An Investigation Of Solyndra And The Department Of Energy Disasters

By The Internet

Revision 1.5

A Crime Investigation

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Overview:

The Solyndra taxpayer, technology, financial and political disasters that began during the reign of Steven Chu at the Department of Energy typified the overt, organized crime, corruption and crony malfeasance of the situation. This trend was created by the link between the U.S. Department of Energy and audacious kick-back schemes created by Silicon Valley campaign financiers and the 2008 White House. This is the story of the racketeering schemes and scams that attempted to steal trillions of dollars of taxpayer cash, in plain sight, under the cover of a "national economic emergency". This free public-authored WIKI Book is a non-commercial documentation of those crimes.

Solyndra's Whorehouse Lender

- By Bruce Krasting, My Take On Financial Events

If you want to find out what happened with Solyndra you have to follow the money. I did. The half billion dollars of taxpayer dough that is probably lost in Sol came from the Federal Financing Bank ("FFB"). It's worth a look at this bank to see what else is going on.

FFB is a bank that is owned and controlled by the US Treasury. The chairman of the Board is the TSec. (Tim Geithner). With the (big) exception of the Post Office all of the loans at FFB are guaranteed by government agencies. Technically speaking, FFB has no risks on loans guaranteed by an agency like the DOE. But I don't think that should absolve Tim Geithner of any responsibility regarding the losses the country faces with Solyndra. If he, (*or anyone else at Treasury*) puts their pen to a ½ billion loan, **they better well know where the taxpayers money is going**. That didn't happen.

FFB has been around for 40+ years. I believe it has always been a bank that has been used and abused by whoever happened to be running the show at Treasury. For example; from 9/30/2008 (*Pre - Tim and O*) to 9/30/3009 (*Post - Tim and O*) the FFB lent out $17.1 billion to the nice folks at the National Credit Union Administration's "**Liquidity Fund**". NCU is the guarantor of the deposits in the country's Credit Unions (similar to FDIC). They were up against it in 2009. They had no money left in the till to insure that those deposits would be safe. A bailout was needed to avoid a crisis. But rather than have a public debate about this, the FFB just borrowed some money and wrote a check to NCU. **Problem solved**.

The following are the balance sheet assets of the FFB for fiscal year end 2008 and 09. **Note that there were no outstanding loans guaranteed by the DOE in 08**. But a year later the number had jumped up to nearly a Bil. It was clear back then that the FFB was rapidly becoming a policy tool of the new

administration. By June 30th 2011 the DOE-guaranteed loans at FFB has grown to $5.2B. Clearly the Administration is (*was?*) using the bank to facilitate its objectives.

FEDERAL FINANCING BANK
Notes to Financial Statements
September 30, 2009 and 2008
(Dollars in thousands)

Loans receivable at September 30, 2009 and 2008, consist of the following:

Agency	2009	2008
Rural Utilities Service, Department of Agriculture	$ 25,391,164	22,693,499
Credit Liquidity Fund, National Credit Union Administration	18,384,062	1,109,161
U.S. Postal Service	10,200,000	7,200,000
Rural Utilities Service, Department of Agriculture certificates of beneficial ownership	3,047,025	3,632,550
General Services Administration	2,037,215	2,097,721
Department of Energy	907,680	–
Low Rent Public Housing, Department of Housing and Urban Development	586,[illegible]	691,412
Foreign Military Sales, Department of Defense	545,376	680,365
Historically Black Colleges and Universities, Department of Education	453,298	338,466
Ship Leasing, Department of Defense, Navy	–	16,623
Small Business Administration	5,379	10,046
Veteran Administration Transitional Housing Program	4,889	4,940
Federal Railroad Administration, Department of Transportation	1,786	2,035
Total loans receivable	$ 61,564,851	38,476,868

The borrowers identified as the beneficiaries of the FFB's deep pockets include:

Abound Solar
Arizona Solar – UNC
Beacon
Great Basin Transmission
Kahuku Wind Power
Solyndra
Solar Partner I
Solar Partner II
And Solar Partner(s) III – VIII

The names on this list are the problems-to-be for the DOE. (*I can't wait to find out who we are partnering up with on the I – VIII deals)*

The FFB/DOE has also been lending big bucks to some well know names.

