good—would need to look at this before we decide to do this. And then you send him back a more lengthy email, you said it is a reception, not a fund-raiser. And then you say, in the second paragraph of the email you sent back to him on this correspondence, I expect there will be about 40 people or so, generally folks we know who are interested in this issue and have the capacity to write significant checks.

So who were some of those folks at this party, if you don't mind me asking? Was Mr. Tiller there?

Mr. SILVER. No, Mr. Tiller wasn't there.

Mr. JORDAN. Was Mr. Witsoe there?

Mr. SILVER. No, Mr. Witsoe wasn't there either. To be candid, I don't remember who was at this party.

Mr. JORDAN. What about Ms. Pat Stryker, was she there?

Mr. SILVER. I doubt it. I don't know Pat Stryker.

Mr. JORDAN. The head of Bohemian Industries, biggest investor in Abound Solar, bundler—

Mr. SILVER. We didn't—

Mr. JORDAN. She was not there?

Mr. SILVER. We didn't actually create the invitation list. This was not a fund-raiser, and what I was trying to do with this email, as I recall, was to give Mr. Isakowitz some background information—

Mr. JORDAN. Was Joe Zimlich there, the CEO of Bohemian Industries? Was he at the party?

Mr. SILVER. I don't think so, but I don't know him either.

Mr. JORDAN. Okay. Okay. So the fact that Pat Stryker, who is the founder of this Bohemian Companies and a major donor and bundler for the Obama campaign, over \$100,000, that did not influence your decision to give the loan to Abound Solar?

Mr. SILVER. Not at all. I did not know who those people were then and I do not know who they are now; I have never met them.

Mr. JORDAN. Did anyone at this party that you invited folks at the Department of Energy to while you were trying to get the job, did any of those folks lobby you, talk to you about the Abound Solar project?

Mr. SILVER. No, sir. I knew nothing about the Abound Solar project.

Mr. JORDAN. Okay. Okay. Let me ask you this. While you were head of the loan program, how many times did you visit the White House?

Mr. SILVER. I don't know. I certainly went over on numerous occasion to attend staff meetings of various kinds with the staff at OMB and other agencies.

Mr. JORDAN. And at any of these meetings at the White House, were you there when either Pat Stryker or Joe Zimlich, big investors in Abound Solar project, while they were at the White House?

Mr. SILVER. Not to my knowledge. I don't know those people, sir.

Mr. JORDAN. Okay. I see I am out of time. I have a lot more, but I will yield to the—okay, let me do this. I will go to the gentleman and we will come back for the second round. I yield now to the gentleman from Ohio.

Mr. KUCINICH. Thank you, Mr. Chairman. I think you established that Mr. Silver wanted the job. The real question here is whether he was qualified.

So, Mr. Silver, it has been suggested that you were appointed to lead this DOE Loan Program solely as a result of political connections. The fact is that Mr. Silver had a wealth of experience that made him uniquely qualified for the role. Now, you were cofounder and managing director of Core Capital Partners, a successful early stage investor in alternative energy technologies, is that correct?

Mr. SILVER. Yes, sir.

Mr. KUCINICH. And you graduated from Harvard University with honors and did post-grad work in Paris and Geneva, as well as receiving both a Fulbright and Rotary Graduate Fellowships, is that right?

Mr. SILVER. Yes, sir.

Mr. KUCINICH. Did you have any leadership experience in large organizations?

Mr. SILVER. Yes, sir. I was either the chief operating officer or the senior executive vice president, which is essentially the same job, two different companies with complex production operations.

Mr. KUCINICH. You were with Tiger Management, is that right?

Mr. SILVER. Yes, sir.

Mr. KUCINICH. One of the Country's largest and most successful hedge funds. And is it true that, while at Tiger, the assets grew from \$400 million to over \$8 billion, is that correct?

Mr. SILVER. Yes, sir.

Mr. KUCINICH. And you served as a policy advisor to several U.S. cabinet secretaries, is that correct?

Mr. SILVER. Yes, sir.

Mr. KUCINICH. And isn't it true that, while at the Commerce Department, you helped negotiate the first clean car agreement with the Nation's auto manufacturers?

Mr. SILVER. Yes, sir.

Mr. KUCINICH. Now, look, in this era of Citizens United, you know, and pay-to-play, what really is extraordinary is that we brought somebody in front of this Committee who is actually qualified for the job that he did. That is a story. Hold the presses.

Now, Mr. Silver, you were a highly successful investor and financier in the private sector before you started at the Department of Energy. You put those business skills to work in government to build up the renewable energy technology industry in the U.S., as Congress intended. Why do you believe government has a role to play in developing renewable energies like solar? And how important is that role in helping America gain energy independence?

Mr. SILVER. The U.S. Government has a long and storied history of backing critical technologies of all kinds, including energy technologies, for hundreds of years; it has been instrumental in developing these industries. We have backed oil, gas, coal, and other kinds of industries for decades in order to bring them forward because they are so essential to the underlying economy. I don't believe that clean and renewable energy is any different.

Mr. KUCINICH. Well, here is my concern. I go back to what I was saying at the beginning. You know, we want trade with China, but we better look at the rules here. According to Brookings's study, China now leads the world in clean energy investment, and in 2010, when DOE awarded a loan guarantee to Abound, China put into place a staggering \$54.4 billion in clean energy investments.

In the first quarter of 2011, Chinese investments in clean energy were \$10.9 billion, as compared to just \$2 billion in the United States. Wake up. We are losing market share here from people who are subsidizing their exports and crushing our industries.

Now, Mr. Silver, what impact will this investment disparity have on American industry and job growth if it continues?

Mr. SILVER. Well, let me give you just one concrete example, Congressman. We invented the solar panel in the United States, we invented it here. Today, eight of the ten largest solar panel manufacturers in the United States are headquartered outside the United States.

Mr. KUCINICH. So look at what we have here. China not only leads the U.S. in investment, but also has a policy of illegally dumping below-cost solar panels in the U.S., and the ITC found, in a preliminary decision, "reasonable indication" that the U.S. solar industry was materially injured by reason of imports from China that allegedly subsidized and sold in the United States at less than fair value. This is about fairness. Our solar industry is getting decimated.

Now, Mr. Frantz, what impact are illegally dumped Chinese solar panels having on the U.S. solar manufacturing industry?

Mr. FRANTZ. I can only further elaborate on Mr. Silver's comment and add to the point which has not yet come before the Committee, that we just have learned that General Electric, one of the largest corporations in the United States, is in the process now of delaying their new production facility in Colorado as well. So this is epidemic, certainly, and it is having profound and lasting effects across the whole United States manufacturing capability.

Mr. KUCINICH. Listen. Listen to this, members. You have a businessman here. You have somebody who understands the industry and he is telling us it is in trouble.

Now, Mr. Witsoe, your company was impacted by those subsidized and illegally dumped Chinese imports, was it not?

Mr. WITSOE. Yes.

Mr. KUCINICH. And you state in your testimony, “Abound’s technology in business made solid progress until the second half of 2011, when solar prices dropped by 50 percent in a year due to aggressive price-cutting from Chinese competitors using older crystalline-silicon technology.” Is that true?

Mr. WITSOE. That is correct.

Mr. KUCINICH. And can you tell the Committee what role these events played in your company’s eventually bankruptcy?

If he can answer, I would appreciate it.

Mr. WITSOE. I think those were the key drivers of—

Mr. KUCINICH. What does that mean?

Mr. WITSOE. Well, simply, they had dropped prices so far below—

Mr. KUCINICH. Who? Who is they?

Mr. WITSOE. China had dropped prices below even their own cost that we were unable to compete in that environment, and we certainly never expected prices to fall that fast and that far.

Mr. KUCINICH. Thank you, Mr. Chairman.

Mr. JORDAN. I thank the gentleman.

I just request from Mr. Silver if you are the smartest, most qualified guy, as Mr. Kucinich alleges, then why did you approve the loan guarantee? Why did the Department of Energy approve this loan guarantee to Abound Solar when Fitch’s two reports, which were both very negative? Fitch’s first report set a dismal B credit rating and warned the Department of Energy that the product had only a 45 percent chance of recovery.

So Fitch, even before, you can talk about what happened in China, I get that, but Fitch told you guys, hey, this has got a less than 50 percent chance of making it, this is a bad risk. But you guys said, oh, it’s all right, we are using taxpayer money, we can do that.

Mr. SILVER. Thank you for the question, Congressman, because I think it is an important one and it gets to the essence of what we are doing here today. I am going to give you my best recollections because, as you know, not being at the Department, I don’t have access to the underlying data, but what I can tell you—

Mr. JORDAN. No, no, no, no, no, this is when you were there. This is when you made the—

Mr. SILVER. But I don’t have access to it to refresh my memory. What I can say is that the program itself was intended to support clean energy technologies at commercial scale, and Abound fit that model. It was a major opportunity to reduce costs in solar manufacturing. The application met the program criteria and goals, and, as I recall the structuring, it was very aggressive in protecting the U.S. taxpayer.

The solar panel prices at the time had fallen, but even then the project worked. It is the second year when the project—

Mr. JORDAN. No, no, no, no. Fitch gave you another report.

Mr. SILVER. Right.

Mr. JORDAN. The second report said Fitch stated that the cost of the project for taxpayers had become significantly more expensive, and yet the estimated efficiency of the panels—some of the first panels you put in didn’t even work. The estimated efficiency of the panels has decreased significantly. So the cost went up, the quality

went down in the second report, and you still said let's give them taxpayer money.

And here is the interesting thing: everything Fitch said came true. So if you are going to have a credit report come to you—we just heard that you are the smartest guy in the world in this area, so what I want to know is, if you are the smartest guy in the world, why didn't you listen to Fitch, two reports, what they said, which absolutely beared out, became the fact; and you add in Beacon Power and Solyndra, which have both gone bankrupt, and my guess is there are more coming.

What figures? You don't pay attention to Fitch? We always come back to this point in these hearings. Did you give the loan guarantee because political connections persuaded you to do it, or did you give it based on the merit? And that is certainly not there. So it is either you did it for your buddies or you were incompetent and said we are not going to pay attention to what Fitch says, even though it all came true, and we are just going to give the money anyway? It has to be one or the other because there is no other conclusion you can reach.

Mr. SILVER. Well, Congressman, I am not the smartest guy in the room, but I am also not incompetent, so I guess I will answer the question by saying that we did market analyses, we did financial analyses, we did technical analyses, we did legal analyses, we did regulatory analyses—

Mr. JORDAN. And Fitch didn't do that?

Mr. SILVER. Well, actually, we have more resources on this project, to be candid, than Fitch does, but nonetheless—

Mr. JORDAN. You have more resources, and they were right and you were wrong?

Mr. SILVER. There is no right and wrong in an assessment of what out-year production prices for solar panels are going to look like. We worked with the data from—

Mr. JORDAN. When Fitch says costs are going up—I mean, this is before you give the final guarantee.

Mr. SILVER. And it is also—

Mr. JORDAN. Costs were going up and the quality is going down. The first report we were skeptical; now we are telling you, hey, it is going to cost more and this is not as good as we thought, you might want to think about this. And you guys said, no, \$400 guaranteed, \$70 million out the door, loss to the taxpayers.

Mr. SILVER. We obviously incorporated the data from Fitch into the analysis. I don't have it in front of me and haven't had a chance to review it, but—

Mr. KUCINICH. Would my friend yield?

Mr. JORDAN. I would be happy to yield to the gentleman.

Mr. KUCINICH. I think this is easily explained, because Fitch couldn't predict China's illegal dumping and the impact that it has.

Mr. JORDAN. This report came out before all that was taking place, that is the point.

Mr. KUCINICH. But it is a practice that is in process, and it is the aggregate effect of it. It is not just that it is happening one day; it is an aggregate effect that at some point makes it impossible for a business to go forward. Look, we knew, when these loan guarantees were passed, Congress built in a factor that some of them were

going to be in trouble, some of these businesses were going to have trouble surviving. But if you know that when there is a level playing field, imagine how difficult it is when somebody is essentially trying to break your legs when you are running in a track meet.

Mr. JORDAN. I want to yield to Ms. Buerkle, but I would just say this. Fitch understood there was a level playing field and they still said this is a bad bet.

Mr. SILVER. If I may—

Mr. JORDAN. I have to go to the gentlelady from New York, then the gentleman can respond if he would like.

Ms. BUERKLE. Thank you, Mr. Chairman. Just a couple of issues.

Mr. Silver, you mentioned that your role was to implement, not to establish policy, and we get that. But when you tell me that so many of these companies are now overseas and their corporate, I think that that is an opportunity for this Administration to understand the policies of this Country with regards to our corporate tax rate, the cost of regulations. There is a reason why companies go overseas; not because they don't want to do business here, but because this Administration and its policies have created such a hostile environment for a company to do well.

So I think that that is something we all need to understand, and this Committee has looked at, especially this Subcommittee, the regulatory scheme coming out of this Administration is stifling our businesses. The uncertainty, the question about what our tax rates are going to be in the corporate tax structure, that is why our companies are going overseas.

I also want to just mention, because I have so many nuclear power plants in my district, that is a clean, safe energy source, and you mentioned it in your opening remarks. Has in fact that program, has that money been given to and the plan been implemented to that nuclear power plant that you mentioned?

Mr. SILVER. Let me address those questions in order, and with your permission, Congresswoman, let me defer the answer to that to my colleague, Mr. Frantz, because I am no longer at the program and haven't been there for close to a year.

Ms. BUERKLE. Okay.

Mr. SILVER. First, with respect to your comment, Mr. Chairman, about Fitch ratings, I just did want to take a moment to—

Ms. BUERKLE. I apologize, Mr. Silver, because I only have five minutes, and I am sure—

Mr. SILVER. Then let me say I certainly share, Congresswoman, your concern that we ensure that we have the most efficient and effective regulations possible to support business. The entire goal and intent of the loan program is to support American business. I would just point out what I said in my opening remarks, which is that the Loan Programs Office is not a policy-making shop; it is an implementing agency.

Ms. BUERKLE. I understand that. Thank you. We have such a short period of time, I need to get on with my questions.

The next series of questions is for Mr. Frantz. If I could ask the Committee to play a short video clip, please.

[Video played.]

Ms. BUERKLE. Mr. Frantz, this is a re-election ad that the President played and has used. It uses a map from the Department of

Energy's Loan Program Office. Would you comment whether or not this map is disingenuous with regards to the jobs that were created from those energy initiatives?

Mr. FRANTZ. Well, I can comment on precisely what we have done, and I did so in my oral testimony, Congresswoman. We have created over 60,000 jobs. The interesting thing is that, on the positive side of the ledger, all of our projects represent new construction, and that is a huge multiplier, a huge dynamic in the job creation picture.

Ms. BUERKLE. Okay. Now that you brought that up, let's just pull up the first slide here.

[Slide.]

Ms. BUERKLE. All of the dots in red on this map, Mr. Frantz, represent Project AMP project sites. Now, Prologis hasn't drawn down on its loan and no construction has occurred at any of these sites. So there is a map out there and it is to show all the jobs it has created, but in fact, where you see the red dots, there is no construction going on, no jobs have been created yet, whether it is in the construction business, as you are mentioning, or with regards to the solar panels.

Mr. FRANTZ. To the best of my knowledge, Congresswoman, the contrary is in fact true, and that is that Prologis has spent millions of dollars in what they call roof preparations, and that is legitimate commencement of construction under our program; and they are working based on equity, not our debt. We have not disbursed, you are correct in that.

Ms. BUERKLE. Now, the DOE, they gave the money or where did that money come from?

Mr. FRANTZ. No, it came from equity.

Ms. BUERKLE. Okay. And are you confident in saying that every one of those red dots that the project has started and we have put people back to work?

Mr. FRANTZ. I would have to look at the specific sites by specific address, but I can assure you that Prologis is working on roof preparations on a number of projects in the millions of dollar range.

Ms. BUERKLE. I think the important point in showing the President's ad and then we show this ad is that no DOE money has been given for these projects. So when DOE talks about we are creating jobs—and that map that the President used came off the DOE website, so it is disingenuous, because if that money didn't come from DOE, then I don't know how he can tout those job creations.

Mr. FRANTZ. Well, I think, with all due respect to the Committee, often the equity is employed once a loan guarantee has been given; there is a quid pro quo. So I can't comment; the senior management is not here, I have not talked with them, but clearly an incentive for them to begin construction on roof preparation was the fact that they were holding a loan guarantee.

Ms. BUERKLE. But wouldn't you agree it is a little disingenuous that the President is taking credit for that?

Mr. FRANTZ. I wouldn't comment; I don't think it would be appropriate for me to do so.

Ms. BUERKLE. I yield back, Mr. Chairman.

Mr. JORDAN. I thank the gentlelady.

I recognize the Chairman of the full Committee, Mr. Issa.

Mr. ISSA. Thank you, Mr. Chairman.

Mr. Silver, as I said in my opening—

Mr. JORDAN. Mr. Chairman, I am sorry. I have to go to the minority.

Mr. ISSA. Oh, Mr. Cummings, certainly.

Mr. JORDAN. I apologize.

We will go the Ranking Member, and then we will go to the full Chairman.

Mr. CUMMINGS. Thank you very much, Mr. Chairman.

Mr. Witsoe, is there anything Republican or Democratic about the solar energy industry?

Mr. WITSOE. No.

Mr. CUMMINGS. And you had some \$300 million invested in this project, is that right?

Mr. WITSOE. That is correct.

Mr. CUMMINGS. By private industry.

Mr. WITSOE. That is correct.

Mr. CUMMINGS. So the private folks must have seen something in it. In other words, they invested \$300 million; they saw something there. Earlier it was stated that perhaps you all should have foreseen this China situation. I take it that you did not foresee this, is that right?

Mr. WITSOE. No, certainly not.

Mr. CUMMINGS. You know, in my city there is a cleaners a few years ago that started charging \$1 per garment, and they charged \$1 per garment and got all this business; people were lined up. You go somewhere else, a pair of pants cost you \$6. Here they were charging \$1. And then, after a while, they upped the price, upped the price to what everybody else had been charging, but then they had all the business. Is that sort of what China is trying to do here, do you think?

Mr. WITSOE. It feels like a similar strategy.

Mr. CUMMINGS. Yes.

So, Mr. Tiller, in 2007, during the Bush Administration, your company, Abound, which was then known as AVA Solar, received DOE funding for a different solar project, is that correct?

Mr. TILLER. Yes, sir.

Mr. CUMMINGS. Isn't it a fact that many prominent investors in solar energy, even in your own company, were prominent funders of Republican candidates, is that correct?

Mr. TILLER. I believe that is correct, sir.

Mr. CUMMINGS. Investors in solar energy are Republicans and Democrats. It turns out members of Congress who supported these projects were also both Republicans and Democrats. In 2009, members of Congress from Indiana wrote a letter of support for the Abound project, touting the project's important economic benefits to Tipton County, the State of Indiana, and, indeed, the Nation at this critical juncture.

Mr. Witsoe, can you tell us, were those Indiana members of Congress who supported your DOE application, were they just Democrats or were they also Republicans?

Mr. WITSOE. I wasn't with the company at the time, but I believe they were also Republicans.

Mr. CUMMINGS. And, Mr. Silver, when you were at the Loan Programs Office at DOE, did you hear from both Republicans and Democrats in support of project applications?

Mr. SILVER. Constantly.

Mr. CUMMINGS. So it was not unusual to have bipartisan efforts in an effort to help these job creators, is that right?

Mr. SILVER. It wasn't unusual to have bipartisan support for them and it wasn't unusual for individual Democrats and Republicans, members of Congress and State legislators, to call on individual projects.

Mr. CUMMINGS. Now, did you meet with any members of Congress about DOE projects?

Mr. SILVER. Yes, sir.

Mr. CUMMINGS. Both parties?

Mr. SILVER. Yes, regularly.

Mr. CUMMINGS. So that was nothing unusual?

Mr. SILVER. Not at all.

Mr. CUMMINGS. Were the Republicans, as well as Democrats you met, what kind of conversations would you have with them? They just kind of let you know they were interested in the project? Was there any pressure or what?

Mr. SILVER. Well, they were interested in knowing about the project; they were interested in updates; they were interested in letting us know that they were interested in the projects. These would be typical and regular interactions.