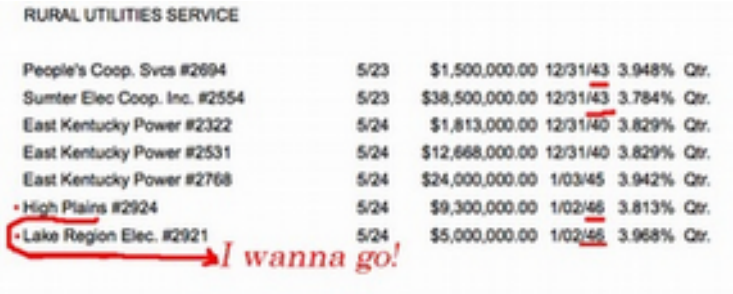
Fisker Automotive, Inc.
Tesla Motors, Inc.
Ford Motors

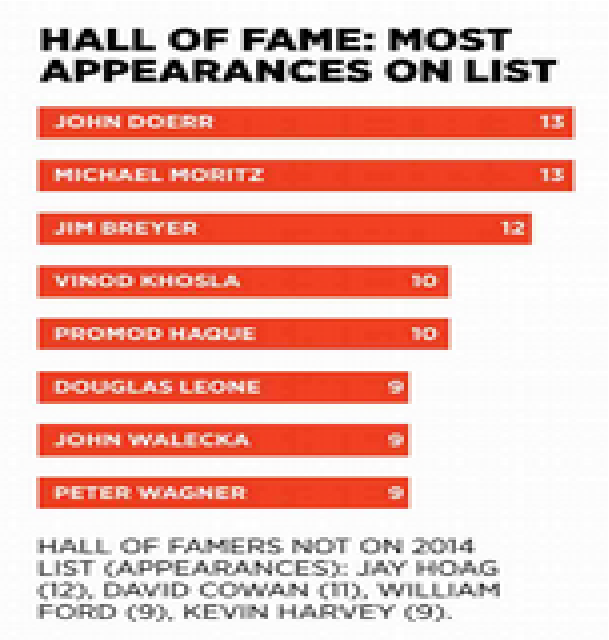
These successful companies owe the FFB a total of $3.8 billion. There is one company that I don't recognize. But they got $35mm in May at a real fine rate:

The Post Office has $12.9 large out with FFB. The PO has a debt limit of $14b. They will hit that in 2012 (and then go broke). The FFB has been funding the operating deficits at the PO for years. When O took office it was $7b. Playing, "Hide the losses at the PO**" is a very old game in D.C.**

The FFB also has an active role in providing the much needed lucre for Foreign Military Sales. *As of June 30 there was $349mm of IOUs. (I wonder who those "I"s are. Probably stable governments*, right?) If you're keeping score, the amount outstanding when Bush left office was 50% higher than today.

$33 billion (61% of FFB's book) is out to Rural Electrics. It would appear that many parts of the country don't have adequate utilities. Nor do they have the resources to fix the problems. The solution has been to lend them dirt-cheap money with functionally no maturity. This is just a silly accounting game to avoid recognizing that needed infrastructure expense(s) should have been in the budget long ago. This is a close-up of a section of the FFB report:





Note the long maturities and % rates. 35-year money for **Lake Land** (*sounds like a nice place*) at Treasuries +30. The following is a pic of all the re-financings for May and June. I shrunk it because it would just clutter the page; *it's that long*. Blow it up on your own or go to the **FFB site**

and look up Press Releases. **This goes on every month of the year.** This stinks of boondoggle and pork. What are the administrative costs to oversee this? **There has to be a better way.**

I'm all for education. We're dead in the water without it. I think there is a role for the government to assist in this. **But the FFB?** *Why are they making loans?* Is this just another way to avoid an expense? What are these guys in D.C. thinking? Is everything "*on the arm*" down there? Again, a close up and the totals for two months. This is silly, right?

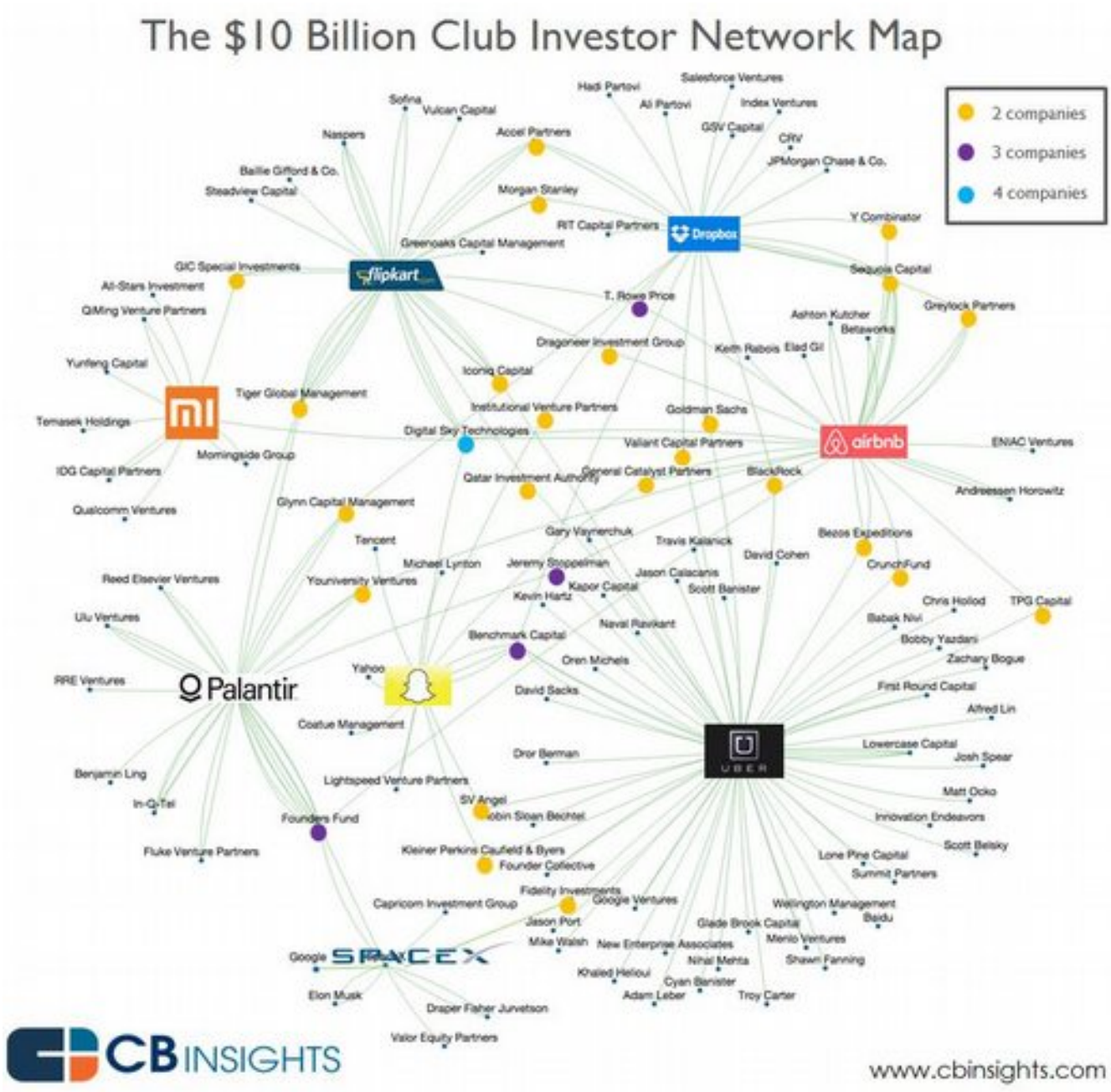
A minor bad loan is the $493mm of Hope Now Bonds. A good chunk of this is still in cash. But not for long. Treasury is going to use some of this money for the big mortgage ReFi that is in the offing. When that happens there will be hope of repayment of the Hope Bonds.