Mr. CUMMINGS. Now, we have identified nearly 500 letters sent by both Republican and Democratic members, including our Chairman, Chairman Issa, seeking funds for clean energy projects in their districts. I am not saying there is anything wrong with that, but more recently Chairman Issa has been calling the Department of Energy's entire Loan Guarantee Program a "broad scandal" that has been driven by political favoritism and accusations of pay-to-play relationships.

Did you see any evidence of that during your tenure?

Mr. SILVER. None whatsoever, sir. As I say, almost nobody, and certainly nobody that I am aware of in the loan program, even knew who the individuals were who had invested, either directly or indirectly, into these companies.

Mr. CUMMINGS. Now, could you have predicted the extent of this China factor here? Is that the main issue, do you think, with regard to the problems that this company experienced?

Mr. SILVER. It is certainly a key driver. China has devoted billions and billions and billions of dollars in not just solar, but every clean and renewable energy space to build out those industries. But it is also true that that work is continuing and growing aggressively all over the world.

Mr. CUMMINGS. But you never anticipated it would be to this degree, where they were actually putting product out there and charging less than the product cost to produce the product?

Mr. SILVER. No. One couldn't, one would not imagine that because fundamentally what you are describing, Congressman, is predatory pricing.

Mr. CUMMINGS. And that is illegal, is that correct?

Mr. SILVER. I am not qualified to comment on that.

Mr. CUMMINGS. Very well. Thank you very much.

Mr. JORDAN. I thank the gentleman.

We now recognize the Chairman of the full Committee.

Mr. ISSA. Thank you very much. This is in fact a vast scandal, Mr. Ranking Member. I don't run away from those statements. The American people know it. I would hope that you would soon join us and realize that the amount of dollars lost, you cannot blame it all on China and you certainly cannot stand here, sit here and blame China as though you didn't know that they would be a fierce competitor.

I, for one, spent over 20 years in the electronics business. I think it was pretty well known by the time I came to Congress 12 years ago, that China would compete and would compete fiercely for this kind of business.

Mr. Silver, when you were at a Department of Energy employee, did you have a BlackBerry?

Mr. SILVER. Yes, sir.

Mr. ISSA. Did you have a Government-issued BlackBerry?

Mr. SILVER. Yes, sir.

Mr. ISSA. Did you also have a private phone of your own expense?

Mr. SILVER. Yes, sir.

Mr. ISSA. Did you have a Government-paid for computer at your office?

Mr. SILVER. Yes, sir.

Mr. ISSA. Did you have a computer at home, either permanent or a laptop that was paid for by the Government?

Mr. SILVER. No, sir.

Mr. ISSA. Did you have any secure ID capability of logging in?

Mr. SILVER. Yes, but the system is so antiquated and the technology, which you will appreciate given your background, sir, is so cumbersome that it is virtually impossible to work with documents and long form pieces in that fashion.

Mr. ISSA. Okay. But they did give you a fob and tell you how you could get into the system remotely and securely, right?

Mr. SILVER. Well, they didn't give me a fob, but there is a mechanism for—

Mr. ISSA. Okay. Did you use it on occasions?

Mr. SILVER. The fob—

Mr. ISSA. The mechanism.

Mr. SILVER. Very rarely.

Mr. ISSA. Okay. Did you receive training as to the Federal Records Act and your responsibility in communications?

Mr. SILVER. I honestly don't recall. If it is part of the normal protocol, then I would have, but I just don't remember.

Mr. ISSA. Okay. Now, you have kindly provided us with over 2,000 records from your Gmail account, and I want to thank you. My question to you is, why is it clear from these emails that you were communicating often with other, to be honest, other employees? In other words, it was DOE employee to DOE employee regularly through Gmail; both of you were using Gmail rather than your official mail.

Mr. SILVER. Well, I want to try to put this in context. We were working 16-hour days, 7 days a week against the sunset dated legislation in order to move these projects through.

Mr. ISSA. Okay. I understand that was part of it. But did you ever send a Gmail or did you ever access your Gmail account while you were at your desk at your office?

Mr. SILVER. On occasion I would try, particularly because I was traveling as much as I was, I would prepare to take things I needed, and that was from time to time a mechanism. As you mentioned in the provision of the documents, the vast majority of the material that I delivered, as you can see, are industry reports, they are white papers on technologies, they are draft presentations for the loan program and the like.

Mr. ISSA. Well, I don't want to characterize them wrongly, but I am seeing things like a discussion between you about BrightSource concerning a PPT outlining consequences of sending a memo to the White House. Now, to me, this is something that should have been made available, clearly should have been—this is the March 8th. This is a government document that is concerned, concerned about the politics and the policy of it. Was this retained or delivered upon your termination, or prior to your termination, into the Government's hands?

Mr. SILVER. First of all, I apologize, Congressman, I can't actually read that, so I can't comment on what it says, but—

Mr. ISSA. Well, let me rephrase it. Did you deliver your Gmail account back and forth for ones like the one I just characterized, did you deliver them to the Department of Energy before departure?

Mr. SILVER. We delivered—everything that has been requested—

Mr. ISSA. The reason I am asking and I think it is an important question is these were government documents. They were not produced in duplicate on your official side. You departed DOE. In realtime or at any time prior to your leaving DOE, did you deliver these for archival purposes to the Department of Energy?

Mr. SILVER. I am not sure that I was aware that I needed to do that. But as soon as we received a request from the Department of Energy we complied.

Mr. ISSA. And isn't it true that request came only after we asked for those documents? They didn't ask for them until we were already seeking them, is that correct?

Mr. SILVER. I don't know the timing of that, sir.

Mr. ISSA. When did they ask for them?

Mr. SILVER. In the fall. I am told it was in the November, December time frame.

Mr. ISSA. Okay. Last quick question just for the record. You had a BlackBerry. Couldn't you have BlackBerried official to official in the case of most of these? In other words—

Mr. SILVER. As I said to you, sir, the vast majority of that material are documents, so there is no easy way, when you are trying to work with documents in a short time frame, to make that happen.

Mr. ISSA. Let me just make something for the record.

Mr. SILVER. Yes. But let me just say—

Mr. ISSA. Sure. Of course. Ask unanimous consent I be granted an additional minute. Thank you.

Mr. SILVER. I certainly wish, in retrospect, that I had handled these documents somewhat differently, but there was certainly no—the documents that I have actually already exist, by and large, on the Government—because they are these reports.

Mr. ISSA. Right. And to be honest, we are not terribly concerned about documents attached; we are looking mostly at the content of the email.

Mr. SILVER. No, I understand.

Mr. ISSA. But isn't it true that you could have sent to Gmail these things before leaving your office and, in fact, using your BlackBerry, you could have simply, if you had the ability to Gmail, you could have Gmailed it, you could have still sent them from your government account? In other words, you chose, out of apparently convenience, as did your colleagues, to use Gmail and had no knowledge, no training that you remember that would have caused you to know that these not being maintained, at a minimum, violated the intent of the Federal Records Act, which is that these be retained by the agencies and available to the American people.

Mr. SILVER. Well, first, I apologize, I don't actually have a Gmail account. That is not what—but in any event—

Mr. ISSA. Oh, no, you actually have a special account. But everyone you communicated with were Gmail.

Mr. SILVER. Right. But we certainly have made available all of—

Mr. ISSA. And I apologize. We blacked out deliberately so that what you do have in the way of a personal url is yours to deal with.

Mr. SILVER. Thank you.

Mr. ISSA. I want to thank the Chairman for his indulgence. Yield back.

Mr. JORDAN. I thank the Chairman.

Now recognize the gentleman from South Carolina, Mr. Gowdy.

Mr. GOWDY. Thank you, Mr. Chairman.

Mr. Silver, the email account that ends in .net, is that your personal email account?

Mr. SILVER. I'm sorry, which?

Mr. GOWDY. I am happy to give it. I thought we were making some concerted effort not to share with the rest—

Mr. ISSA. Please do not give it.

Mr. GOWDY. Is it safe to say it ends in .net?

Mr. SILVER. Yes.

Mr. GOWDY. All right. Now, you just testified, I think this is a direct quote, you wish you had handled the documents somewhat differently. I would argue to you you did handle it somewhat differently. The fact that you forwarded what I am sure you will concede is a decidedly work-related email to your personal email account does strike some of us that are familiar with the Federal Records Act as being somewhat different.

So you get an email at 2:50 a.m. in the morning on a Monday; you respond to that email from your personal email account at noon. Were you at home when you responded to it; were you at work when you responded to it?

Mr. SILVER. The answer is I don't know, Congressman, because I don't have access to my records from being—

Mr. GOWDY. But you would have had to have forwarded that email from your work account to be able to respond to it on your personal account.

Mr. SILVER. That is true. What I don't know is what I was doing that day and where I was headed. As I said, as a matter of preparation for trips—

Mr. GOWDY. Well, let me ask you. Help me with this. Why did you feel the need to respond to it from your personal account?

Mr. SILVER. Well, that answer is easy, and that is because any document over the size of a short email is very hard to read and manipulate, as you well know, I am sure, in classic library fashion.

Mr. GOWDY. Well, we are going to get to whether or not you used this practice with other emails. This one had no attachments, it was just an email.

Mr. SILVER. Right. But it was requesting that I review it and look at it and comment on it.

Mr. GOWDY. Did you make a practice of forwarding all emails that had attachments to your personal email account?

Mr. SILVER. No, just ones that were long and complex.

Mr. GOWDY. And how many would that be?

Mr. SILVER. I don't know. But as I said, we turned over virtually everything that we have available, and the vast majority of it are these documents.

Mr. GOWDY. Would you have deleted any emails before you turned them over?

Mr. SILVER. Certainly not intentionally, no.

Mr. GOWDY. I am not asking. If you had done it intentionally, this would be a conversation you would be having with another member of the Federal Government; it would be with the U.S. Attorney's Office, not with a congressman.

Mr. SILVER. Right. But the reason I said that is I can't answer that question because, as it turns out, I have no backup mechanism on this.

Mr. GOWDY. How pervasive was this practice of forwarding emails to your home email account?

Mr. SILVER. Not terribly.

Mr. GOWDY. What does not terribly mean?

Mr. SILVER. I don't know how to quantify that.

Mr. GOWDY. More than 100; less than 100?

Mr. SILVER. Well, I received tens of thousands of emails while I was with the program.

Mr. GOWDY. Then what percentage would you have forwarded to your personal email account to then answer from your personal email account?

Mr. SILVER. I don't know the answer to that, Congressman. Not an enormous number, but any that would require me, while I was traveling or working, to review documents and comment on them.

Mr. GOWDY. Is it your testimony that you were traveling when you received this email from Mr. Willard?

Mr. SILVER. I don't remember if I was or not.

Mr. GOWDY. If you were not traveling, what would be the other explanation for why you would have forwarded it to your personal email account?

Mr. SILVER. Well, I might well have been out of the office, but not traveling.

Mr. GOWDY. What is the purpose of the Federal Records Act?

Mr. SILVER. I am not qualified to—obviously, to retain records, but I am not qualified to give you—

Mr. GOWDY. And why would it be important to retain records?

Mr. SILVER. It is certainly important to retain records for the purpose of ensuring that there is an archive of what happened, and the records, just to be clear, Congressman, if I forwarded something from my Department of Energy computer, it is on the Department of Energy computer database.

Mr. GOWDY. Is your response on it?

Mr. SILVER. It depends who it goes to. In many cases it is.

Mr. GOWDY. Well, if your response was from your personal email account to someone who doesn't work for government, then how are we ever going to get that, unless you give it to us?

Mr. SILVER. Which is exactly what we—

Mr. GOWDY. That is wonderful, Mr. Silver. We are so grateful that you evidenced that civic duty of turning it over. What do we do with people who don't evidence that? That is the reason we have a federal set of rules and regulations, agreed?

Mr. SILVER. I am sure that is correct.

Mr. GOWDY. Well, of course it is. I mean, it is for people who might have more nefarious motives than yours, because it strikes me that just like convenience may be an explanation for why people answer things on their personal account instead of their work account, would you also agree with me that concealment might also be a motive for folks who want to use their personal account and not their official account?

Mr. SILVER. Well, it certainly was not my motive, sir.

Mr. GOWDY. I wasn't asking about you, Mr. Silver. I am asking in general. If everyone adopted this somewhat different process that you adopted, it would thwart both the letter and the spirit of the Federal Records Act, agreed?

Mr. SILVER. I am not qualified to comment on that, Congressman.

Mr. GOWDY. What qualification do you need to answer that question? If everyone used their personal email account, we wouldn't be able to do our jobs in Congress because we wouldn't know what documents we didn't have. Agreed?

Mr. SILVER. I would think it would make sense to keep as many documents as possible, yes, I agree.

Mr. GOWDY. All of them.

Mr. SILVER. All of them.

Mr. GOWDY. I yield back to the Chairman.

Mr. JORDAN. I thank the gentleman.

We now recognize the gentleman from Pennsylvania.

Mr. KELLY. I thank the Chairman.

If we could, I would like to put up the slide that Ms. Buerkle had talked about. Mr. Silver and Mr. Frantz, you, of course, will recognize this. And, again, it is the President. And while we say we are

trying to make this political, this is what the President is using in his re-election campaign, and I think we would look at that and would agree there is a lot of jobs being created. Look all over the map, look at all those dots. Now, a lot of them are Prologis and I know that some of that is happening and some of it is not happening.

I want to show you another slide, that maybe you are not familiar with, that also shows you where jobs are being created. Now, this is actually China. So we went from shovel-ready to Shanghai. I think it is kind of neat that we show one map that shows how good this policy is working, but we do leave out a very important part of job creation. I think it is just kind of fascinating to see that, so we will leave that up for a little bit.

Mr. Frantz, Mr. Silver, the Department of Energy gave Sempra, which has a BB+, which is a high-risk rating, a \$337 million loan guarantee for its Mesquite Solar Project, which is also a high-risk project, to build a solar plant in the Arizona desert. The plant uses solar panels manufactured by Suntech, a Chinese solar panel company. How many jobs do you think this loan guarantee created in China? Any idea? I mean, I know we say we created 60,000 in the States. How many do you think we created in China using taxpayer money?

Mr. FRANTZ. Congressman, I don't have information relative to the chain and supply chains.

Mr. KELLY. Okay. Well, how about Suntech? How about Suntech? We are using their panels, right? That is whose panels we are using for this project?

Mr. FRANTZ. I would have to take the question for the record, and I will certainly respond in the details of the supply chain to the specific project. I don't have that right at the moment.

Mr. KELLY. Well, because we have been talking about creating American jobs, we have been talking about made in America, and we have been talking about everything that we are going to invest money in should be invested here, so all those dollars that, by the way, came from taxpayers or are backed by taxpayers should be used the right way, and I think we would all agree with that.

Mr. SILVER. Congressman, the only thing I would add to your earlier slide is that the initial map of the United States probably does not show other cites that it might show, for example, the supply chains that provided materials, for example, to Abound and others.

Mr. KELLY. And I understand that.

Mr. SILVER. And it also does not—

Mr. KELLY. Okay, reclaiming my time. Reclaiming my time. The Arizona facility that we are talking about, they don't manufacture those panels here, do they, their assembly? Because what they are doing is they get stuff shipped in from China and they assemble them in the United States, so we kind of do an end run and we say, wait a minute, no, no, this is working in Arizona.

So I just think we need to be completely honest with what is going on here, because the theme of this hearing today is about where are we investing taxpayer dollars for a great ROI. And I understand that private investors would have looked at this and said, you know what, that is a risk I will take, especially if it is backed

by DOE loans. I don't know the timing of when they invested, but I would say that probably had something to do with it also.

Let's talk about Shepherds Flat, a \$1.3 billion investment. American? It is a wind farm. Are you familiar with it?

Mr. SILVER. Yes.

Mr. KELLY. Either of you, Mr. Frantz or Mr. Silver.

Mr. SILVER. It is the largest, it was at the time and it may still be the world's largest wind farm. It is in Oregon.

Mr. KELLY. And it is an American project.

Mr. SILVER. Well, it has American investors, American components, American labor, American—

Mr. KELLY. The towers that the wind mills are put on? They come from China. They come from China. So we are talking about investing billions and billions of dollars, and yet we find out that the money we are investing isn't really creating American jobs, it is creating jobs in China.

We have them shipped here and we manufacturing them here and we say—and I understand renewables, I really do. I get that.

Let's just put up one last slide, if we could, on Project AMP, if we have it available, the list of the suppliers that are approved. Do we have that? The list of suppliers, the approved suppliers for Prologis.

Okay, all right. Well, I think you will find out that quite a few of the suppliers are Chinese.

Mr. SILVER. Again, Congressman, please, with your permission, I am no longer close enough to the details, but I can say this, and perhaps Mr. Frantz can respond for the record at a later date, there are undoubtedly Chinese suppliers on there, because most suppliers are Chinese. However, if you actually go into the terms of that particular transaction, you will find that we required them to preference American panel manufacturers deliberately as part of the negotiation.

Mr. KELLY. And I understand that. I understand that. But I think it is a little bit disingenuous to say that the whole process, because this initiative was about creating American jobs, looking at green energy and being able to go to renewables, and then we make it impossible for the fossils to stay in business; we regulate them out of business and we say, well, by mandate, the electric has to be supplied from renewables. So I understand all that.

The Department of Commerce right now is imposing tariffs, are they not, on the Chinese?

Mr. SILVER. Yes, sir.

Mr. KELLY. Okay. Don't you think it is a little bit disingenuous for the Department of Commerce to go ahead now and impose tariffs on the same people that the Department of Energy is subsidizing to make these, and then turn around and say, well, this is the way we are going to handle it? It makes no sense to me. I am so tired of hearing about these pesky Chinese that buy a lot of our debt, that also profit from taxpayer dollars, U.S. taxpayer dollars, and then turning around, trying to make it something else than what it is.

It really comes down to when we spend American dollars, these are hard-earned American taxpayer dollars, and we find out that a lot of these things are going overseas—listen, I would like to have

seen this money, instead of going to Shanghai, go to the Shenango Valley, when Tubiz, a company that is in the district that I represent. They are doing an awful lot. They have a lot of people working. And I am talking about red, white, and blue jobs right now in western Pennsylvania that are being held up and not being looked at the same way as some of these other projects.

So I thank you all for appearing here today. I know sometimes it gets a little laborious for you, but at the end of the day, at the end of the day we have to make sure that every single taxpayer dollar that we spend is going for the right reasons and we are getting a good ROI on it.

Mr. Chairman, I thank you. I yield back.

Mr. JORDAN. I thank the gentleman.

Before we get to Mr. DesJarlais, the Ranking Member is recognized.

Mr. KUCINICH. I want to thank the gentleman for his indulgence.

At what point do we get to the deliverables and a big scandal here? I mean, I don't see it yet. I respect members on the other side; many of them are good friends of mine, but when we get to the point of where we are talking about a big scandal and we are down to talking about whether somebody used Gmail or a government account, come on. I mean, really. And bottom line, Mr. Silver turned over his Gmail accounts to the Committee, so we have that. So there is no concealment here.

Now, again, we have identified about 500 letters from both Democrat and Republican members that are seeking funds for clean energy projects in their districts, which is what we should be doing. That is what we are supposed to do. But when we want to say, well, the Department of Energy's entire loans program is a broad scandal, political favoritism, pay-to-play. We have our friends in the Majority party, many of them supported these projects before they opposed them, so what changed?

The evidence hasn't changed. I haven't seen substantiation in evidence of the accusations that have been made. And I really think that this Committee, which is so important to the people of the United States, always functions best when we gather the information first, and then make the assessment, instead of making the assessment before we gather the information.

So what has changed? Well, we are in an election year. And I understand that. Because at the beginning of this Administration, when the election was three years and more away, we had my friends in the Majority, many were supporting the solar industry. Election gets closer, we have something else happening.

So stop the presses again; we have politics that are entering into this. That isn't meant to demean the Committee's responsibility to ask questions, because every one of these witnesses, and I also want to say including the Secretary—we have a right to ask questions. But we should have to know what we—the idea is that before you ask the question, when you are sitting on this side of the table, you already are supposed to know the answer. We are not operating in that way in this case.