There is one more attractive feature for the Chairman of the FFB. With the exception of the notes from the PO, it's all off balance sheet. When the "Debt to the Penny" calculation is made by the Treasury, the (net of PO) $33b at FFB borrowings are excluded.

In Wall Street terms, that makes the FFB a SPIV and it's a whorehouse.

Note: I've written about the FFB before. I smelled trouble with this bank. My nose was working.

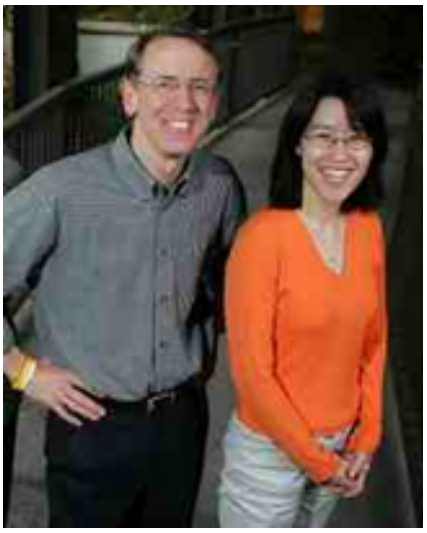
Here, **here**, **here** or **here**. ***THIS CHART SHOWS YOU HOW THE CROOKS WERE FINANCIALLY CONNECTED:***



How the crooks hooked up together (above)

TOP OF THE CROP

FIRMS THAT SCORE BIG EXITS PUT THE MOST PARTNERS ON THE MIDAS LIST.



John Doerr and his partner Ellen Pao. He arranged much of the Cleantech Scam. She later sued him in a famous sex abuse lawsuit.


Top Investors In The Current Billion Dollar Club
Sequoia Capital 13
KPCB 12
T. Rowe Price 11
A16Z 10
Accel Partners 10
Goldman Sachs 9
NEA 9
Tiger Global 8
stripe
houzz
airbnb
MongoDB
Square
Instacart
EVERNOTE
sunrun
JAWBONE
Jasper
Dropbox
Bloomenergy
DocuSign
JAWBONE
UBER
magicleap
Square
slack
houzz
Instacart
EVERNOTE
PURESTORAGE
MongoDB
Dropbox
cloudera
airbnb
Lookout
houzz
wework
Lookout
JAWBONE
slack
stripe
Pinterest
FANATICS
airbnb
Instacart
magicleap
DocuSign
RAZER
Lookout
slack
cloudera
LEGENDARY
Dropbox
sunrun
Bloomenergy
GILT
Dropbox
NUTANIX
UBER
Square
Lookout
wework
Bloomenergy
Good
GILT
MongoDB
EVERNOTE
houzz
UBER
AUTOMATTIC
Credit Karma
PURESTORAGE
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Certifications, Apostilles & Authentication of Documents

Frequently Asked Questions View Search Results

Entity Details

THIS IS NOT A STATEMENT OF GOOD STANDING

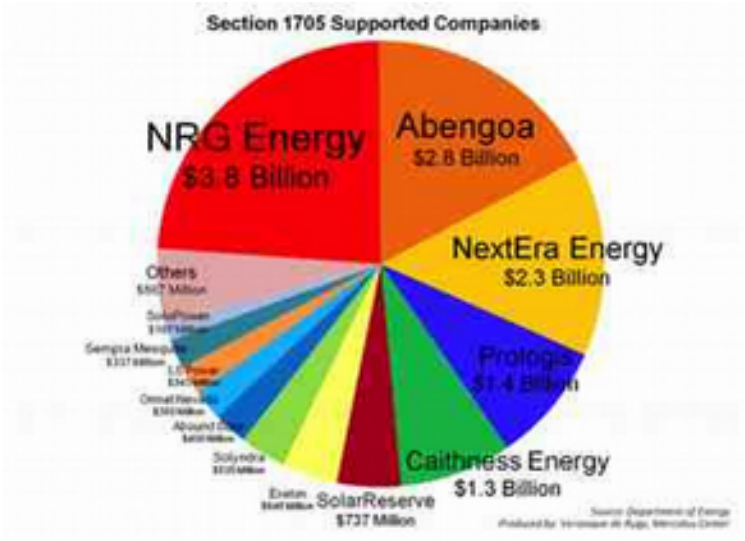
File Number:	5017141	Incorporation Date / Formation Date:	07/28/2011 (mm/dd/yyyy)
Entity Name:	SOLYNDRA SOLAR II LLC		
Entity Kind:	LIMITED LIABILITY COMPANY (LLC)	Entity Type:	GENERAL
Residency:	DOMESTIC	State:	DE

???

REGISTERED AGENT INFORMATION

Name:	CORPORATION SERVICE COMPANY		
Address:	2711 CENTERVILLE ROAD SUITE 400		
City:	WILMINGTON	County:	NEW CASTLE
State:	DE	Postal Code:	19808
Phone:	(302)636-5401		

2005	May	• Solyndra founded.
	July	• Bush Administration signs the Energy Policy Act of 2005, creating the DOE 1703 Loan Guarantee Program.
2006	December	• Solyndra applies for 1703 loan.
2007	Late 2007	• DOE approves Solyndra loan as one of 16 companies ready to move forward with application process.
2008	November	• Silicon prices remain high. • Solyndra is very attractive to investors. • Raising $144 million; total now $450 million.
2009	January	• Bush administration takes Solyndra before a DOE credit review committee that remands the loan back to DOE for more information.
	March	• The committee moves the strengthened loan application forward.
	June	• Chinese silicon begins to hit the market and prices begin to drop. In the next two years PV prices would drop 50%.
	September	• Solyndra raises an additional $219 million venture capital. • The DOE closes on the $535 million loan guarantee after six months of due diligence. • Application to closing the process took 3 years.
	January-June	• PV prices continue to slide • Investors and analysts question Solyndra's ability to compete. • Solyndra pulls its IPO. • Raises another $175 million from investors.
	May	• Obama visits Solyndra facility, is photographed holding tubes while talking with founder Chris Gronet.
	July	• Gronet replaced as CEO.
	November	• Solyndra closes Fab 1 facility. • Company concentrates on DOE funded Fab 2, on time and on budget.
2011	February	• Liquidity crisis. • Investors provide $75 million to restructure loan guarantee. • DOE chooses to give the company a fighting chance.
	March	• Republican Representatives complain that DOE funds are not being spent quickly enough. • House Energy and Commerce Committee Chairman Fred Upton (R-MI): "despite the Administration's urgency and haste to pass the bill [the American Recovery and Reinvestment Act] ... billions of dollars have yet to be spent."
	August	• Amidst falling PV prices, analysts worry that Solyndra cannot compete. • DOE refuses to restructure the loan a second time.
	September	• Solyndra declares bankruptcy. • Closes manufacturing facility and lays off 1,100 workers.