So I am not sure what this so-called investigation amounts to, and it is true, it is true that China is using illegal trade practices to cripple American businesses. Instead of investigating potential

solutions to the problems, we are attacking the companies that have been undermined by this. Doesn't make any sense. If I know anything about the Republicans, Republicans are pro-business.

How did you end up being switched here, where I am the one arguing in favor of a major industry and my friends on the other side of the aisle have basically taken the position that has been imputed to me in the past; how did this happen?

So I thought I would clarify that, Mr. Chairman. Unfortunately, I have a meeting over at the Republican Club right now.

Mr. JORDAN. Well, I thank the gentleman. I would just point out this before yielding to the gentleman from Tennessee. We have established today that Mr. Silver, when he first got the job, in the process of interviewing for the job, in that same time frame, has a party at his house where he invites the very people who are going to decide whether he gets the job to come to the party. He says in his email I expect there will be about 40 people, folks we know are interested in this issue and the capacity to write significant checks.

We have a \$16 billion program; 26 companies got tax dollars, 22 of those companies had a credit rating from Fitch of BB-, junk status, three of them went bankrupt: Solyndra, Beacon Power, Abound Solar. Abound Solar, the one we are focused on today, had a B rating, even worse. We have two reports from Fitch which say this is a bad bet; second report went from a bad bet to even a worse bet. The quality went down, the cost went up. We have the guy who has run the program who consistently moves communication from his government account to his personal account, doesn't turn over the emails until we respectfully ask for them.

So I think it is entirely appropriate, as the gentleman said, that we ask questions about this, and, frankly, it is important that we get the Secretary back in front of this Committee, because there are certainly things that he said in March that we want to ask him about now that we have had several hearings on that I think are real important. So that is why we are doing this. And we are certainly all pro-business; we are just pro-business in the traditional sense of the word, not taking taxpayer money and giving it to people who have close connections with the White House.

Mr. KUCINICH. If I may, Mr. Chairman, and I beg the indulgence of the Chair. I do have to leave, but I just want to comment. We absolutely have a right to ask questions, including of the Secretary. I support this Committee's right to ask him questions and to get the answers. I just don't see the scandal yet. And if I did, look, whether it is a Democrat or a Republican administration makes no difference to me. If there is something there, I am ready to go after it. I don't see it yet.

Thanks, Mr. Chairman.

Mr. JORDAN. I thank the gentleman.

Recognize the gentleman from Tennessee and appreciate the gentleman's patience.

Mr. DESJARLAIS. Yes, sir, Mr. Chairman. Thank you.

And thank you all for attending today.

We have, unfortunately, lost the confidence of the American people as a Congress. It doesn't matter whether they are Republicans or they are Democrats. Only 7 percent approve of the job we are

doing. So we have an Oversight Committee to look at where we have succeeded and where we have failed, and I think that is why we are here today, is to reflect back on maybe what we could do better and what we can do better moving forward.

Right now we are debating whether or not to raise taxes on all Americans, and if you are the taxpayer sitting out there, which we all are, you want to know whether or not we are making wise investments. So rather than blame people, let's learn from our mistakes. And I think clearly there were some mistakes made on this program.

So, Mr. Frantz, could you talk a little bit about the purpose and nature of the Portfolio Management Division's watch list?

Mr. FRANTZ. I would be happy to comment, Congressman. We were blessed, when we stood up this program, to obtain the director for the Portfolio Management Division from many years of experience with the EXIM Bank. She brought with her a wealth of experience and knowledge. The Division now is wholly stood up. She imported with her an electronic management system called Quick Silver, which is assisting what we call constant monitoring, very proactive monitoring.

The monitoring on all these projects is done on an hourly, daily, weekly, monthly basis with full reporting and accountability and transparency. It involves our legal division, our technical or engineering division in constant consultation with her very senior investment officers who are staffing that Division.

And I think I would commend to you, and I presume you have seen or are aware of the Allison report. Mr. Allison went to great lengths. In fact, the focus of that independent investigation was largely focused on our portfolio management division, and he gave many specifics as an independent assessment of how we stood that program up and how it is performing.

Mr. DESJARLAIS. Okay, being as we are talking about Abound Solar, was it put on the Portfolio Management's watch list? And if so, when?

Mr. FRANTZ. I think I would prefer to call it an early warning system. We don't really refer to a list, a specific list as a watch list, it is a document, it is a working document, but it is part of the early warning system.

Mr. DESJARLAIS. When did you realize—

Mr. FRANTZ. Yes, Abound was, of course, brought to the attention—

Mr. DESJARLAIS. When did you realize that it was in trouble?

Mr. FRANTZ. My recollection would be that it was in the, I guess, summer of last year when we—we had had discussions with them about the current marketing situation and we were in constant conversations with them on a weekly, daily basis, so I don't have a precise date right at my fingertips.

Mr. DESJARLAIS. Okay. Could you pledge to share with the Committee the list of companies that are on the DOE's watch list?

Mr. FRANTZ. I will take that for the record and will respond to you, sir.

Mr. DESJARLAIS. All right.

Mr. Silver, you seem to think that Solar is a good investment.

Mr. SILVER. Well, not per se. Individual transactions maybe.

Mr. DESJARLAIS. Okay. If you were investing, would you invest in some of what you are selling here today?

Mr. SILVER. I am not selling anything today, Congressman.

Mr. DESJARLAIS. Well, I mean, you are selling a concept.

Mr. SILVER. I do believe that the solar industry will be an important economic engine for future growth, yes.

Mr. DESJARLAIS. Do you think it is worth gambling taxpayer money on?

Mr. SILVER. I don't think it is worth gambling on anything; I am not a gambler.

Mr. DESJARLAIS. We gave money to a company that, as the Chairman noted, had a Fitch rating of abysmal, so to me that would be somewhat of a gamble. If it was my money, I would probably be very leery, but you did not seem to be reserved about spending all these folks' money.

Mr. SILVER. Well, sir, let me answer two ways. First of all, the Fitch rating is actually physically incorporated into the credit analysis that the loan program undertakes, so it is baked into the results.

Mr. DESJARLAIS. Weren't 22 of the 26 companies that were loaned money for solar rated as junk?

Mr. SILVER. I don't know the answer, but I will answer directly what I think you are asking, which is these are innovative companies by definition. In fact, the mandate is to ensure that companies with important potentially transformative technologies that cannot easily find financing in the private sector can be facilitated in doing that.

And I would just leave you with one thought, which is that these are not grants, sir; these are loans. They are intended to be repaid. Unfortunately, and no one regrets it more than me, they cannot always happen. But they are structured as underwritings; they are loans intended to be repaid, by the way, with interest.

Mr. DESJARLAIS. Okay, so you would agree, then, that this maybe is what the President was talking about this Saturday when he was saying companies and businesses don't get there on their own; they need government to help them. Would this be a good example of government's help?

Mr. SILVER. I didn't see the President's comment, sir, I don't know.

Mr. DESJARLAIS. Okay. I am out of time.

Thank you.

Mr. JORDAN. I thank the gentleman.

Mr. Frantz, when did you learn that Abound Solar was totally done, they were going to go bankrupt?

Mr. FRANTZ. I can't give you, Mr. Chairman, the precise date, but, as I mentioned, we had been in conversations, close conversations and discussions with them.

Mr. JORDAN. When did you know it was over, they were going to close up the doors, they were going to lay off the people?

Mr. FRANTZ. We had established, in fact, written a forbearance agreement that was crystallized, keeping us posted on precise developments, which included—

Mr. JORDAN. What date was that?

Mr. FRANTZ. I can't give you a precise date, but we know that the determination was made just before their public announcement. So that was a decision that was taken with——

Mr. JORDAN. They announced on the 28th. How much lead time did you have before the 28th?

Mr. FRANTZ. A matter of days, because we were aware that they were in discussions with a prospective investor for the transaction, so I can't give you a precise date, but I was not involved in those discussions, so I can't give you the precise date when it broke off and——

Mr. JORDAN. Who was involved?

Mr. FRANTZ. Members of the staff, my staff.

Mr. JORDAN. Okay. But you definitely knew before the 28th.

Mr. FRANTZ. I think——

Mr. JORDAN. And how long did you know this company was in serious trouble?

Mr. FRANTZ. We had been——

Mr. JORDAN. Here is the point. Mr. Witsoe was in front of this Committee just two months ago, and he didn't tell us things were going south in a big way then, but did you know two months ago that things were in big trouble?

Mr. FRANTZ. I didn't personally——

Mr. JORDAN. No, no, no, did the Department of Energy?

Mr. FRANTZ. We were monitoring it, as I say, Mr. Chairman, very, very closely on practically a daily to weekly basis, so I couldn't——

Mr. JORDAN. Did you guys——

Well, Mr. Witsoe, why did you pick June 28th to announce that you guys were done?

Mr. WITSOE. Because the day prior to that, the 27th, is when we got notice from that final prospective investor that they would not——

Mr. JORDAN. Was there any coordination with you and the Department of Energy when and how this announcement would be made?

Mr. WITSOE. No. No. We showed them the press release just before it went out.

Mr. JORDAN. So it is completely coincidental that this just happened to be the day of maybe the biggest news on Capitol Hill in the last year, when the Supreme Court announced its ObamaCare or the Affordable Care Act decision, when the House of Representatives was voting on a contempt resolution of the attorney general? No coincidence, it just happened that day?

Mr. WITSOE. It is completely coincidental.

Mr. JORDAN. Wow. Wow. This is amazing. Just amazing.

Mr. WITSOE. As I said, we learned from the investor the prior day.

Mr. JORDAN. Well, why didn't you tell us anything about this two months ago when you were in front of us?

Mr. WITSOE. Well, two months ago we discussed that the company, even with better technology, had severe risk in the market, and we had just, unfortunately, had to have a number of layoffs a couple months prior. So I think that we did inform that. We

thought at the time we certainly hoped that these financing efforts would be successful.

Mr. JORDAN. Okay. All right. Appreciate it. Let's put up this one email.

[Slide.]

Mr. JORDAN. We have had a lot of discussion about this email between you and Mr. Woolard. This deals with the BrightSource issue, which I just found this email to be unbelievable.

Actually, I think we want the other one, guys, the one where you are asked to edit a letter that is going to be sent from the then chairman of the board of BrightSource, Mr. Bryson.

[Slide.]

Mr. JORDAN. So this is the March 7th, 2011, email from John Woolard to Jonathan Silver. So you were asked to edit a letter that Mr. Bryson, who was chairman of the board of BrightSource, was going to send to then White House Chief of Staff Bill Daley. Whatever happened to that, did you do the edits?

Mr. SILVER. What happened to it, Congressman, is that that letter was never sent, is my understanding.

Mr. JORDAN. But that was not my question. Did you edit, did you make additions, corrections, say it this way, don't do that?

Mr. SILVER. I did respond, in fact. If I may, with your permission, here are my first sentences. It says, Jon, as drafted, I must be honest and say I think it is off target. The ongoing work does not speak to a lack of urgency; it speaks to a need to ensure that there is limited risk to taxpayer exposure. Those are the very first sentences in that memo, sir.

Mr. JORDAN. But my question was did you edit it and make corrections and suggestions, and did you send that back to him?

Mr. SILVER. I did make some minor things. He had misspelled White House, as an example. I don't remember, a couple of other things.

Mr. JORDAN. Okay.

Mr. SILVER. But they were actually relatively modest—

Mr. JORDAN. Did you send that to him from your government account or from your private account?

Mr. SILVER. No, I am told now that it came from my private account, and that is why the question I can't answer as to where I was, because I don't know the details.

Mr. JORDAN. Okay. But it turned out—who made the decision that—so you counseled them not to send the letter?

Mr. SILVER. Well, I didn't counsel to send or not to send; what I said was I think it—as I said, as drafted, I must be honest and say I think it is off target. I even went on to say, sir, that that said, there are two lawsuits, and while one does seem to be a nuisance suit, the other may or may not be. The project is tight enough that if a stay was issues, there could be issues around the covenants. The General Counsel's Office in DOE is drafting a memo on this issue and OMB needs this input before determining an appropriate final credit subsidy score.

Mr. JORDAN. Do you think it—is it unusual that—I guess I shouldn't be surprised, knowing that you were inviting folks to a party who were going to decide whether you get the job prior to—let me just ask this. Do you think it is appropriate for this kind

of relationship to exist? Now it is the other way; you are the one in government, someone is trying to get approval of—\$400 million tax and this BrightSource I think was over \$1 billion—several million dollars of taxpayer money, and they are suggesting to you, hey, edit this letter that our chairman of the board, soon to be Commerce secretary, is going to send to the White House chief of staff? Do you think that is unusual?

I have not been in the Federal Government that long, in my third term, but I have not seen this before.

Mr. SILVER. Two quick things. First, I do want to respond to your question about the invitation to our home by pointing out that Steve Isakowitz, who I acknowledge I did not know before, was actually a Bush Administration appointee.

Mr. JORDAN. That is not the point. The point was he was going to decide whether you got the job or not and you were inviting him to your house.

Mr. SILVER. No, he was not the decision-maker, sir. But, in any event—

Mr. JORDAN. Well, why was he interviewing you, then?

Mr. SILVER. I was interviewed by a dozen or so individuals at the Department of Energy.

Mr. JORDAN. So you went to an interview with a guy who had no bearing on whether you get the job or not? That doesn't make any sense.

Mr. SILVER. The decision-maker, I assume, sir, although I don't know definitively, would have been the Secretary of Energy, and he was not invited.

Mr. JORDAN. But that is the point. Four people were interviewing you and they were going to talk to the secretary, and what they say is going to determine whether you were going to get the job or not, and you think it is appropriate, in the course of that process, to invite them to your home to hang out with Al Gore and other celebrities in this industry.

Mr. SILVER. Let me respond, Congressman, if I may, to your question about—

Mr. JORDAN. No, no, no. That is what took place. You are the one who brought this up. You said you wanted to clarify what took place there.

Mr. SILVER. Well, actually, because they appropriately went to clear it with general counsel, who said that was not something they could do, they didn't come.

Mr. JORDAN. Okay, back to the BrightSource.

Mr. SILVER. I believe, Congressman, that the BrightSource story on this has been completely misunderstood. It is very important to understand that there is a two-part process in the loan guarantee program. The first is the issuance of what is called, I don't mean to be technical, but a conditional commitment. That is an intent to give the loan, to close the loan, subject to whatever conditions may emerge. The final is the closing of the loan.

When Mr. Woolard sent me this email, he already had a conditional commitment, which means that the terms had already been set and had been reviewed—

Mr. JORDAN. I understand.

Mr. SILVER.—and approved by multiple different agencies and the career professionals.

Mr. JORDAN. Yes, it is just not moving as fast as they want and they want you to speed it up. That is why they are asking will the White House quarterback this, will the White House do this, can you edit the letter; we want to do this. John Bryson, who is going to be Commerce secretary in just a few short time, we have the White House log, is at the White House the very next day.

Mr. SILVER. I will say that I do think it is in the purview of the Loan Programs Office, once a loan has been conditionally committed and reviewed objectively, to assist the applicant to move it expeditiously as possible. What was remaining was the final credit subsidy score. And the reason this mattered to me—

Mr. JORDAN. Wait, wait, wait a minute. So what you are saying is that it was a formality at that point?

Mr. SILVER. It is not a formality, but as long as the—

Mr. JORDAN. So there was still a chance you could say no.

Mr. SILVER. Of course. You don't say yes until the close. But one of the things that BrightSource needed to do, and I know this sounds potentially amusing, is they actually had to move some tortoises on this particular site, and there is—I am no expert on this—there is a window in which you can move tortoises during the hatching season, and if you miss that window and it pushes it out six months, the project is at risk.

Mr. JORDAN. Let me ask you this. So the letter wasn't sent. Did you call the White House and talk to anyone in the White House about the BrightSource, the final loan guarantee?

Mr. SILVER. I have no recollection whether I did or not, but—

Mr. JORDAN. I think I asked you this. How many times did you visit the White House?

Mr. SILVER. Numerous times.

Mr. JORDAN. What we have is, I think the White House log, we have around 70 times you visited the White House. At any of those meetings did you talk to Bill Daley, chief of staff, about the BrightSource project?

Mr. SILVER. To the best of my knowledge, I did not, and I certainly—

Mr. JORDAN. Well, let me ask you this. Was Bill Daley in any of those meetings you had at the White House?

Mr. SILVER. I don't recall, but certainly—

Mr. JORDAN. Who did you meet with in the 70 times you went there?

Mr. SILVER. The vast majority of those meetings, and they were regular and frequent, almost weekly meetings, were with the career staff at OMB, NEC, and Treasury; and they were to update those individuals and those agencies on where we were with these projects because there was an independent review process that they went through.

Mr. JORDAN. So in those updating and review processes that you were doing at the White House 70 different times, did you say, you know what, we have already given the conditional loan approval to BrightSource. In the back of your mind you are thinking they decided not to send this letter that I edited for them. Did you bring

up BrightSource and say, you know what, we need to push this through and get this done?

Mr. SILVER. Again, Congressman, I don't recall, but if all the conditions of the—

Mr. JORDAN. You don't recall whether you ever talked about BrightSource—

Mr. SILVER. I am not sure.

Mr. JORDAN.—with the future Commerce secretary as the chairman of the board? You don't recall if you ever talked about BrightSource at the White House?

Mr. SILVER. Well, I know I didn't talk about BrightSource with the future Commerce secretary.

Mr. JORDAN. I am not saying that. I am putting it in context. Here is the guy who was—you just edited a letter that he was going to send to the White House chief of staff. It is common knowledge a month later he becomes Commerce secretary, and you did not ever bring up BrightSource in these 70 different meetings you had at the White House?

Mr. SILVER. Again, I don't know. Undoubtedly, BrightSource was brought up at meetings by staff. My 70 meetings were supplemented by hundreds and hundreds and hundreds of meetings by staff, all of whom were updating individuals at the Office of Management and Budget.

Mr. JORDAN. At any of these meetings you were at the White House, was the secretary there with you, Secretary Chu?

Mr. SILVER. From time to time, yes.

Mr. JORDAN. And was he in any meetings with you and the White House Chief of Staff, Bill Daley?

Mr. SILVER. There may have been a meeting in which we discussed some logistics. We were trying—this was a program that we were standing up from a standing start—

Mr. JORDAN. So there were meetings where you and Secretary Chu were talking with the White House chief of staff about the 1705 Loan Guarantee Program?

Mr. SILVER. There were meetings where we were trying to ensure—there were a couple where we were trying to ensure that the logistics of managing the review process was as streamlined as possible, but there were not meetings where we were talking about BrightSource, the deal; BrightSource, the terms of the deal; BrightSource—any other configuration than that.

Mr. JORDAN. But certainly meetings where you discussed with the White House chief of staff the 1705 Loan Guarantee Program.

Mr. SILVER. I have updated senior people in the Administration on the 1705 Program occasionally

Mr. JORDAN. No, I want to be specific.

Mr. SILVER. Congressman, I just don't have my—I don't know who was in these meetings or not. I don't remember.

Mr. JORDAN. I am asking you this question: Were there meetings at the White House where you and Secretary Chu talked to the White House Chief of Staff, Bill Daley, about the 1705 Program?

Mr. SILVER. There were meetings at the White House where we tried to ensure, to make sure, to figure out the mechanisms by which the interagency process—

Mr. JORDAN. Okay, let me ask this. Were there meetings, whatever you—

Mr. SILVER. I just don't remember who were in the meetings, sir. I just don't.

Mr. JORDAN. You don't remember if the White House chief of staff and the Secretary of the Department of Energy, who was your boss, you don't remember if there were meetings where the three of you were in the same meeting?

Mr. SILVER. I honestly don't remember who was—

Mr. JORDAN. Really?

Mr. SILVER. I really don't. I cannot recall. Most of these meetings took place with, as I say again, and I don't mean to be redundant, staff from the National Economic Council, the Office of Management and Budget, and the Treasury Department about these transactions, about the economics and the terms of the transactions, about the analysis of the transactions, and significantly about the logistics for managing those analyses.

Mr. JORDAN. I want to get one thing. I just want to make sure. Earlier you said there were meetings at the White House, you went 70 different times, there were meetings at the White House where you and the secretary were at those meetings. Then you seemed to indicate there were meetings where the White House chief of staff was also present.