Section 1705 Supported Companies
NRG Energy
$3.8 Billion
Abengoa
$2.8 Billion
NextEra Energy
$2.3 Billion
Others
Caithness Energy
$1.3 Billion
SolarReserve
$737 Million


Federal Government
Energy Secretary (Clinton)
Energy Secretary (Clinton)
Energy Secretary (Clinton)
Staff : Energy Sec Richardson (Clinton)
WH Climate Change Task Frc (Clinton)
Jt. Chiefs of Staff (Clinton)
WH Office on Envir Policy (Clinton)
Staff: Sen. Cantwell (D) Rep. Dicks (D)
Staff: Sen. Cantwell (D)
Staff: Sen. Stabenow (D)
Staff: Rep. Dingell (D)
Energy Counsel: Sen. Bayh (D)
Staff: Rep. McDermott (D)
Chief of Staff: Sen. Moynihan (D)
Staff: Sen Conrad (D)
EERE, Energy Department (Obama)
Hazel O'Leary
Federico Pena
Bill Richardson
Rich Glick
Roger Ballentine
Wesley Clark
Murray Liebman
Steve McBee
Angela Becker-Dippmann
Noushin Jahanian
Dennis Fitzgibbons
Genevieve Cullen
James Allen
Nicholas Allard
Tobyn Anderson
Cathy Zoi
Green Energy
Exec VP (Northern States Power Co.)
Sr Adviser (Vestar Capital Partners)
Board Member (Terra Solar USA)
VP, Gov't Affairs (Iberdrola)
Board of Directors (Paragon Air. Tech.)
Co-Chairman (Growth Energy)
Lobbyist (Sure Power Corp.)
Lobbyist (Solyndra)
Lobbyist (Solyndra)
Lobbyist (Solyndra)
VP, Federal Affairs (First Solar)
VP/Lobbyist (EDTA)
Gov't Rel Rep (Puget Sound Energy)
Advisory Board (Clean Energy Sys)
VP/Lobbyist (Lighthouse Energy Grp)
Partner (Silver Lake Kraftwerk Fund)
GEKE.US

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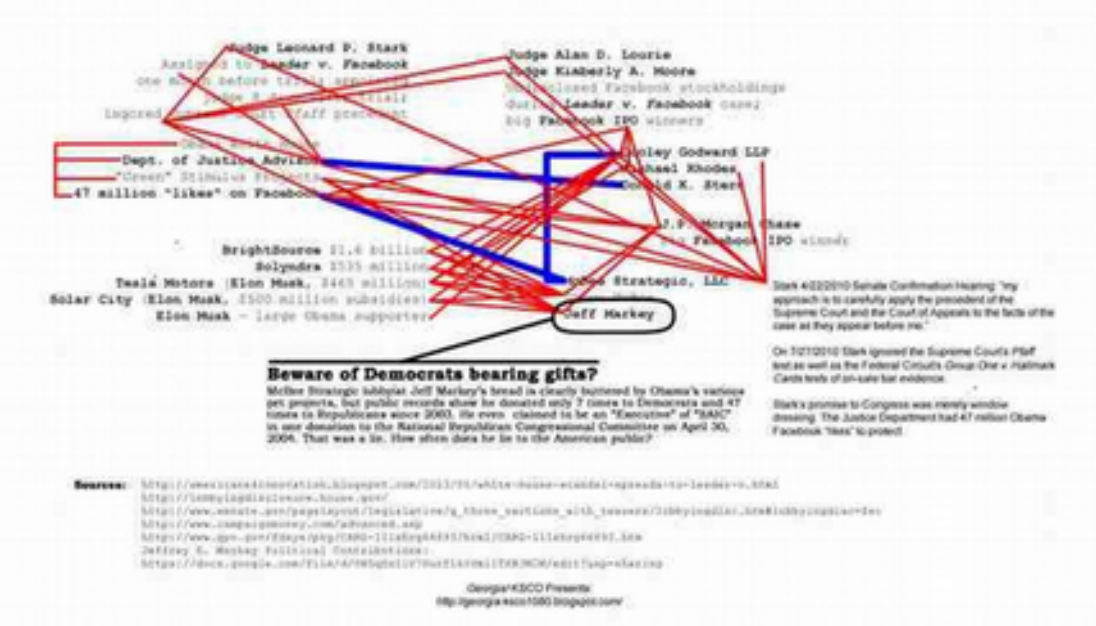