Were there any meetings where you, Secretary Chu, and Bill Daley, White House Chief of Staff, that took place at the White House, took place anywhere, were there any meetings where the three of you were in the same meeting?

Mr. SILVER. I am sure there was a meeting where the three of us were in the same room.

Mr. JORDAN. And in your role, obviously, is the 1705 Program, so if the three of you were in a meeting, obviously you were going to be talking about the 1705 Program.

Mr. SILVER. I am saying to you that we were talking about the logistics and processes by which we would get these transactions accomplished. There were an enormous number of moving parts to get—

Mr. JORDAN. Well, here is why it is important, because when I questioned the secretary a couple months back, he said—let me just read this. I think this is important for Mr. Cummings and the Committee to know. Did the White House ever call you, every talk to you about any of these? Did you get someone from the White House Chief of Staff, someone from the White House to talk to you about their respective companies involving these individuals, involving the 17—and context earlier was involving the 1705 Program, and Mr. Chu said, no, we didn't.

Mr. SILVER. That—

Mr. JORDAN. Now you are telling me—

Mr. SILVER. No, Congressman, I am telling you exactly the same thing. We did not have these conversations about deals or deal terms; we had these conversations about logistics because it was so difficult to get these projects moved.

Mr. JORDAN. So, again, so your testimony is you edited a letter that the chairman of the board from BrightSource was going to send to the White House chief of staff, but in subsequent visits to

the White House you don't even bring that up. It was important enough for you to edit; they had already gotten the conditional loan guarantee; they are in the process of getting the final approval; and you don't bring that up when you are in a letter, even though you edited a letter that was going to be sent from the chairman of the board to the very individual you were talking to?

Mr. SILVER. I am not saying, to the best of my recollection, there were no meetings at all that I participated in around BrightSource inside the White House except at the staff level to talk about the transactions.

Mr. JORDAN. You were at—

Mr. SILVER. I don't—

Mr. JORDAN. No, no. You were at the White House 70 times.

Mr. SILVER. Right.

Mr. JORDAN. You have told me you were in meetings where the secretary, you, and the chief of staff were there. You edited an email, and yet you don't even bring—maybe you were there to talk about the general context of this program, I get that, but you don't bring it up?

Mr. SILVER. Correct.

Mr. JORDAN. Okay. I just wanted to be clear.

I would be happy to—I guess is just down to the two of us. If the gentleman has a further round, he is welcome to take as much time as he would like.

Mr. CUMMINGS. Thank you very much.

I have sat here. I had not intended to attend this hearing; I was going to attend another hearing, but I am glad I did. This seems to be an alleged conspiracy in search of the facts, and I say that with great sadness. We have China dumping panels illegally, illegally in our market and basically destroying a company, one of the job creators that we always hear about, and here we are today not dealing with China and what they are doing to destroy our job creators, everybody wants jobs, but we are here talking about emails and who used the BlackBerry. It is interesting. People in my district, they want us to create jobs.

And then we seem to be trying to say that this is some political, some favoritism has been going on here, and I just don't believe it.

Mr. Witsoe, the Republicans have mentioned several of Abound's investors, and they are clearly trying to paint this project as politically motivated, so I would like to ask you about Abound's biggest investor. The project's single largest outside investor was an entity called Invus Group, is that right?

Mr. WITSOE. That is correct.

Mr. CUMMINGS. In fact, the Invus Group put in more than \$100 million in financing, is that right?

Mr. WITSOE. That is correct.

Mr. CUMMINGS. The CEO of Invus Group is Raymond Debbane, is that—

Mr. WITSOE. I didn't—I never met him.

Mr. CUMMINGS. Okay, you don't know him?

Mr. WITSOE. No.

Mr. CUMMINGS. Boy, he put a lot of money in your company for you not to know who he is. According to documents from, well, I am telling you he is the CEO

Mr. WITSOE. I know him; I haven't met him.

Mr. CUMMINGS. Oh, I see. According to documents from the Federal Election Commission, Mr. Debbane has contributed tens of thousands of dollars to Republican candidates and pacts over the past two years. There is nothing wrong with that.

Were you aware of that, Mr. Witsoe?

Mr. WITSOE. No, I was not.

Mr. CUMMINGS. Were you aware that he made donations to presidential candidate Mitt Romney? Were you aware of that?

Mr. WITSOE. No.

Mr. CUMMINGS. Were you aware that he made campaign donations to our own Chairman Issa? Were you aware of that?

Mr. WITSOE. No, I am not aware of anything from our investors.

Mr. CUMMINGS. All right.

Now, Mr. Frantz, I understand that the entire Indiana congressional delegation, including Democrats and Republicans alike, supported the Abound project, is that right?

Mr. FRANTZ. That is my understanding.

Mr. CUMMINGS. Yet, today my colleagues in the Majority seem to be saying that all of those Indiana Republicans were wrong; that the Department should have rejected the Abound project.

Mr. FRANTZ, I want to ask you this question because I have sat on this Committee for 16 years and I have seen people come before the Committee and so often they leave with their reputations not intact. It pains me because we only have one life to live. This is no dress rehearsal; this is the life. And our reputations are so very, very important.

And I know that you know that you are under oath, but, Mr. Frantz, let me ask you this question. To your knowledge, did any political considerations on either side, on either side, Democrat or Republican, govern the Department's decision to approve a loan guarantee to Abound?

Mr. FRANTZ. Congressman, I can assert to the very best of my knowledge, and as I indicated in my prepared remarks, I have been with the program from its inception to today, that not a single project has been brought forward, gone through the due diligence process, closed, and been awarded a loan guarantee with other than the pure merits of the project itself. There has been no, to the best of my knowledge, political coercion on any one of the single projects.

Mr. CUMMINGS. Mr. Silver, we on the Hill, we may not be subject to the same rules about BlackBerries and official records and all that, but we have a little problem here. We can only use a certain BlackBerry for campaign stuff and a certain BlackBerry for congressional stuff. A lot of us carry around two BlackBerries.

So when you were being asked all these questions about your personal account, your BlackBerry, whether you were traveling and all this kind of stuff, the bottom line is were you in any way, and I remind you that you are under oath. The media is gathered here today, they are ready for the headline. Usually the headline, by the way, comes out before the hearing. It is a little different today; I don't know what happened.

But were you in any way trying to hide information or trying to hold back information by using one instrument as opposed to an-

other, or one account as opposed to the other? Because I think, I think this is what this was supposed to be getting to. I notice the New York Times over there and all those other papers. I guess that is what they are trying to write about. So I am curious myself. Were you trying to do any of that kind of stuff?

Mr. SILVER. No, unequivocally not, Congressman, and it is the reason I was able to and in a position to turn over several thousand pages of documents in one day, as we did yesterday. I had just come back in the Country from a business trip and we pulled this together as quickly as we absolutely could. So, no. I would even go further and say, in an effort to ensure that there were no issues to this regard, after I left the Loan Programs Office, I gave my computer to my attorney and have not had access to it since.

Mr. CUMMINGS. Now, you know, Mr. Witsoe, Chairman Issa said something that I just found so interesting, when he was talking about, he still said that we should have anticipated, that we should know that China was going to do these kinds of things, and I am just wondering if you had known that China was going to illegally, and I emphasize that, illegally violate U.S. trade law by putting these panels on the market below what it cost them to produce, do you feel bad that you didn't anticipate this like Chairman Issa is implying that you should have anticipated it?

Mr. WITSOE. No. I have been part of many very competitive industries that have competed with China and I have never seen anything like this before.

Mr. CUMMINGS. You just said something that I just want to get into a little bit. You said you have never seen anything like this before?

Mr. WITSOE. I have never seen price competition happen this fast and this deep, even in very competitive industries that I have been part, electronics and others.

Mr. CUMMINGS. So when you went into this, first of all, you have been in business for a while, is that right?

Mr. WITSOE. No, eight months.

Mr. CUMMINGS. You have only been in business eight months?

Mr. WITSOE. I have only been in the business for eight months.

Mr. CUMMINGS. Oh, okay. But I assume that when you go into a venture like this you don't go into it to lose money, do you?

Mr. WITSOE. No, certainly not.

Mr. CUMMINGS. And you make assertions to your potential investors that this is a good deal for them to invest in, or they would not have put in the kind of money that they did, is that correct?

Mr. WITSOE. That is correct. They put in \$300 million.

Mr. CUMMINGS. And someone on the Committee, I forget who said it, implied that all of this money, or a substantial amount of it, came after you got the DOE guarantee. I assume that some of it may have come before and some may have come after, is that a safe statement?

Mr. WITSOE. I don't have the exact numbers, but I believe about half of it came prior to.

Mr. CUMMINGS. So you would guesstimate that before you got the DOE guarantee, about half of the \$300 million they had invested, is that what you are saying?

Mr. WITSOE. Approximately.

Mr. CUMMINGS. But when you went into it, you anticipated some shenanigans by China, did you not?

Mr. WITSOE. No, we always would anticipate competition by China, but certainly not them selling below their own cost, in which they would be losing money.

Mr. CUMMINGS. So you expected them to, you must have had some kind of calculation. You must have said, well, we are going to sell, hypothetically, we are going to sell this panel for \$1,000. We know that China, it is costing them, say, whatever, \$800 to produce them, and we anticipate that they will sell them for a certain amount.

So can you help me with that? Because I don't want the public walking away from here thinking that some folks acted irresponsibly. I am talking about the job creators acted irresponsibly going into a deal like this. It makes no sense.

Mr. WITSOE. No. There was a lot of analysis done on what our costs would be, where the market costs would be, and that is why Abound was interesting, because we had a technology that we felt could get to the lowest possible cost.

Mr. CUMMINGS. So, Mr. Frantz, much has been made of the Fitch report. You were aware of that report, were you not?

Mr. FRANTZ. Yes, sir. The Fitch report and the other rating agencies are just one tool that we use, it is not the only component that we use in our evaluations. And, as a matter of fact, in the course of our identification of risks and risk mitigants that we employ, we even do a more extensive, it was alluded to earlier, even a more extensive ultimate evaluation than the individual rating agencies do.

We have the expertise of the entire Department of Energy at our disposal, and we use them. And in this particular instance, as a matter of fact, we had a number of different parties, both within our expertise in the Department of Energy, as well as outside independent consultants, who corroborated the fact that Abound was exhibiting a technology that could withstand enormous price compression in the marketplace and was clearly prospectively a technology that would be a lowest cost producer here in the United States, and that is precisely why we supported it.

Mr. CUMMINGS. Now, you heard my analogy about the cleaners in my district, did you not?

Mr. FRANTZ. Yes, sir.

Mr. CUMMINGS. How they charged \$1 per garment, get all the business, and then up the price, but then they got all the clients, the customers. You talked about price compression and everything that was calculated. I am trying to figure out is China just going off the cliff with this kind of deal? In other words, Mr. Witsoe made it sound as if they didn't anticipate it. You, being an expert in this area, apparently you had all of this data and the data didn't pan out.

Tell me, looking at it in retrospect, and I know it is easy for people to be the Monday morning quarterback to look at a deal like this, but the question becomes if we were to do this deal again, try to do a deal like this again, what lessons have we learned from this and what would we do differently than what we did? It sounds like you had all the resources for data.

I am sure you had the best minds, the best analysis and all that, but apparently China has done something that threw the whole damned thing, all the measurements for probability of success, by what they are doing, they have thrown all that out the window. Unless they are doing something that you all have not mentioned to us so far.

Mr. FRANTZ. No, Congressman, I can say this about that in terms of your assertions. As I mentioned in my prepared testimony, I have literally worked all over the world and, in fact, I have worked in China on projects, and I can tell you that from years of experience doing that, that there is no way you can ultimately predict the behavior of a specific government anyplace.

In this case, with respect to China, it is clear that China has made a decision and has enormously, very heavily subsidized this specific industry way below the cost of the manufacturing of their projects, and I mentioned that in my testimony as well. Also, as you indicate, hindsight is always worth much more than foresight. As hard as we work to try to predict the future, we are not perfectly clairvoyant at all, and this, as Mr. Witsoe just indicated, was a phenomena that none of us, nobody, including our internationally oriented consultants, predicted. It has been a precipitous price compression that the experts, not only here in the United States, but all over the world, could not have foreseen.

Mr. CUMMINGS. This is my last question. So do we then say that we are not going to get into this area? I mean, do we just say, all right, we invented it. Someone on the other side implied that, well, since China is doing what they are doing, let them have it. I take it that you don't agree with that.

Mr. FRANTZ. Well, I think, as all four of us have indicated to you this morning, and all four of us, in our own individual, respective ways, are deeply committed, profoundly committed professionally to see the success of this program, the program was, of course, a bipartisan way established here in the U.S. Congress to fulfill a need for support of our industries in a very high-risk segment. That is deployment of new and innovative and transformative technologies in which the private sector and private markets, by the way, even today will not readily support.

That is precisely why we are here and why, certainly, as the officers from Abound have attested, that they made a calculated investment, a calculated risk to bring a new and transformative technology to the marketplace, which I have just indicated would be, if not the only, one of the lowest cost producers in the world. That is precisely the value of this program, it is precisely the value of public support in this domain, and it is why we all are deeply and profoundly committed to assist the private markets, which are still, even to this day, not totally responsive to these types of investments.

Mr. CUMMINGS. Thank you, Mr. Chairman.

Mr. JORDAN. I told you guys we would get out of here by about 12:30, so I am going to be close to that.

One last thing. Mr. Silver, back to this email from Mr. Woolard to you regarding BrightSource and editing the letter, it was clear from emails and basically what you said earlier, that you both

wanted this to go through. You wanted BrightSource, that had already gotten the conditional guarantee, you wanted this to happen.

You switched to your personal account. You tell him, I will make the edits, but I advise you probably not to send this letter.

What took place between there, to your knowledge? Did anyone from the White House call you guys? Did anyone from the Department of Energy contact the White House? What took place in the time, because a this is a March 7th email exchange, 2011, and then on April 11th, so just a little more than a month later BrightSource got the thumbs up and got the final loan guarantee approval. So what took place in that month? Did anything happen?

Mr. SILVER. Well, a number of things probably happened. Again, I will have to go from recollection. But principally what happens in that last month is the legal documentation around the previously agreed upon terms for the loan, in addition to the Office of Management and Budget assigning a final credit subsidy score for the project. Those would be the two sort of major milestones or things that would have to happen.

Mr. JORDAN. In this month-long time, did you personally have any contact with Mr. Bryson?

Mr. SILVER. With Mr. Bryson? No.

Mr. JORDAN. April 11th is the day it was approved, the same day, obviously, Mr. Bryson was going to the White House some because he was looking to be Commerce secretary, I understand that, but the very day he visits the White House, April 11th, is the very day the loan gets approved. Do you think there is any connection to that?

Mr. SILVER. None. But I do want to say for the record that I have known John Bryson for many years; there is no secret about that.

Mr. JORDAN. Okay, so you have known him for a long time?

Mr. SILVER. I have.

Mr. JORDAN. And you had no communication with him in this one-month interval that was a critical time for the company that he was chairman of the board of?

Mr. SILVER. No.

Mr. JORDAN. No contact? No email, personal or government?

Mr. SILVER. Not to the best of my recollection.

Mr. JORDAN. No phone calls?

Mr. SILVER. Not to the best of my recollection, no.

Mr. JORDAN. When he was at the White House, you didn't visit with him?

Mr. SILVER. The only time I—

Mr. JORDAN. None of his visits corresponded with any of your 70 visits?

Mr. SILVER. I was at the White House for his swearing in.

Mr. JORDAN. Okay. Okay.

I want to thank you all for being here today. I know it was long.

Mr. Tiller, you got to really participate, didn't you?

[Laughter.]

Mr. JORDAN. We thank you for being here nonetheless. This first panel is dismissed. We will get ready for our second panel.

[Recess.]

Mr. JORDAN. The Committee will be back in order.

You know how we have to do it, we have to swear you in. Mr. Kats, we are getting your nameplate. So if you guys would please stand up, we will do that. Again, I apologize. I knew the first panel was going to take a while.

Do you solemnly swear to tell the truth, the whole truth, and nothing but the truth?

[Witnesses respond in the affirmative.]

Mr. JORDAN. Let the record show that both witnesses answered in the affirmative.

We still start with Doctor, it is good to have you with us again. You have been in front of this Committee and several committees. We appreciate your expertise.

And you as well, Mr. Kats.

So you are just stuck with me, I apologize. But, Doctor, you are recognized.

WITNESS STATEMENTS

STATEMENT OF VERONIQUE DE RUGY

Ms. DE RUGY. Chairman Jordan, it is an honor to appear before you today to talk about the Department of Energy Loan Guarantee. My name is Veronique de Rugy. I am a Senior Research Fellow at the Mercatus Center at George Mason University, where I study tax and budget issues.

Advocates for renewable energy are right to be outraged by subsidies going to fossil fuels. Yet, they are wrong to think that in order to address subsidies they don't like, they should demand large amount of subsidies for energy they like.

The Department of Energy's 1705 Loan Guarantee Program is a cornerstone of the U.S. renewable energy policy. The policy is often justified on two grounds: first, advocates argue that renewable energy companies do not have access to sufficient credit to support new projects. In addition, the DOE argues that encouraging investment in green energy would create up to 5 million jobs. So now let's look at how these claims stand up to scrutiny.

So looking at the flow of 1705 loans, we find that, first, some of the loans have gone to companies that would have not been able to get funded in the open market without the loan guarantees because they were deemed too risky. Not all of them were horrible bets, but many of them were. So far three companies have gone under, and at great cost to taxpayers. So let's take the Abound company that this hearing is about. In the end, after the company has sold its assets, the price tag for taxpayers will be roughly \$50 million to \$60 million, paid by the American people at a time when they are hurting a lot.

It is possible that many of these companies that went under may not necessarily be representative of the entire portfolio, and that is another problem. That is my second point. Nearly 90 percent of the 1705 loan went to subsidized projects backed by large companies that very likely would have had access to capital if their project was indeed viable.

Third, under the 1705 loan program, 16 million loans were guaranteed and, according to DOE, 2,388 permanent jobs were created, and that means that taxpayer exposure for each alleged permanent

job created is 6.7 million jobs. So it speaks very poorly to the quality of this loan program as a jobs program. But understand that this is actually not even really representative of what has happened because when the company goes under, you have that exposure and you are left with zero jobs.

So the data speaks for itself, but the real problem is actually way worse than this. In fact, failures like Solyndra, Abound, BeaconPower are only symptoms of problems much more fundamental with loan guarantee programs, and in particular this program, so they suffer from three particular failure problems. Every loan guarantee transfers risk from lender to taxpayer, which creates a moral hazard. Because the loan amount is guaranteed, banks don't really have an incentive to do proper scrutiny and proper diligence. What these loans do is they privatize gains and they socialize risk. In other words, the taxpayers bear the risk, but the profits, if there are profits, are borne by the product company and the banks that lent the money.

Second, every loan guarantee gives an incentive to lenders to shift to subsidized projects and away from non-subsidized ones independently of the merits of the project, and this has a cascading effect. For instance, when the government subsidizes a project, it is perceived as safe. That means that venture capitalists, who are actually in the business of providing money to high-risk customers, actually will leave that market.

But another thing happens which is much more counterintuitive: other private investors will actually divert resources from other non-subsidized projects towards subsidized projects, again, independently of their merits. So, for instance, in the previous panel we heard that Abound Solar got some \$150 million, I guess, after getting that guarantee. Some of this may have come independently, but it is very likely, in this example, that some of that money came only because of the government guarantee, and that meant basically taking money away from other maybe green companies that would have actually succeeded.

Third, at their worst, every loan guarantee introduces political incentives into business decisions, creating the condition for businesses to seek financial reward by pleasing political interests rather than customers. This is called cronyism and it is a bipartisan problem and it entails real economic costs.

So whatever the intention that motivated the program, the evidence is clear; it just doesn't work. The 1705 loan program does expose taxpayers to Solyndra, Abound, Beacon Power-like waste, but more of a concern are the systematic distortions it introduces into the market and the unintended consequences those can have.

Thank you.

[Prepared statement of Ms. de Rugy follows:]



MERCATUS CENTER
George Mason University

Bridging the gap between academic ideas and real-world problems

TESTIMONY

A GUARANTEE FOR FAILURE: GOVERNMENT LENDING UNDER SEC. 1705

VERONIQUE DE RUGY

Senior Research Fellow

Testimony Before the House Committee on Oversight and Government Reform, Subcommittee on Regulatory Affairs
The Administration's Bet on Abound Solar: Assessing the Costs to the American Taxpayers
July 18, 2012

In 2009, renewable energy company Solyndra received \$535 million through the federally backed 1705 loan guarantee program of the Department of Energy (DOE). Two years later, the firm filed for bankruptcy and had to lay off its 1,100 employees, leaving taxpayers to bear the cost of the loan. For obvious reasons, more than any other recent events, this waste of taxpayer money has attracted much attention.

But Solyndra isn't the only company to fail after receiving a loan through this particular program. Back in October, Beacon Power Corp., an energy-storage company that received \$43 million in backing from the 1705 loan program, filed for bankruptcy. More recently, Abound Solar, Inc, a U.S. solar manufacturer that was awarded \$400 million through the program, announced that it would suspend operations and file for bankruptcy. Abound borrowed about \$70 million against the guarantee, which is likely to result in a cost of \$40 million to \$60 million to U.S. taxpayers after Abound's assets are sold and the bankruptcy proceeding is completed.

In addition, there are signs that other companies may follow in the steps of Solyndra and Abound. First Solar's Antelope Valley project, which received a \$646 million 1705 loan in 2011 through its partner Exelon, is one likely casualty; SunPower's California Valley Solar Ranch— now owned by NRG Solar—is another. The ranch received a \$1.2 billion loan guarantee last September. Whether these companies will fail or not is not yet clear, and the potential cost to taxpayers is not known. However, the precarious situation of these companies exemplifies the risk faced by taxpayers when the government extends loan guarantees to high-risk companies.

Now, the important question is whether or not these examples are representative of the 1705 loan program. What we find is that loan guarantees in this program go to two types of projects:

- Projects that would not have been funded in the open market without a government guarantee because they are too risky, and
- Projects that could have gotten a loan but were happy to benefit from the lower interest rate available through a DOE loan guarantee.

For more information or to meet with the scholars, contact
Robin Bowen, (703) 993-8582, rbowen5@gmu.edu
Mercatus Center at George Mason University, 3301 Fairfax Drive, 4th Floor, Arlington, VA 22201

The ideas presented in this document do not represent official positions of the Mercatus Center or George Mason University.

The failure of Solyndra has attracted much attention, but the problems with loan guarantees are much more fundamental than the cost of one or more failed projects. In fact, the economic literature shows that every loan guarantee program (a) transfers the risk from lenders to taxpayers, (b) is likely to inhibit innovation, and (c) increases the overall cost of borrowing. At a minimum, such guarantees distort crucial market signals that determine where capital should be invested, resulting in lower interest rates that are unmerited and a reduction of capital for more worthy projects. At their worst, these guarantees introduce political incentives into business decisions, creating the conditions for businesses to seek financial rewards by pleasing political interests rather than customers. This is called cronyism, and it entails real economic costs.¹

Yet these loan programs remain popular with Congress and the executive branch. That's because in general most of the financial cost of these guaranteed loans will not surface for many years. Consequently, Congress can approve billions of dollars to benefit special interests with little or no immediate impact to federal appropriations, because these dollars are almost entirely off budget.

HOW DO THESE LOAN GUARANTEES WORK?

The DOE Loan Programs Office (LPO) administers three separate loan programs: (1) Section 1703 loan guarantees, (2) Section 1705 loan guarantees, and (3) Advanced Technology Vehicles Manufacturing (ATVM) loans. Here are descriptions of the three loan programs, as explained by DOE:

- Section 1703 of Title XVII of the Energy Policy Act of 2005 authorizes the U.S. Department of Energy to support innovative clean energy technologies that are typically unable to obtain conventional private financing due to high technology risks.
- Advanced Technology Vehicles Manufacturing (ATVM) loans support the development of advanced technology vehicles (ATV) and associated components in the United States. They also meet higher efficiency standards.
- The Section 1705 Loan Program authorizes loan guarantees for U.S.-based projects that commenced construction no later than September 30, 2011 and involve certain renewable energy systems, electric power transmission systems, and leading edge biofuels.²

According to LPO's website, DOE's loan guarantee authority originated from Title XVII of the Energy Policy Act of 2005 (P.L. 109-58).³ Under Section 1703, the federal government can guarantee 80 percent of a project's total cost. The American Recovery and Reinvestment Act of 2009 (P.L. 111-5) amended the Energy Policy Act of 2005 by adding Section 1705.⁴ Section 1705 was created as a temporary program, and 1705 loan guarantee authority ended on September 30, 2011.

The dollar volume of loans that can be guaranteed under DOE's authority is predetermined by congressional appropriations that oversee the program. A simple way to explain how these loans work is this: If a recipient defaults on its loan, the federal government pays the remainder of the debt to the lenders and repossesses all of the assets from the unfinished projects.⁵

1. Matt Mitchell, "The Pathology of Privilege: The Economic Consequences of Government Favoritism" (Mercatus Research, Mercatus Center at George Mason University, Arlington, VA, July 2012).

2. United States Department of Energy, accessed June 13, 2012, <https://lpo.energy.gov/>.

3. Section 1703 of the Energy Policy Act of 2005 (P.L. 109-58).

4. Section 1705 of the Energy Policy Act of 2005 (P.L. 109-58). Section 1705 was created by amending the Energy Policy Act of 2005 through the American Recovery and Reinvestment Act of 2009 (P.L. 111-5).

5. However, the Office of Management and Budget has calculated that only 55 percent of loans can be recouped from the sale of assets.

As with other loan programs, the federal government has established a credit subsidy fee to prevent taxpayer exposure. In this case, the cost of the fee is determined by DOE, with guidance from the Office of Management and Budget (OMB). The lenders usually charge the up-front guarantee fee to the borrower after the lender has paid the fee to DOE and has made the first disbursement of the loan.

Lenders handle fees differently for 1705 loans, however. Under the stimulus bill, DOE received appropriated funds to pay for credit subsidy costs associated with Section 1705 loan guarantees, which, after rescissions and transfers, was \$2.435 billion. As the Congressional Research Service rightly puts it, “Section 1705 loan guarantees were very attractive as they provided an opportunity to obtain low-cost capital with the required credit subsidy costs paid for by appropriated government funds.”⁶

DOE does not provide loans directly. Instead, borrowers have to apply to qualified lenders, who are expected to perform a complete analysis of the application. DOE then reviews the lender’s credit analysis, rather than conducting a second analysis, and DOE makes the final credit and eligibility decision.

DO LOAN GUARANTEES DO WHAT THEY CLAIM TO DO?

Leaving aside the question of whether the government should encourage the production of certain goods or services, the economic justification for any government-sponsored lending or loan-guarantee program must rest on a well-established failure of the private sector to allocate loans efficiently (meaning that deserving recipients could not have gotten capital on their own). Absent such a private-sector deficiency, the DOE’s activities would simply be a wasteful subsidy at best, and a politically motivated one at worst, to this sector of the economy.

Yet many argue that some public policy objectives require the sacrifice of marketplace efficiency. It is an accepted feature of modern American government that some public interests or social policy gains outweigh economic losses. In the case of green energy, the government’s lending programs could fulfill specific public policy objectives that the marketplace on its own would either not serve, or would supply at suboptimal levels. But do these programs do what they claim to do?

The DOE proclaims that its loan guarantees help save the planet⁷ by helping to secure funding for early-stage technologies or for the later (risky) commercialization stage—known as the manufacturing “Valley of Death.”⁸ It also claims that loan recipients will generate economic growth and “green” jobs that otherwise would not appear. DOE can thus be judged on its ability to meet these public policy goals—specifically, on its ability to fill the supply-and-demand gap in the clean energy loan market, particularly for startups.

To measure the DOE results, I looked at the flow of DOE credits to evaluate who receives them and whether the DOE is meeting its stated policy objectives of promoting new startups and encouraging the creation of green jobs. Close examination demonstrates that neither stated DOE policies nor actual lending patterns provide evidence that DOE’s loan guarantees serve any of their defined public policy purposes.

6. Phillip Brown, “Solar Projects: DOE Section 1705 Loan Guarantees” (Congressional Research Service, October 25, 2011), accessed June 13, 2012, [http://op.bna.com/env.nsf/id/jstn-8mzsy/\\$File/CRSSolar.pdf](http://op.bna.com/env.nsf/id/jstn-8mzsy/$File/CRSSolar.pdf).

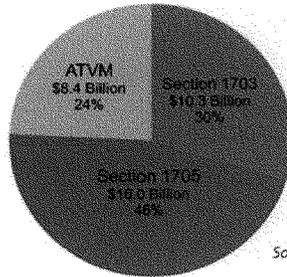
7. Mike King and W. David Montgomery, “Let’s Reset Our Energy Policy Starting with Loan Guarantees,” in *Pure Risk: Federal Clean Energy Loan Guarantees*, ed. Henry Sokolski (Arlington, VA: Nonproliferation Policy Education Center, 2012).

8. Sustainablebusiness.com, “Clean Energy: Crossing the Valley of Death,” June 2010, <http://www.sustainablebusiness.com/index.cfm/go/news.display/id/20544>.

FOLLOWING THE 1705 LOAN GUARANTEE PROGRAM MONEY

Since 2009, DOE has guaranteed \$34.7 billion, 46 percent of it through the 1705 loan program, 30 percent through the 1703 program, and 24 percent through the ATVM.⁹

Loan Guarantees by Program



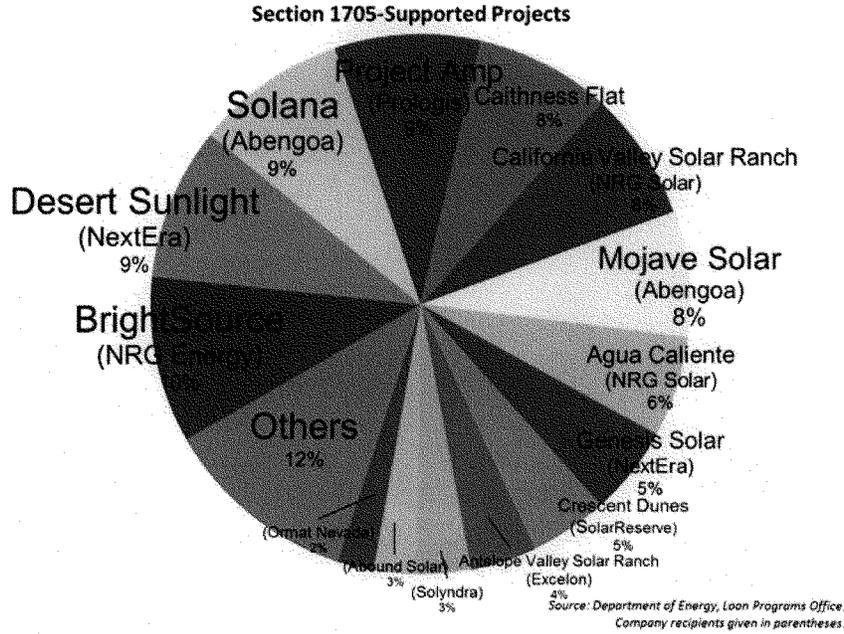
Source: U.S. Department of Energy, Loan Guarantee Programs

As noted earlier, the 1705 program (under which Solyndra received funding) is a product of the economic stimulus bill of 2009. This program offered borrowers better terms than the 1703 program; in fact, in some cases the government paid a substantial fee out of appropriated funds, a fee that is the borrower's responsibility under the 1703 plan. Also, many 1703-eligible projects were also eligible under the 1705 program.

The data on the 1705 program shows that 26 projects were funded under the 1705. Further analysis showed that

- The program guaranteed roughly \$16 billion in all.
- Some 2,378 permanent jobs were claimed to be created under the program. That works out to a taxpayer exposure of \$6,731,034 per job.
- The recipient of the most 1705 loans was NRG Energy Inc. (BrightSource), which received \$1.6 billion, or 11 percent of the overall amount guaranteed under the program.
- The top 10 recipients of loans under the 1705 program were all solar generation companies, which received a combined \$12.2 billion in loan guarantees (76 percent of the overall amount guaranteed). Included were NextEra Energy Resources, LLC (Desert Sunlight), a Fortune 200 company; Abengoa Solar Inc. (Solana), a Spanish multinational company; and Prologis (Project Amp), a global real estate investment trust. Utility firms like NRG Energy received three separate loans in the top-10 recipient list.
 - Prologis received \$1.4 billion (8.75 percent of the total) to install solar panels on top of a building it owns.
 - Cogentrix, a wholly owned subsidiary of the Goldman Sachs Group, Inc., received a \$90 million guarantee from the government.
 - Three companies have filed for bankruptcy so far: Solyndra, which received \$535 million in loan guarantees (3.34 percent of the total); Abound Solar, which received \$400 million (3 percent of the total); and Beacon Power, which received \$43 million (less than 0.1 percent).

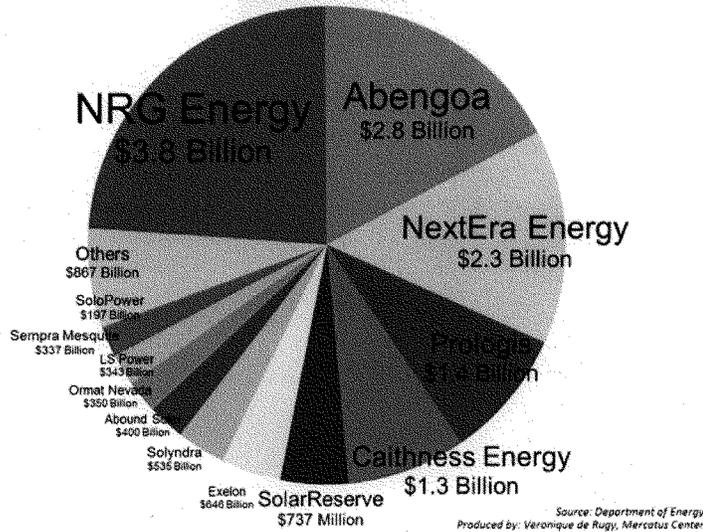
⁹ U.S. Department of Energy, Loan Programs Office: https://lpo.energy.gov/?page_id=45.



If we organize the data by the companies that received the 1705 loans, we find

- The recipient of the most 1705 loans was NRG Energy, Inc., which received a total of \$3.8 billion—23.7 percent of the overall amount guaranteed under the 1705 program.
- Four companies— NRG Energy, NextEra Energy, Arbogea, and Prologis—received 64 percent, or \$10.3 billion, of the total amount guaranteed under the program.

Section 1705-Supported Companies



So what can we make of these figures? First, it should be noted that very few permanent green jobs were created under the 1705 loan program, or any of the other loan programs. The Obama administration had initially pushed these projects as job generators, claiming that these programs could create 5 million American jobs through investment in green technology. Also, to the extent that green jobs were created, the \$6.7 million taxpayer exposure per job is quite spectacular. This number alone would seem to debunk the idea that these DOE loan programs efficiently generate new permanent jobs.

Second, our data demonstrates that under the 1705 program most of the money has gone to large, established companies rather than to startups. Companies that benefited included established utility firms, large multinational manufacturers, and a global real estate investment fund. In addition, the data shows that nearly 90 percent of the loans guaranteed by the federal government since 2009 went to subsidize lower-risk power plants, which in many cases were backed by big companies with vast resources. This includes loans such as the \$90 million guarantee granted to Cogentrix, a subsidiary of Goldman Sachs. Currently, Goldman Sachs ranks number 80 on the list of America's Fortune 500 companies.¹⁰

Quoted in the *New York Times* recently, David W. Crane, NRG's chief executive, explained, "I have never seen anything that I have had to do in my 20 years in the power industry that involved less risk than these projects," he said. "It is just filling the desert with panels."¹¹

10. CNN Money, "America's Fortune 500 Companies," <http://money.cnn.com/magazines/fortune/fortune500/2012/snapshots/10777.html>.

11. Eric Lipton and Clifford Krauss, "A Gold Rush of Subsidies in Clean Energy Search," *New York Times*, November 11, 2011, <http://www.nytimes.com/2011/11/12/business/energy-environment/a-cornucopia-of-help-for-renewable-energy.html?pagewanted=all>.

This probably means that if there were an actual gap between supply and demand in the area of loans for energy companies, startups, and others, this program wouldn't be filling it. In fact, most of these loans look like government transfers of the worst kind. Subsidies to very large corporations smack of cronyism.

Further, while these projects are relatively low risk and backed by large companies, that does not mean that they are risk-free for taxpayers. These projects are organized as separate corporations from the parent companies, so in case of a problem, the parent company could simply restructure and get rid of the struggling project, leaving taxpayers with the bill.

Third, some of the loans went to provide capital for high-risk projects—projects likely unable to get financing from the broader market without a government guarantee. Either the company or the technology did not have the credibility that is normally required for a major loan, or the company had serious, existing financial woes that were not alleviated by the loan. Companies like Solyndra, Beacon Power, and Abound fall in this category; it may also prove to be the case for BrightSource, Solar Reserve, US Geothermal, First Solar, and California Valley Solar Ranch.

Fourth, there seems to be an even more troubling trend of “double dipping” by large companies that received loan guarantees from the DOE program. Many of the companies that have benefitted from subsidized loans under the 1705 guarantee program also received grants under the American Recovery and Reinvestment Act (ARRA). Prologis, for example, received \$1.4 billion in subsidized loans and also received a grant for \$68,000 under the Recovery Act for the purpose of “rent for warehouse space.”

Green Mountain Energy, a company of NRG Energy, received two grants under the ARRA in the second quarter of fiscal year 2011. Likewise, Reliant Energy and Reliant Energy Tax Retail LLC, two other NRG Energy companies, reported receiving *at least 37 grants* under the ARRA. These grants augmented the \$3.8 billion in loan guarantees distributed to NRG Energy under the Section 1705 loan program.

NRG will also be eligible to receive \$430 million from the Department of the Treasury.¹² Many other companies that have received DOE loan guarantees have also benefited from the Department of Treasury 1603 grants.¹³

Overall, NRG and its partners have secured \$5.2 billion in federal loan guarantees, plus hundreds of millions in other subsidies for four large solar projects.¹⁴ Examples abound of companies benefitting from multiple assistance programs initiated during this period. For instance, in addition to the \$538 million it received under the 1705 loan program, Solyndra benefited from a \$10.3 million loan guarantee that the Export-Import Bank extended to a Belgian company (described in the Ex-Im deal data as “Zellik Ii Bvba”) to finance a sale of Solyndra products.¹⁵

Solyndra isn't alone. First Solar's Antelope Valley project received a \$646 million 1705 loan in 2011 through its partner Exelon, and per my calculation from the Ex-Im Bank FOIA deal data information for FY2011,¹⁶ the company also scored \$547.7 million in loan guarantees to subsidize the sale of solar panels to solar farms abroad.

12. Eric Lipton and Clifford Krauss, “A Gold Rush of Subsidies in Clean Energy Search,” *New York Times*, November 11, 2011, <http://www.nytimes.com/2011/11/12/business/energy-environment/a-cornucopia-of-help-for-renewable-energy.html?pagewanted=all>

13. Department of Treasury, “1603 Program: Payments for Specified Energy Property in Lieu of Tax Credits,” <http://www.treasury.gov/initiatives/recovery/Pages/1603.aspx>.

14. Eric Lipton and Clifford Krauss, “A Gold Rush of Subsidies in Clean Energy Search,” *New York Times*, November 11, 2011, <http://www.nytimes.com/2011/11/12/business/energy-environment/a-cornucopia-of-help-for-renewable-energy.html?pagewanted=all>.

15. Export-Import Bank of the United States, 2011 Annual Report, <http://www.exim.gov/about/reports/ar/2011/index.html>, p. 30.

16. Export-Import Bank of the United States, “Open Government Initiative,” <http://www.exim.gov/open/>.

More troubling is the fact that some of the Ex-Im money went to a Canadian company named St. Clair Solar, which is a wholly owned subsidiary of First Solar.¹⁷ St. Clair Solar received a total of \$192.9 million (broken into two loans) to buy solar panels from First Solar. In other words, the company received a loan to buy solar panels from itself. Incidentally, First Solar also received a \$16.3 million loan from the government in 2010 to expand its factory in Ohio.¹⁸

Unfortunately, this double dipping by energy companies isn't new—and while there is no doubt that the deals are lucrative for the companies involved, taxpayers have a lot to lose. Further, double-dipping provides evidence that businesses will be tempted to steer away from productive value creation for society and instead work on narrowly serving political interests for financial gain.

THE CASE AGAINST CLEAN ENERGY LOAN GUARANTEES

The case of Solyndra—a startup that received \$528 million in federal loans before it went bankrupt, laid off over one thousand workers, and left taxpayers to foot the bill—is striking, but it actually represents only one aspect of the fundamental problems caused by loan guarantee programs in general, and DOE's clean energy loan programs in particular.

Socialized Losses and Privatized Gains

One conspicuous issue is the default rate. Historically, loans guaranteed by the government have had a higher default rate than loans issued by the private sector. For instance, the Small Business Administration (SBA) has a long-term default rate of roughly 17 percent.¹⁹ This compares to 4.3 percent for credit cards and 1.5 percent for bank loans guaranteed by the Federal Deposit Insurance Corporation.

The Congressional Budget Office has calculated that the risk of default on the DOE's nuclear loan guarantee program is well above 50 percent.²⁰ In 2011, the CBO updated its study and replaced this embarrassing default rate with a list of variables affecting the rate.²¹ The report now asserts that higher equity financing of these projects would reduce the risk of default; such a solution seems unlikely, however, as most loan guarantee programs cover 80 percent of their financing through debt rather than equity.

Moreover, according to the CBO, when the federal government extends credit, the associated risk of those obligations is effectively passed along from private lenders onto taxpayers who, as investors, would view this risk as costly. In other words, when the federal government encourages a risky loan guarantee it is "effectively shifting risk to the members of the public."²²

Another issue might best be summarized as the sharing of loss versus the privatizing of gain. If a loan is not repaid, the cost of the investment devolves to the taxpayers. But what if the loan is repaid? The lender will benefit from all the interest payments it collected thanks to a low-risk loan, and the borrower will benefit from its successful

17. Tim Carney, "Firm Sells Solar Panel to Itself: Taxpayers Pay," *Washington Examiner*, March 18, 2010, <http://campaign2012.washingtonexaminer.com/article/firm-sells-solar-panels-itself-taxpayers-pay/434251>.

18. Tim Carney, "Firm Sells Solar Panel to Itself: Taxpayers Pay," *Washington Examiner*, March 18, 2010, <http://campaign2012.washingtonexaminer.com/article/firm-sells-solar-panels-itself-taxpayers-pay/434251>.

19. Veronique de Rugy, "Banking on the SBA" (Mercatus on Policy, Mercatus Center at George Mason University, Arlington, VA, 2007), accessed on June 13, 2012, <http://mercatus.org/publication/mercatus-policy-banking-sba>.

20. Pamiir Wang, "Federal Clean Energy Loan Guarantees: Their Moral Hazards," in *Pure Risk: Federal Clean Energy Loan Guarantees*, ed. Henry Sokolski (Arlington, VA: Nonproliferation Policy Education Center, 2012).

21. Congressional Budget Office, "The Cost-Effectiveness of Nuclear Power for Navy Surface Ships" (May 12, 2011), <http://www.cbo.gov/publication/41454>.

22. Congressional Budget Office, "Fair-Value Accounting for Federal Credit Programs" (Issue Brief, March 2012).

business venture. In other words, loan guarantee programs are yet another way that the federal government socializes losses while privatizing benefits.²³

The Moral Hazard

Federally backed loans create a classic moral hazard. Because the loan amount is guaranteed, banks have less incentive to evaluate applicants thoroughly or apply proper oversight. In other words, the less skin the lender has in the game, the less likely it is that the lender will vet the quality of the project. In addition, the company that borrows the money risks less than it would if its loan weren't guaranteed. Further, each time the government bails out a firm or shoulders the cost of a loan guarantee, it conveys to borrowers and bankers alike the mistaken idea that it's okay for them to take excessive risks.

In a March 2012 report, the Government Accountability Office (GAO) found that the DOE loan guarantee program was riddled with program inefficiencies, which calls the fairness of its decisions into question.²⁴ When the GAO requested data from the DOE on the status of applications, the DOE did not have consolidated data readily available and had to assemble the data from various sources over several months. Inadequate documentation and out-of-date review processes reduce one's sense of confidence in the consistency and fairness of DOE's decisions and raise questions about DOE's ability to fully assess and mitigate project risks.

Moreover, the private sector (in the absence of government intervention) builds the infrastructure to assess risk, but the federal government has neither the expertise nor the incentive to build such a safety net. This increases the likelihood that loan guarantees will be awarded based on factors other than the ability of the borrower to repay the loan, such as political connections and congressional pork.²⁵

The moral hazard of loan guarantees increases when rules intended to prevent the program from being a pure company giveaway are removed. When, as part of the stimulus bill of 2009, the government lifted the subsidy fees for 1705 loans, the cost to taxpayers went up and high-risk companies were drawn in.

Mal-investment

Loan guarantee programs can also have an impact on the economy beyond their cost to taxpayers because mal-investment—the misallocation of capital and labor—may result. In theory, banks lend money to the projects that represent the greatest likelihood of success, in terms of loan repayment, profits, and economic growth. However, since there isn't an infinite amount of capital available at a given interest rate, loan guarantee programs could redirect resources from politically neutral projects to politically motivated ones. Think about it this way: When the government reduces a lender's exposure to fund a project it wouldn't have funded otherwise, it reduces the amount of money available for projects that would have been viable without subsidies.

This government involvement can distort the market's signals further. For instance, the data shows that private investors tend to congregate toward government guarantee projects, regardless of the merits of the projects. This takes capital away from unsubsidized projects that have a more viable business plan and a better probability of success without subsidies. As the GAO noted, "Guarantees would make projects [the federal government] assists

23. Russ Roberts, "Gambling With Other People's Money" (Mercatus Center at George Mason University, Arlington, VA, April 28, 2010), accessed June 13, 2012, <http://mercatus.org/publication/gambling-other-peoples-money>.

24. Government Accountability Office, "DOE Loan Guarantees: Further actions are needed to improve tracking and review of applications" (March 2012), accessed June 13, 2012, <http://www.gao.gov/assets/590/589210.pdf>.

25. King and Montgomery, "Let's Reset," 22.

financially more attractive to private capital than conservation projects not backed by federal guarantees. Thus both its loans and its guarantees will siphon private capital away.²⁶

This reallocation of resources by private investors away from viable projects may even take place within the same industry—that is, one green energy project might trade off with another, more viable, green energy project.

More important, once the government subsidizes a portion of the market, the object of the subsidy becomes a safe asset. Safety in the market, however, often means low return on investments, which is likely to turn venture capitalists away. As a result, capital investments will likely dry out, and innovation rates will go down.²⁷

In fact, the data show that in cases in which the federal government introduced few distortions, private investors were more than happy to take risks and invest their money— even in projects that required high initial capital requirements. The Alaska pipeline project, for example, was privately financed at a cost of \$35 billion, making it one of the most expensive energy projects undertaken by private enterprise.²⁸ The project was ultimately abandoned in 2011 because of weak customer demand and the development of shale gas resources outside Alaska.²⁹ However, the undertaking proves that the private sector invests money even when there is a chance that it could lose it. Private investment in U.S. clean energy totaled \$34 billion in 2010, up 51 percent from the previous year.³⁰

Finally, when the government picks winners and losers (in the form of a technology or a company), it often fails. Two factors come into play. First, the government does not have an advantage in information or technology over private agents. In many cases their decision makers are insulated from market signals and won't learn important and necessary lessons about the technology or the market. Second, the resources that the government offers are so addictive that companies may switch their focus from the needs of the customer to the wishes of government officials.

Cronyism

In a 2003 speech to the National Economists Club in Washington, D.C., then-Federal Reserve Governor Edward M. Gramlich argued that loan guarantee programs are unable to save failing industries or to create millions of jobs, because—he explained—the original lack of access to credit markets is caused by serious industrial problems, not vice versa. If an applicant's business plan cannot show a profit under reasonable economic assumptions, private lenders are unlikely to issue a loan, and rightly so.

Then why is the federal government still guaranteeing loans? Because it serves three powerful constituencies: lawmakers, bankers, and the companies that receive the subsidized loans.

Politicians are able to use loan programs to reward interest groups while hiding the costs. Because such loan programs are almost entirely off budget, Congress can approve billions of dollars in loan guarantees with little or no impact on appropriations. Moreover, unlike Solyndra, most failing projects take years to collapse, allowing politicians to collect short-term rewards while skirting, or postponing, political blame. It's like buying a house on credit without having a trace of the transaction on your credit report.

26. Wang, "Federal Clean Energy," 15.

27. Wang, "Federal Clean Energy," 15.

28. Peter Bradford, "Taxpayer Financing for Nuclear Power: Precedents and Consequences" (Nonproliferation Policy Education Center, 2008), http://www.npolicy.org/article_file/Taxpayer_Financing_for_Nuclear_Power-Precedents_and_Consequences.pdf.

29. Ben Casselman, "Alaska Pipeline Scrapped," *Wall Street Journal*, May 18, 2011, <http://online.wsj.com/article/SB10001424052748703509104576329541913338186.html>.

30. The Center for the Next Generation website, "Advanced Energy and Sustainability," accessed June 13, 2012, <http://www.tcng.org/programs/advanced-energy-and-sustainability>.

It is also easy to understand why companies and company executives seek these loans. The preferential treatment they enjoy comes at the expense of the taxpayer, however, and ultimately at the expense of our market and political system.

Another potential beneficiary of these loans is the financial institution that issues them. With other loan programs, such as the SBA's, evidence suggests that lenders may have an incentive to favor borrowers that qualify for a loan with a government guarantee over those that do not. When a small business defaults on its obligation to repay a loan, bankers do not bear most of the cost; taxpayers do. Meanwhile, lenders make large profits on SBA loans by pooling the guaranteed portions and selling investors trust certificates that represent a claim to the cash flow.

How profitable is this? Testifying before Congress in April 2006, David Bartram, the president of the SBA Division of U.S. Bancorp, the nation's sixth largest financial services company, explained that "return on equity of SBA loans can exceed 70 percent."³¹ A 70 percent return on equity (RoE) is remarkably high. Right now, the five-year average RoEs for the two biggest banks in America—Citigroup and Bank of America—are 16.2 percent and 14.5 percent, respectively.

More study is required to determine whether a similarly outsized return to financial institutions occurs with the DOE program, but the parallels between the DOE and SBA programs suggest that this is a possibility.

CONCLUSION

The Department of Energy's loan guarantee programs have been the focus of much public attention since energy companies Solyndra, Beacon Power, and Abound went bankrupt, leaving taxpayers to shoulder hundreds of millions of dollars in loan guarantees. The evidence strongly suggests that these programs fall short of their stated goals of developing clean energy and creating jobs. Of equal concern is the indirect damage to the nation's economic fabric through distortion of market signals, cronyism, and mal-investment. Companies are pursuing financial benefit through the political system, and the economy—and our country—are paying the price.

31. Veronique de Rugy, "Banking on the SBA" (Mercatus on Policy, Mercatus Center at George Mason University, Arlington, VA, 2007), <http://mercatus.org/publication/mercatus-policy-banking-sba>.

ABOUT THE MERCATUS CENTER AT GEORGE MASON UNIVERSITY

The Mercatus Center at George Mason University is a research, education, and outreach organization that works with scholars, policy experts, and government officials to connect academic learning and real-world practice.

The mission of Mercatus is to promote sound interdisciplinary research and application in the humane sciences that integrates theory and practice to produce solutions that advance in a sustainable way a free, prosperous, and civil society.

ABOUT THE AUTHOR

Veronique de Rugy is a senior research fellow at the Mercatus Center at George Mason University. Her primary research interests include the U.S. economy, federal budget, homeland security, taxation, tax competition, and financial privacy issues. Her popular weekly charts, published by Mercatus, address economic issues ranging from lessons on creating sustainable economic growth to the implications of government tax and fiscal policies.

Mr. JORDAN. Thank you, Doctor. Appreciate your testimony.
Mr. Kats, you are recognized.

STATEMENT OF GREGORY KATS

Mr. KATS. Thank you. Thanks for the opportunity to speak with you today. I serve on the board of directors of four U.S. clean energy companies and just served on the board of the National Academy of Sciences study recommending to Congress ways to strengthen U.S. competitiveness.

Abound Solar attracted broad support, including from Indiana Republican Governor Mitch Daniels, for its \$400 million loan guarantee. Abound raised about \$300 million from private investors, including from British Petroleum. The DOE structured its loan guarantees to Abound in tranches in order to reduce its risk, so only \$70 million of the \$400 million is at risk, and as noted by the Wall Street Journal, DOE could receive about \$30 million of that back, leaving a Federal loss of about \$40 million, or one-tenth of the loan loss guarantee. This reflects prudent DOE lending risk management practices.

Overall, the DOE Loan Guarantee Program has had a 4 percent default rate, which is just one-fourth of the losses projected for and budgeted for. A 4 percent default rate means a 96 percent rate. In the real world, where facts matter, a 96 percent success rates get you an A.

The loan program has done exactly what it was intended to do, help create over \$35 billion in investments in renewable energy, where the private sector lending was not available. Congress set aside a credit subsidy because it knew there would be job losses because the program supports innovation, and these losses are proving far less than projected for and budgeted for. In the real world, where U.S. companies are invested in to build jobs and strengthen America's competitive position in global markets, the DOE Loan Guarantee Program is a big success.

U.S. success in clean energy matters a lot to the U.S. military. Department of Defense is the largest energy consumer in the world. Secretary of the Navy, Ray Mabus, put it this way: Why the interest in alternative energy? The answer is pretty straightforward: we buy too much fossil fuel from potentially or actually volatile places on earth. Every time the cost of a barrel of oil goes up \$1, it costs the United States Navy \$31 million in extra fuel costs.

But it is costly in more ways than just money. For every 50 convoys of gasoline we bring in, we lose a Marine, we lose a Marine killed or wounded. That is too high a price to pay for fuel.

In the words of then Chairman of the U.S. Joint Chiefs of Staff, Admiral Mullen, energy is about not just defense, but security; not just survival, but prosperity. Our national defense infrastructure and systems hold the potential to help stem the tide of strategic security issues related to climate change.

The U.S. military, U.S. scientists, and the National Academy of Sciences are unambiguous in their acceptance of the reality and threat of climate change. So why is this Congress undermining U.S. clean energy industry solutions to climate change? Our major

competitors, including China and Germany, have invested heavily in expanding their domestic wind and PV corporations.

Today, of the top 10 global wind and PV manufacturers, only one of each is located in the United States. We should be deeply concerned about the security implications of the U.S. losing its global competitive leadership position in these critical industries, that were largely invented here in the United States in a multi-decade collaboration between U.S. corporations, U.S. DOE, the U.S. military, and U.S. universities.

Abdication of U.S. congressional support for U.S. renewable energy industries that were largely created here in America is a disaster for U.S. companies, for U.S. competitiveness, and for U.S. security, but it is a big win for China.

Other governments support, rather than undermine, their domestic clean energy industries. So why are members of this Congress distorting and denying what is clearly a successful American program? If the U.S. military is forced to import the technology it needs to achieve its mission of shifting to clean energy, U.S. security will be weakened. For financial employment and security reasons, the U.S. DOE should use the unused loan guarantee funds to support another \$30 billion to \$40 billion in U.S. clean energy companies and programs.

If this Congress is willing to support America's innovative corporations, the U.S. can regain its global leadership in clean energy and address climate change in a way that builds on U.S. ingenuity and creates American, rather than Chinese, jobs.

Most Americans know that climate change is happening. Most Americans are in favor of renewable energy because it is clean, U.S. grown, and getting cheaper. Most Americans understand that the Government gives even larger subsidies to other forms of energy. Most Americans understand that in supporting innovative things, you are not going to bat 100 percent, but that 96 percent is obviously a success. And most Americans want this Congress to use its common sense.

Thank you.

[Prepared statement of Mr. Kats follows:]

Statement of Gregory H. Kats
President of Capital E

Before the
House Committee on Oversight and Government
Reform

Evaluation of the DOE Loan Guarantee Programs,
including support for Abound

July 2012

FOR RELEASE ON DELIVERY
July 18, 2012

Brief bio of Gregory Kats:

- President Capital E (cap-e.com), a national clean energy advisory firm
- Serves on the boards of multiple U.S. energy and energy related firms, all of whom sell into international markets, and all of whom are hiring employees here in the US.
- Served as the Director of Financing for Energy Efficiency and Renewable Energy at U.S. Department of Energy
- Former Managing Director of Good Energies, a multibillion dollar global clean energy PE and VC investor.
- Partnered with JP Morgan and Citi to develop financial strategies to scale US funding for energy efficiency from \$20 billion a year to \$150 billion a year.
- Serves on a National Academy of Science board developing US policy recommendations to strengthen US innovation and competitiveness.
- Education: BA, UNC; MBA from Stanford University, MPA from Princeton University, Certified Energy Manager.

Thank you for the opportunity to speak with you today on this important issue.

This hearing addresses several questions

- 1) The DOE Loan Guarantee Program includes loans to Abound Solar. What does Abound's filing for bankruptcy say about the DOE loan program overall?
- 2) Related to the Abound bankruptcy and in light of the Solyndra and Beacon failures, is the DOE Loan Guarantee Program successful in its financial objectives? In its non-financial objectives?

Brief summary:

Abound Solar, a US solar manufacturer, with broad support, including from Indiana Republican Governor Mitch Daniels, was awarded a \$400 million DOE loan guarantee. DOE structured its loan guarantee in tranches to reduce Federal exposure.

Abound raised about \$300 million from private investors, including from British Petroleum. Massive Chinese government subsidies drove very rapid expansion of Chinese solar panel production capacity and resulted in an unexpected collapse in global solar pricing, leading multiple solar firms globally to file for bankruptcy, including Abound Solar.

Because DOE had structured its \$400 million loan guarantee to Abound in tranches, only \$68 million or so of the \$400 million is at risk. As quoted in the Wall street Journal, a DOE spokesman recently estimated that the department could receive about \$30 million back from abound, leaving a federal loss of about \$40 million, or one tenth of the loan loss guarantee. This reflects prudent lending risk management practices

Executive Findings regarding overall DOE loan guarantee program:

- 1) The only way to judge a program's success or failure is to determine whether it met or failed to meet its objectives.
- 2) The DOE loan program was established with a default amount budgeted and funded at \$2.47 billion. That is \$2.47 billion is the amount the Office of Management and Budget predicted and Congress budgeted to cover expected defaults in this program. If defaults exceed \$2.47 billion, then the program is a failure. If the default amount is less, the program is successful. This is the only fair and rational measure of financial performance for the program.
- 3) The DOE loan guarantee has approved 28 loans worth \$16.1 billion dollars, and has so far experienced three highly publicized defaults from Solyndra, Beacon, and Abound. These loans were for \$535 million, \$43 million and \$68 million respectively. The Federal government can expect to receive a portion of those funds back. Defaults from Solyndra, Beacon, Abound, and other loan recipients, after some funds are recouped from each party, are likely to net out to about \$400 - \$800 million in losses. This is a roughly 75% lower default rate than projected and budgeted for. Given these very limited losses, the program would have to be fairly viewed as very successful. Assertions that the DOE loan program are a failure must rest on the belief that there will be an additional wave of defaults that result in total defaults exceeding the \$2.47 billion loan default budgeted, planned for, and funded.
- 4) An additional default or defaults are possible. But is it likely that additional defaults will result in loan losses exceeding the projected/budgeted amount of \$2.47 billion? Is the pessimism about future US renewable energy manufacturing and project performance warranted?
- 5) The likelihood of default totaling \$2.47 billion viewed from a rational basis appears exceedingly unlikely. A minority of the loans and amount invested were in manufacturing, fuel production energy storage or transmission. The large majority - \$14.1 billion of the \$16.1 billion were for large scale generation projects -- mainly solar -- that were built on long term power purchase contracts based on technologies with strong performance track records. A wave of new defaults is vanishingly unlikely. 10 of the 28 loans were made to manufacturing, fuel production energy storage or transmission. These are smaller loans and represent 13% of the exposure and can be viewed as higher risk. As a recent Bloomberg Government Analysis observes, if all these 8 higher risker loans fail, and no assets are recovered (highly unlikely) there would still be \$466 million remaining to cover further losses. Losses by the larger, more credit-worthy project loan recipients seem increasingly unlikely and if any losses were to occur, the vast majority of loan amounts are likely to be recovered since the projects can be expected to retain substantial value.
- 6) 85% of the money put aside for losses in this program remains at the Treasury. This program can only be fairly judged as a success, therefore these funds should be used as intended - to backstop additional loan guarantees. Given its effectiveness in leveraging private funding and additional benefits, discussed below, the largest risk is that DOE slows its 1705 loan guarantee program.
- 7) Review of the loan portfolio suggests total defaults are likely ultimately to be in the range \$400 - \$800 million dollars, or about one quarter the amount projected and budgeted for. Based on a reasonable assessment of outstanding portfolio financial profile and risks, the DOE loan program can therefore rationally only be viewed as a big success. From the perspective of financial performance, the DOE should therefore expand its loan guarantees. Failure to do so would weaken the US economy and security, undermine US competitiveness and cost US jobs.

Long bipartisan history, rationale for public-private investing, including loan guarantees

There is a long bipartisan history of U.S. federal, military, state, and city level investment in clean energy. The DOE Loan program demonstrates this. The DOE Loan program has 3 parts, 2 of which were established by the George W Bush Administration and 1 of which was established by the Obama Administration.

The first part of the DOE loan programs, Section 1703 authorizes DOE to provide loan guarantees to enable commercialization of clean energy technologies and projects. This program was part of the energy Policy Act of 2005 and was signed into existence by President George W Bush. 1703 loans guarantee a total of \$10.3 billion, with two nuclear power conditional commitments.

The second part of the DOE Loan program addresses advanced technology vehicles manufacturing (ATVM) and was established in the Energy Independence and Security Act and signed into law by President George W Bush. The DOE ATVM loan program has closed 5 loans totaling \$8.4 billion.

The third part of the DOE loan program, Section 1705 of the DOE loan program was established through the 2009 American Reinvestment and Recovery Act as part of a far larger program to accelerate US investment and employment in response to the 2008-2009 deep economic downturn. Section 1705 extended the Energy Policy Act of 2005 and provides DOE funds and direction to support expanded investment of US companies and projects in clean energy, including solar, wind, transmission and storage. Like loan guarantee programs in general, these were projects that were viewed as unlikely to receive commercial funding because the companies or projects were viewed as early stage, somewhat risky and/or not fully commercial proven. Like other loan guarantee programs, 1705 was established with the expectation that most funded projects would succeed commercially but that some would not.

Did the DOE 1705 loan guarantee program succeed financially and in its other objectives? The only rational way to evaluate whether this program is successful is to evaluate its performance against its objectives - is the default rate better or worse than projected, and is it achieving its non-financial objectives eg jobs, security, economic competitiveness?

Financial Failure?

To determine whether the DOE 1705 loan program is successful from a financial/default perspective we need to compare the expected program default rate to the current and likely total default rate. If the default rate can be expected to exceed the projected and budgeted default rate, then the 1705 program can be viewed as financially unsuccessful. However if the default rate is lower than the default rate projected and budgeted for, then the DOE 1705 loan program should be recognized as financially successful.

The 1705 loan guarantee program has provided loan guarantees to projects worth \$16.1 billion. This represents about 1.7 percent of the almost one trillion dollars of existing federal loan guarantee commitments. Federal loan guarantees like 1705 are established to enable financing of projects that would probably not otherwise receive financial funding, and like other bank and government commercial lending programs, assumes a default rate as normal and expected. In establishing the 1705 loan guarantee program, for example, the Office of Management and Budget predicted and Congress budgeted \$2.47 billion to cover expected project defaults or partial defaults. (See: <http://www.whitehouse.gov/omb/budget/Supplemental>)

Review of the loan portfolio suggests that total defaults are likely ultimately to be in the range \$400 - \$800 million dollars, or about one quarter the amount projected and budgeted for. A fair assessment of outstanding portfolio financial profile and risks proves that the DOE loan program has been prudently managed.

Lack of Diversification?

The US House of Representatives report on DOE's Loan Guarantee Program contends that the loan portfolio was not diversified and that this will therefore lead to higher losses. But is it true that the loan portfolio is undiversified? A review of the loan guarantee recipients indicates that the portfolio is actually geographically broadly diversified and includes a large mix of both direct company loan guarantees and project development recipients. That indicates diversification. What about the high concentration of solar projects – does this indicate an imprudent lack of diversification, as the House report argues? A review of the solar projects funded indicates otherwise. The Bloomberg Government report review of the solar projects receiving loan guarantees finds that recipients of the solar loan guarantees are in fact quite diversified, including "residential, commercial and utility-scale installations using three types of photovoltaic cells and two different types of concentrating power (CSP) technologies". That is a lot of diversification. See: <http://about.bgov.com/2011/12/01/bgov-study-solyndra-failure-observes-low-risk-energy-guarantees/>

Indeed a dispassionate observer would recognize that the Abound failure was driven by a collapse in silicon prices and collapse in PV prices that no one predicted. Had silicon prices and PV prices not unexpectedly collapsed, abound could well now be viewed as a very shrewd loan choice that strengthens the diversified US solar industry position globally (because it relies on cadmium telluride).

Systematic Risk?

The US House of Representatives March 20, 2012 staff report entitled "The Department of Energy's Disastrous Management of Loan Guarantee Programs" spends a lot of time documenting and criticizing the fact that the recipients of the loan guarantees had relatively poor credit risk ratings. This argument is puzzling... like investigating a bank's home loan program and then expressing outrage at the finding that home owners had to borrow money to buy their homes.

The whole point of a loan guarantee program is to finance projects that cannot otherwise get commercial financing. If the recipients of the DOE loan programs were very low risk (investment grade) they would have access to commercial funding and a DOE loan guarantee would therefore displace private funding. That is, loans to very low risk companies and projects would be a waste and a sign of failure, not a sign of success.

The DOE loan guarantee process has required very extensive and expensive due diligence – paid for by the applying companies. The extensiveness of the loan review program made it slow, resulting in widespread frustration that the loan review process was not faster. For example; "Could you please explain why DOE has been unable to obligate these funds more rapidly?" - Rep. Mike Simpson R-ID [Hearing before the House Committee on the Budget, Questions Submitted by Congressman Mike Simpson, July 14, 2010]. And, "I am writing to you today to stress the urgency of expeditiously reviewing loan guarantee applications for renewable energy projects, particularly those utilizing solar technology," said Rep. Mary Bono Mack (R., Calif.) in a letter from September 2010 to Mr. Chu, White House budget director Jack Lew and Treasury Secretary Timothy Geithner.

DOE's loan review process typically has involved hiring independent technology, legal and marketing firms to do in-depth, expensive (paid for by the applicant) independent reviews, many of which lasted more than a year.

For example, Sage Electrochromic Glass spent more than two years and several million dollars pursuing a DOE loan guarantee to support a large manufacturing facility in Minnesota. DOE ultimately turned down the funding application. As a result, a large French multinational will assume majority ownership of the firm. While the first scale manufacturing plant will be built in Minnesota, the next scale plant is expected to be built in Europe – and ownership of this technology developed in the United States will pass into European ownership. This is exactly the kind of technology that the US military is interested in and is deploying on its military bases in the US and abroad to cut energy use and strengthen security.

In hindsight, the DOE loan guarantee program has made mistakes – it made several loans it should not have made and did not make some loans it probably should have made. Many have argued that the process was too arduous, detailed and slow while others have argued it should have been even more rigorous.

While it is easy in hindsight to criticize the DOE loan program, the only fair basis for judging success or failure is whether the program achieved its financial and other objectives.

The purpose of loan guarantee programs is to fund companies and projects that have desirable benefits and that probably otherwise could not get commercial funding. The success of a portfolio of loans – like investments by a VC firm – is only fairly measured on the outcome of the portfolio of investments. As discussed above, the likely total default rate is in the range of one quarter of the level projected and budgeted for. This is clearly a successful program.

Review of loan portfolio outstanding suggests total defaults are ultimately likely to be in the range \$400 - \$800 million dollars, or about one quarter the amount projected and budgeted. From the perspective of financial performance, the DOE should therefore expand its loan guarantees. Amidst such clear success, the DOE should be pressed to continue making these loan guarantees for perhaps another \$30 to \$40 billion in American projects. Doing so would not only fulfill the financial objective of the program but would have large positive impacts in non-financial ways discussed further below.

Non-Financial Objectives

This testimony will now turn the non-financial objectives of the DOE loan guarantee program.

Is the DOE loan guarantee program successful in its non-financial criteria (eg jobs, clean power generation, security)? Caithness Shepherds Flat received \$1.3 billion in DOE 1705 loan guarantees to develop the world's largest to date wind farm here in the US. Clearly this project generates US jobs, increases production of domestic clean energy, reduces US energy imports and strengthens US competitiveness.

Recovery Act investments helped finance:

- Agua Caliente - the world's largest photovoltaic solar plant
- Caithness Shepherds Flat in Oregon
- Diamond Green Diesel in New Orleans - a biodiesel project that will nearly triple the amount of domestically produced renewable diesel

These clean power generation projects will generate enough clean electricity to power over two and a half million homes, cutting oil imports, improving trade balance, expanding distributed domestic employment, and strengthening US corporate competitiveness in the very fast growing and internationally competitive clean energy markets.

Given that our principal trading competitors are providing heavy subsidies to their domestic clean energy industries, the DOE loan guarantee program is providing a significant and timely boost to US clean energy industry, helping slow loss of US strength in the critical and fast growing international clean energy markets. Clean energy has been targeted by our major international competitors (including China and Germany) as a critical and perhaps the critical future growth and export industry. For most US citizens, businesses and policy makers, whether the US wins or loses in this race matters because the outcome will have a large impact on future US employment and economic strength.

Positive Security Impact

One of the objectives of the DOE loan guarantee program is to expand US clean energy manufacturing and generation capacity as a way to strengthen US security. Some have questioned whether this is valid, questioning the idea that clean energy (renewables and efficiency) are in fact beneficial to strengthening security. If this view is correct - that clean energy does not help US security - then the DOE clean energy loan guarantee programs should be considered a failure in meeting its security objective.

The view of the US military are relevant to an evaluation of whether or not the DOE loan guarantee objective of expanding domestic clean energy technology and power generation has a positive impact on security, including addressing the US military objective of limiting the costs and risks of climate change.

Secretary of the Navy Ray Mabus¹ put the question this way: “Why the interest in alternative energy? The answer is pretty straightforward: We buy too much fossil fuel from potentially or actually volatile places on earth. We buy our energy from people who may not be our friends. We would never let the countries that we buy energy from build our ships or our aircraft or our ground vehicles, but we give them a say on whether those ships sail, whether those aircraft fly, whether those ground vehicles operate because we buy their energy. There are great strategic reasons for moving away from fossil fuels. It’s costly. Every time the cost of a barrel of oil goes up a dollar, it costs the United States Navy \$31 million in extra fuel costs. But it’s costly in more ways than just money. For every 50 convoys of gasoline we bring in, we lose a Marine. We lose a Marine, killed or wounded. That is too high a price to pay for fuel.”

Due to a \$21.3 billion annual energy bill and because the fragility of the “grid leaves DoD vulnerable to service disruptions and places continuity of critical missions at serious and growing risk,”^{2,3} the US military has set ambitious targets to reduce energy use and develop renewable energy sources.

The Army and Navy both have net zero programs, aimed at reducing energy use on bases, with the Navy targeting 50 percent of its bases to have net zero energy consumption by 2020. The Army has identified six net zero pilot installations in each of the energy, water, and waste categories and two integrated installations striving towards net zero on all fronts by 2020^{4,5}.

¹ National Clean Energy Summit 4.0 Las Vegas, NV August 30, 2011

² Speech by Dorothy Robyn, Deputy Under Secretary of Defense for Installations and Environment Washington DC, ICF international office, 19 April 2012

³ “Department of Defense Annual Energy Management Report Fiscal Year 2010” July 2011

⁴ Westervelt, Amy, “Why the Military Hates Fossil Fuels” Forbes, February 2, 2012.

⁵ <http://www.forbes.com/sites/amywestervelt/2012/02/02/why-the-military-hates-fossil-fuels-and-you-should-too-part-one-inefficiency/>

In its *Vision for Net Zero*, the Army states:

“Today the Army faces significant threats to our energy and water supply requirements both home and abroad. Addressing energy security and sustainability is operationally necessary, financially prudent, and essential to mission accomplishment. The goal is to manage our installations not only on a net zero energy basis, but net zero water and waste as well. We are creating a culture that recognizes the value of sustainability measured not just in terms of financial benefits, but benefits to maintaining mission capability, quality of life, relationships with local communities, and the preservation”.⁶

Energy is, in the words of Admiral Mullen, about “not just defense but security, not just survival but prosperity.”⁷ Our national defense infrastructure and systems hold the potential to “help to stem the tide of strategic security issues related to climate change”⁸ while improving operational effectiveness.⁹ As the largest energy consumer in the world, the United States Department of Defense (DoD) has realized the value and practicality of energy efficiency, officially codifying it as “a force multiplier”¹⁰ in the 2010 Quadrennial Defense Review. Stated succinctly by Admiral Mike Mullen, Chairman of the Joint Chiefs of Staff, “Saving energy saves lives.”¹¹

The US military view and commitment to expanding US strength and investment in renewable energy as a critical security objective is clear. If the military view on the relationship between clean energy and security is acknowledged as valid, then the DOE loan guarantee program objective of expanding US competitiveness and production of renewable energy can also be reasonably viewed as successfully contributing to US security.

Many of America’s governors also understand the security importance of clean energy generation. Yesterday Republican Governor of Iowa Terry Branstad wrote in the Wall Street Journal rebutting the anti-clean energy views of the Journal’s editorial pages. Governor Branstad asserted that “The wind power industry is an American success story that is helping us build our manufacturing base, create jobs, lower energy costs and strengthen our energy security.”

Both the wind and the solar photovoltaics innovation and industries were largely developed here in the United States. But our major competitors, including China and Germany, have through sustained federal domestic subsidies and purchases rapidly expanded the size and strength of their domestic wind and PV corporations. Today, of the top 10 global wind and PV manufacturers only one of each is located in the US. We should be shocked and deeply concerned about the security implications of the US losing its global competitive leadership position in these critical industries.

⁶ <http://army-energy.hqda.pentagon.mil/netzero/>

⁷ Energy Security Forum Speech as Delivered by Admiral Mike Mullen, chairman of the Joint Chiefs of Staff, Washington, D.C. Wednesday, October 13, 2010 <http://www.jcs.mil/speech.aspx?id=1472>

⁸ Energy Security Forum Speech as Delivered by Admiral Mike Mullen, chairman of the Joint Chiefs of Staff, Washington, D.C. Wednesday, October 13, 2010 <http://www.jcs.mil/speech.aspx?id=1472>

⁹ Energy Security Forum Speech as Delivered by Admiral Mike Mullen, chairman of the Joint Chiefs of Staff, Washington, D.C. Wednesday, October 13, 2010 <http://www.jcs.mil/speech.aspx?id=1472>

¹⁰ United States Department of Defense “Quadrennial Defense Review Report” February 2010

¹¹ Energy Security Forum Speech as Delivered by Admiral Mike Mullen, chairman of the Joint Chiefs of Staff, Washington, D.C. Wednesday, October 13, 2010 <http://www.jcs.mil/speech.aspx?id=1472>

The reality is that there is a global hyper competitive race to see which countries will dominate clean energy. Abdication of US Federal support for US corporations and competitiveness in industries largely created here in the US would be a disaster for US competitiveness and security and a big win for China. Politically, US politicians should be concerned about who gets blamed for losing the global clean energy race.

The DOE Loan guarantee programs has provided a modest but important lift to US clean energy investment and growth – both strengthening job creation and supporting the strength on US clean energy industries. But our main trading competitors, including China and Germany are out-investing us. Given the strategic and security importance of clean energy industries, weakening federal support for the US wind and PV and other clean energy industries undermines US competitiveness and security. If the US military is forced to import the technology it needs to achieve its mission of shifting to clean energy it will weaken US security. For security - and financial reasons - the DOE should use the 85% of its 1705 funds that is still unused and still available at the Treasury to fulfill the purpose of the funding, and backstop additional US clean energy companies and projects.

Positive Employment Impact?

An important non-financial benefit attributed to the DOE loan guarantee is that it creates jobs. As part of ARRA funding, the DOE 1705 loan guarantee program was specifically intended to result in increased employment. Expansion of US manufacturing of clean energy and expansion of renewable energy projects supported by the DOE loan guarantee enables funding for new plant construction and development of large solar and other power generation projects. All of these are located in the United States.

There has been widespread questioning of the employment benefits of stimulus funding for clean energy like the 1705 program. Credible sources on this issue include the Council of Economic Advisors, the Congressional Budget Office, and the National Bureau of Economic Research. These organizations have evaluated the stimulus funding, including 1705 and come to the following conclusions:

A November 2010 report by the Council of Economic Advisors entitled “THE ECONOMIC IMPACT OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009” found that¹²:

- Following implementation of the ARRA, the trajectory of the economy changed significantly. Real GDP began to grow steadily starting in the third quarter of 2009 and private payroll employment increased on net by nearly 1 million from the start of 2010 to the end of the third quarter.
- The two established CEA methods of estimating the impact of the fiscal stimulus suggest that the ARRA has raised the level of GDP as of the third quarter of 2010, relative to what it otherwise would have been, by 2.7 percent. These estimates are very similar to those of a wide range of other analysts, including the non-partisan Congressional Budget Office.

¹² http://www.whitehouse.gov/sites/default/files/cea_5th_arra_report.pdf

- The CEA estimates that as of the third quarter of 2010, the ARRA has raised employment relative to what it otherwise would have been by between 2.7 and 3.7 million, consistent with the initial estimate that the ARRA would save or create 3.5 million jobs as of 2010:Q4.

In February 2011 the National Bureau of Economic Research issued a report entitled “Did the Stimulus Stimulate? Real Time Estimates of the Effects of the American Recovery and Reinvestment Act.” The report summary noted that job impact varied considerably but that “Support programs for low income households and infrastructure spending are found to be highly expansionary. Estimates excluding education spending suggest fiscal policy multipliers of about 2.0 with per job cost of under \$100,000”. The report also found that “The stimulus had a positive, statistically significant effect on employment...aid to low-income people and infrastructure spending showed very positive impacts.”¹³

The non-partisan US Congressional Budget Office issued a report in May 2011 entitled “Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output from January 2011 Through March 2011”, (May 2011). In its report the Congressional Budget Office found that ARRA’s policies had the following effects in the first quarter of calendar year 2011¹⁴:

- They raised real (inflation-adjusted) gross domestic product (GDP) by between 1.1 percent and 3.1 percent
- Lowered the unemployment rate by between 6 percentage points and 1.8 percentage points
- Increased the number of people employed by between 1.2 million and 3.3 million, and
- Increased the number of full-time-equivalent jobs by 1.6 million to 4.6 million compared with what would have occurred otherwise...”

These major non-partisan analyses all demonstrate that ARRA programs like the DOE 1705 loan guarantee program had large positive impact in slowing severe job loss, helping slow or reverse the economy’s steep economic slide, increasing employment and in stimulating the economy.

The issue of timing of job creation for ARRA funding has created some confusion and some apparently deliberate misinformation. Employment occurs after investments are made, so assessment of employment impact before investments are made is neither relevant nor intellectually honest. For example an article on CNS is entitled “Obama Visits Corporation Where His Stimulus Created 'Green' Jobs at \$2 Million Per Job”¹⁵ The article later acknowledges this job creation cost estimates is based on only 150 interim jobs created as Johnson Controls builds its high performance battery plant for 3000 employees in Michigan. Based on actual plant employment of 3000, the cost per job created is \$100,000 per direct job created, not \$2 million per job, as widely reported. The cost effectiveness is actually better than this because the 3000 direct employees at Johnson’s new plant will drive a lot of indirect employment (supplying the plant, servicing employees etc.) This kind of manipulation of data appears to be widespread and may be politically expedient but it is dishonest and insulting to US corporations like Johnson Controls who are investing in expanding the US economy. This kind of dishonest accounting also does a disservice to the need for a fair evaluation of the actual cost-effectiveness and impact of Federal loan support and similar funding.

¹³ <http://www.nber.org/papers/w16759.pdf>

¹⁴ <http://www.cbo.gov/ftpdocs/121xx/doc12185/05-25-ARRA.pdf>

¹⁵ <http://www.cnsnews.com/news/article/obama-visits-corporation-where-his-stimulus-created-green-jobs-2-million-job>

Major banks have also generally become convinced that investments energy efficiency and green buildings are cost-effective and produce good US jobs. For example, Deutsche Bank Group in October 2011 released a report entitled "Repowering America: Creating Jobs". Deutsche Bank forecast energy supply and energy employment through 2030 based on projections of sustained US investment and growth in the areas of energy efficiency and clean energy. Deutsche Bank determined that such a strategy would result in 7.9 million cumulative net job-years of direct and indirect energy employment, of which 6.35 million jobs (80%) would come from energy efficiency or renewable energy sectors (e.g. geothermal, solar PV, solar thermal and wind).¹⁶

Conclusion

In hindsight the DOE loan guarantee program made mistakes – it made several loans it should not have made and it probably did not make some loans it should have made. For some, the loan application process was too demanding and time consuming, while for others it was not demanding enough. But as any PE or VC investor knows, hindsight is always 20/20, whereas at the time of investment investors make their investments, knowing that some will fail, but hoping that most will succeed. The only valid measure of success is whether the financial objectives (eg target default rate) is met and whether other objectives – eg security and expanded US employment were strengthened are met too.

Because DOE had structured its \$400 million loan guarantee to Abound in tranches, total federal losses are likely to be only about \$40 million or one tenth the total loan guarantee amount. This reflects prudent risk management by the DOE loan guarantee program.

A review of loan portfolio indicates total defaults by Solyndra, Beacon and Abound are likely to be in the range \$400 - \$800 million dollars, or about one quarter the amount projected and budgeted before. The DOE should therefore expand its loan guarantees. Given its effectiveness in leveraging private funding, the largest risk is that DOE slows its loan guarantee program.

Questions have been raised about the impact of 1705 objectives of increasing employment and strengthening security.

Regarding employment impact, analyses from multiple non-partisan organizations, including the Council of Economic Advisors, the National Bureau of Economic Research, and the US Congressional Budget Office demonstrate large and positive employment impact from ARRA programs like 1705. If the reader believes that the Council of Economic Advisors, the National Bureau of Economic Research, and the US Congressional Budget Office and large banks are believable, then ARRA programs such as 1705 will be recognized as having substantial, positive employment benefits.

Regarding the relationship between US security and expanded US capabilities and production of clean energy, the US military, as discussed above is very clear that it believes in and is investing heavily in this thesis. If the reader believes that the US military is a credible source on security issues, then it is clear that the 1705 program strengthens US security.

The success of the 1705 program to date and the relatively large unused subsidy indicates that DOE should ramp up its loan guarantee efforts and provide loan guarantee support for roughly another \$30 to \$40 billion of clean energy projects. A Committee on Energy and Commerce Internal Memorandum (September 12, 2011), noted that "with the additional funding provided in the stimulus for the credit

¹⁶ http://www.dbcca.com/dbcca/EN/_media/DB_Repowering_America_Creating_Jobs.pdf

subsidy costs of these guarantees, the total estimated loan guarantee authority is approximately \$70 billion.” The DOE Loan guarantee program therefore has considerably more room in its 1705 DOE loan guarantee program to support additional US renewable and clean energy companies and projects.

The DOE 1705 loan guarantee program provides a significant lift to US clean energy investment and growth – both strengthening job creation and supporting the strength of US clean energy industries. But our main trading competitors, including China and Germany are out-investing us. Given the strategic, security and employment importance of US clean energy industries, weakening federal support for the US wind and PV and other clean energy industries undermines US competitiveness and security. If the US military is forced to import the technology it needs to achieve its mission of shifting to clean energy it will weaken US security. For financial, security, employment and competitiveness reasons - the DOE should use the 85% of its funds unused and still available at the Treasury to backstop additional US clean energy companies and projects.

Given the clear success of its loan guarantee program to date based on rational measures of financial performance and on other measures including security, employment and US competitiveness, the DOE should not risk halting the loan guarantee program. In fact, failing to make substantial additional loan guarantees to expand US strength in renewable and clean energy, strengthen US jobs, competitiveness and security would be self-defeating.

Mr. JORDAN. If this was so good, Mr. Kats, why do you need the taxpayer dollars? You talk about a 96 percent success rate. Why do you need taxpayer money put at risk? Dr. de Rugy talked about how most of these companies got private investment dollars. If it was such a great thing, if it is so wonderful, why do we need the taxpayers to put up millions of dollars and, as we unfortunately know, lose several hundred millions of dollars, as three of these companies went bankrupt?

Mr. KATS. The reason the U.S. provides subsidies for energy across the board, and has done so for five or six decades, is to promote American production of energy. A relatively small proportion of that support has gone to renewables. The reason it has gone to renewables: it is U.S. produced, it is cleaner, it makes the U.S. competitiveness stronger, it creates employment. The success of the program is illustrated by the 96 percent success rate. That is a terrific success.

Mr. JORDAN. How much of that 96 percent—I think it is actually less than that. Out of 26 companies, three of them went bankrupt. But of that 96 percent, how many do you think would have made it on their own?

Mr. KATS. So the 96 percent represents 96 percent of the dollars that were spent are coming back. So from an investment perspective it is a 4 percent default rate or less. That is a big success.

Mr. JORDAN. It would have been lower than that. I think the last time you were here, a couple months ago, you stated that the LPO needed to move faster and be more aggressive. You said this while sitting next to Mr. Witsoe, with Abound Solar, whose company has since gone bankrupt. So, obviously, if we had moved faster relative to Abound, the taxpayers would have lost a lot more money, maybe all of that \$400 million.

Mr. KATS. A 96 percent success rate is really terrific by any measure. It is much more successful than other programs supporting energy. Sir, you asked a question about employment impact, and I want to speak to that.

Mr. JORDAN. Go ahead.

Mr. KATS. The U.S. nonpartisan Congressional Budget Office, in its May 2011 report entitled Estimated Impact of American Recovery and Reinvestment Act on Employment and Economics Output found that these investments, including the DOE guarantee program, raised gross domestic product between 1.1 and 3.1 percent, and increased the number of full-time jobs between \$1.6 million and \$4.6 million with what would have happened otherwise. Again, that is the U.S. Congressional Budget Office.

So the job creation impact has been large, and if this Congress supports—

Mr. JORDAN. But the question always remains, as Dr. de Rugy pointed out, would it have happened anyway? How much can be directly attributable to the fact that the taxpayers put up money? And the only thing we know for certain—you can talk about the success rate, but we know for—success rate would mean for the taxpayers that every dollar that went out came back. That is success. Right now we know that is not the case. Three companies went bankrupt and we have lost hundreds of millions of dollars of taxpayer money.

So how much of that would have happened anyway?

Mr. KATS. So——

Mr. JORDAN. The point is you don't know, and no one knows.

Mr. KATS. The answer is——

Mr. JORDAN. And how many companies that maybe were better than these bigger companies, as Dr. de Rugy pointed out, who got taxpayer dollars, how many of those companies out there would have probably gotten investment from private equity, private dollars, but for the fact they said, you know, what we are going to put the money where it is a little safer, where the Government has backed it up?

There is a company out there, I would bet, and no one can prove, but you just know there is a company out there that may have some technology that really could help our Country; really could help Admiral Mabus, as you referenced; really could help our national security; really could be beneficial. But they are not getting financing because of this program.

Mr. KATS. That is not true—capital investor. And when we look at companies, we look at their ability to scale and compete internationally. I was actually on the board of a couple companies that applied for funding. The process to get federal funding is very rigorous. They would not have received private funding had they not received it. Again, the three companies that have had financial problems, there is only partial exposure. We are talking today about Abound. Of that \$400 million loan, only \$40 million will end up not being repaid back. Overall, in this program——

Mr. JORDAN. Only \$40 million.

Mr. KATS.—there is a 96 percent——

Mr. JORDAN. It is easy say, Mr. Kats, when it is not your money. You said you were on the board of four different companies. Any of those four companies, did they apply for dollars in the 1705 program?

Mr. KATS. None of them did.

Mr. JORDAN. Your company is Capital E, right?

Mr. KATS. Correct.

Mr. JORDAN. I am looking at one of the things from your company, marketing enabling measures. I assume this is from your or something that is put out by your company. You talk about government or private parties can provide full or partial loan guarantees under default. You talk about things that you do. So have you ever worked on behalf of any of the companies that received taxpayer dollars?

Mr. KATS. I served on the board of a company that applied for a DOE loan guarantee. After two years it ended up not getting it. That company was then purchased by Saint-Gobain France. It illustrates why, if all the other—their companies, the United States needs——

Mr. JORDAN. Have you ever consulted——

Mr. KATS. We should not cede the race on clean energy.

Mr. JORDAN. Have you ever consulted, done consulting work for companies who have applied for an received taxpayer dollars in the 1705 program?

Mr. KATS. No, sir, I have not.

Mr. JORDAN. Okay.

Dr. de Rugy, I want your thoughts on this idea that this is a 96 percent success.

Ms. DE RUGY. Well, first, we are just at the beginning. Let's see where it ends.

Mr. JORDAN. But are you like me? I don't accept that as the definition of success.

Ms. DE RUGY. No. I don't—

Mr. JORDAN. Taxpayers only lost hundreds of millions, they didn't lose billions, so that is a successful program.

Ms. DE RUGY. I agree. And, by the way, some of that cost is totally underestimated. Certainly, that is the cost for this given program, but let's not forget that this loan guarantee opens the door to a lot of other government subsidies. So, for instance, NRG, who got \$3.8 billion in subsidies over several projects, is also eligible for a \$430 million grant from Treasury.

Mr. JORDAN. And some of these were eligible for export-import dollars too.

Ms. DE RUGY. Exactly. And there is a gigantic amount of double-dipping. The Export-Import Bank then goes and subsidizes foreign companies in order to—and then local and State governments that give taxpayers—so, I mean, I think the cost to taxpayers is actually way bigger than what it looks. And we don't know how big the failure will be in the end but, more importantly, so many of these companies are actually backed by very large companies that would have had access to capital, very likely, maybe not at the price that they would have liked.

More importantly, I actually think is this process actually tends to do a lot of the things that got us in the financial mess, which is the private sector usually requires some 40 percent of equity for 60 percent debt, and because of the loan guarantee, then companies now can get 80 percent debt and only 20 percent in equity, and I think this is fairly irresponsible.

Mr. JORDAN. I just want to point out that we are going to have a hearing in a couple weeks on the Export-Import Bank and its relationship to this as well, so you made me think of that in your answer.

One last question for both of you. I will start with Mr. Kats. Do you think Dr. de Rugy made this point in her opening statement, that there is the potential for political influence, cronyism, whatever term you want to use. There is the potential for that when you have this amount of money being available for private companies to get hold of. You have sat through some of these hearings, Mr. Kats. You have been here. I don't know if you were here for the first couple hours of this hearing, but do you think there is any political connections, cronyism had anything to do with this program?

Mr. KATS. You know, there are hundreds of billions of dollars and subsidies have gone to energy, fossil fuels, nuclear—

Mr. JORDAN. I am talking specifically about 1705.

Mr. KATS. Yes, 1705 is a relatively small amount compared to that. I think there is potential. My impression is DOE has done a very rigorous job in making sure that doesn't happen. I know that the screening and due diligence process is extremely rigorous; arguably too rigorous and arguably too slow.

Mr. JORDAN. Doctor?

Ms. DE RUGY. There is political connection. The existence of government itself, I mean, the availability of government money, whether it is in the form of a grant, means that actually these companies are going to be seeking this government's favor.

Mr. JORDAN. In both your experience in watching government and seeing this kind of stuff, these kind of programs, have you ever seen what we have talked about this hearing, ever seen where an email comes from the company who is trying to get the loan, asking the person who is going to decide whether they get the loan to edit a letter that is going to be sent to the White House chief of staff? Have you ever seen that kind of stuff? You referenced other forms of energy that get some kind of help. Have you ever seen that take place with those other forms?

Mr. KATS. I don't think that letter was actually sent.

Mr. JORDAN. That isn't my point. Have you ever seen that kind of coziness between the private sector and the person who is deciding whether they get taxpayer money?

Mr. KATS. Yes. I think both Republicans and Democrat congressmen weigh in—

Mr. JORDAN. Specifically have you ever seen that? That is the question.

Mr. KATS. Have I ever seen direct—

Mr. JORDAN. That kind of coziness, where the person deciding whether they are going to get billions of dollars in the BrightSource example, where they are asked to edit a letter, they actually do edit the letter that is going to be sent to the White House chief of staff when they are trying to get \$1 billion in taxpayer dollars? Have you ever seen that in any other energy area?

Mr. KATS. I don't think that letter was sent, sir.

Mr. JORDAN. That is not the question. Have you ever seen the person who is deciding whether the loan guarantee is going to get approved, have you ever seen them actually edit a letter that the company is looking to send to the White House chief of staff? Have you ever seen them edit a letter? Have you ever seen that kind of behavior in any other area other than this 1705 program?

Mr. KATS. I don't think it was appropriate. I haven't seen a letter like that that was actually ever sent.

Mr. JORDAN. Have you ever seen that before?

Ms. DE RUGY. I haven't, but obviously I am not an expert. I can just say that this is not, for instance, Mercatus does fund-raising and we don't do this, we don't ask the people we are asking for money, hey, can you please edit this.

Mr. JORDAN. In your view, fine, because that is the public sector. But this is the private sector asking the government, trying to get taxpayer money. Seems kind of unusual?

Ms. DE RUGY. It seems unusual.

Mr. JORDAN. Very unusual?

Ms. DE RUGY. But, I mean, the economic literature is actually full of evidence that this is what you get when you have the government doling out money.

Mr. JORDAN. You have just not seen it up close. Mr. Kats hasn't seen it before.

Mr. KATS. I actually worked at DOE on the level of engagement on both sides of the aisle, and from CEOs, who I assume were both

Republican and Democrat; we never asked. In terms of trying to find out information, make the case for the plant being built in their district, that happens all the time; it is standard business.

Mr. JORDAN. It is standard business for the government employee to tell the private sector, hey, if you are going to send a letter to the White House, here I show you should write it? That is standard business?

Mr. KATS. Again, I don't think that letter was sent, so you are asking a hypothetical. I am just saying—

Mr. JORDAN. No, I am not.

Mr. KATS. I am just saying that what happens—

Mr. JORDAN. The letter was edited; it was going to be sent to the White House. They chose not to after the fact. What I am asking is—you are saying this is common practice. I am saying, really, you have seen this before?

Mr. KATS. I have never seen a letter that was actually sent that was—actually, I was unable to read the text; I don't know what the letter said, but I would say it is very normal—

Mr. JORDAN. Forget about what the letter said. Let's ask this point. Have you ever, in your experience at the Department of Energy, when you were there, did you know of anyone at the Department of Energy who, when they were approving some kind of loan for a private company and they are asked to edit something that is going to be sent to the White House, have you ever seen them actually edit that and advise them how to do it?

Mr. KATS. The level of involvement in the form of letters, visits, and emails from corporate CEOs, from governors, both Republican and Democrat, and from members on projects in which businesses in their jurisdiction were being considered for funding, that is a constant and unending stream; it takes up an enormous amount of time at DOE to deal with that. That is standard practice, yes.

Mr. JORDAN. Okay.

Doctor, I will give you the last word, if you want. Where does this all end, Doctor? Where are we headed if we keep going down this road?

Ms. DE RUGY. Well, I mean, it is hard to know where it is ending, but I guess there are going to be more government guarantees, probably some failures, more subsidies down the road. But, more importantly, with respect to the—I actually think that the fact that private industry needs the support of the government is never a good sign.

And then where does it end? I mean, then you have competition from abroad. Then what do we do? I mean, if price falls, what is the next step the industry—what is the next demand from the industry? Are they going to demand that the government guarantee certain level of prices? It is likely where we are heading, and we know what was done in other industries such, as sugar and steel, and this is not good for the American people.

Mr. JORDAN. Well, thank both of you for taking the time out. I apologize for your having to wait, but I appreciate your patience and your expert testimony. Take care.

Mr. KATS. Thank you.

Ms. DE RUGY. Thank you.

Mr. JORDAN. We are adjourned.

[Whereupon, at 1:03 p.m., the subcommittee was adjourned.]

Today's hearing continues this Committee's oversight of the Department of Energy's efforts to promote green energy. After Solyndra went bankrupt in August of last year, major questions arose about the nature of the decision-making process at the DOE and how safe American taxpayers were in light of the risks associated with the decisions made by political appointees at the Department.

It is becoming abundantly clear that billions of dollars of the public's money was put at undue risk. The Committee's investigation has revealed a pattern of incompetence, carelessness, and cronyism at President Obama's Department of Energy. The DOE Inspector General has testified that the money given to the Department via the stimulus was akin to attaching a "garden hose to a fire hydrant." DOE was flooded with cash and did not have the infrastructure to spend it in a sound fashion.

Abound Solar received a \$400 million loan guarantee from DOE and is the third major bankruptcy within the DOE's loan portfolio. The decision to grant this company taxpayer support will end up costing taxpayers up to \$70 million. Had it not been for the attention drawn to problems with the loan program, DOE officials could have continued running the office in a cavalier fashion and the losses may have been much greater.

As defenders of the administration's green energy agenda are likely to point out, letters were written by both Democrats and Republicans to the DOE supporting Abound. Ultimately, however, the decision to issue this loan guarantee, despite overwhelming evidence that the company was a bad bet, fell on the shoulders of DOE. To a large degree, this decision rested with two of the individuals testifying here today, the former and current heads of the DOE's loan program office, Mr. Silver and Mr. Frantz. These two political appointees at the front lines of the loan program were responsible for safeguarding taxpayers from undue risk. They failed in that task.

In the case of Mr. Silver, instead of protecting taxpayers, evidence has emerged that he actively aided companies in pushing through their loan guarantees against despite the risks to taxpayers.

The close political and financial ties many of these companies had to the Obama Administration are remarkable. We have a trillion dollar deficit and sky-high unemployment and instead of getting people back to work, tax dollars were directed to friends and political allies. Allowing the DOE to play venture capitalist gods with the people's money is a mistake we should never allow to happen again.

For nearly two months, Chairman Issa and I have been requesting that Secretary Chu come back to testify before the Committee to explain developments uncovered in our investigation. So far Secretary Chu has been unwilling to comeback and explain these developments. In fact, the DOE has obstructed our efforts at every step of the way. Just this week, the DOE actively interfered with our efforts to obtain documents from Mr. Silver prior to this hearing.

Many people don't realize that the Obama Administration is not the first to experience the folly of loan guarantees. When President Carter authorized 20 billion dollars for an alternative energy loan guarantee program taxpayers lost a tremendous amount of money. Afterward,

many agreed we should never issue loan guarantees for clean energy projects again. That debacle is detailed in the Committee's report released in March of this year.

However, there are another three companies in bankruptcy, and, unfortunately, it seems safe to say that Abound will not be the last to fail.

I did not vote for the stimulus, which provided these funds. And frankly, I find it absurd that the President is trying force expensive so-called green energy down the throats of the American people. However, despite my disagreements on the policy, I think we can all agree that there is something fundamentally flawed about the implementation of this policy by the Department of Energy and its loan program office, which has rewarded friends of the Administration at the expense of the American people.