Judge Leonard P. Stark
Judge Alan D. Lourie
Judge Kimberly A. Moore
Dept. of Justice Advisor
47 million "likes" on Facebook
Morgan Chase
BrightSource
Solyndra
Tesla Motors (Elon Musk,
Solar City (Elon Musk,
Elon Musk – large Obama supporter
Jeff Markey
Beware of Democrats bearing gifts?
McBee Strategic lobbyist Jeff Markey's bread is clearly buttered by Obama's various pet projects, but public records show he donated only 7 times to Democrats and 47 times to Republicans since 2003. He even claimed to be an "Executive" of "BAIC" in one donation to the National Republican Congressional Committee on April 30, 2004. That was a lie. How often does he lie to the American public?
Sources:
Georgia4:50CO Presents:

The Solyndra Due Diligence Lie

How could the biggest, most expensive, most "thorough investigation" in DOE history have resulted in all of the biggest failures in DOE history unless Solyndra, and the rest, were entirely just campaign finance kickback scams?

U.S. Department of Energy Page 1 of 2

United States Department of Energy
Office of Public Affairs
Washington, D.C. 20585

News Media Contact(s):
(202) 586-4940

For Immediate Release
March 20, 2009

Obama Administration Offers $535 Million Loan Guarantee to Solyndra, Inc.
Investment Could Lead to Thousands of New Jobs

Washington, DC – Energy Secretary Steven Chu today offered a $535 million loan guarantee for Solyndra, Inc. to support the company's construction of a commercial-scale manufacturing plant for its proprietary cylindrical solar photovoltaic panels. The company expects to create thousands of new jobs in the U.S. while deploying its solar panels across the U.S. and around the world.

"This investment is part of President Obama's aggressive strategy to put Americans back to work and reduce our dependence on foreign oil by developing clean, renewable sources of energy," Secretary Chu said. "We can create millions of new, good paying jobs that can't be outsourced. Instead of relying on imports from other countries to meet our energy needs, we'll rely on America's innovation, America's resources, and America's workers."

Secretary Chu is moving aggressively to accelerate important Department of Energy investments that can create jobs and transform the way America uses and produces energy. This allows the Department of Energy to offer its first loan guarantee within the first two months of the Obama Administration. This loan guarantee will be supported through the President's American Recovery and Reinvestment Act, which provides tens of billions of dollars in loan guarantee authority to build a new green energy economy.

Solyndra's photovoltaic systems are designed to provide the lowest installed cost and the highest solar electricity output on commercial, industrial and institutional roof tops, which are a vast, underutilized resource for the distributed generation of clean electricity. Solyndra's proprietary design transforms glass tubes into high performance photovoltaic panels which are simple and inexpensive to install. By replacing power generated from fossil fuel sources, the electricity produced from the solar panels will reduce emissions of greenhouse gases.

Based in Fremont, CA, Solyndra is currently ramping up production in its initial manufacturing facilities. Once finalized, the DOE loan guarantee will enable the company to build and operate its manufacturing processes at full commercial scale.

Solyndra estimates that:

- The construction of this complex will employ approximately 3,000 people.
- The operation of the facility will create over 1,000 jobs in the United States.
- The installation of these panels will create hundreds of additional jobs in the United States.
- The commercialization of this technology is expected to then be duplicated in multiple other manufacturing facilities.

Secretary Chu is offering the loan guarantee by signing a "conditional commitment" today, following approval this week by the Department of Energy's Credit Review Board. Just as homebuyers who have been approved for a loan are

http://www.lgprogram.energy.gov/print/032009.html 5/19/2009

required to meet certain conditions before closing, the conditional commitment will require Solyndra to meet an equity commitment as well as other conditions prior to closing. Today's action signals the Department's intent to move forward on Solyndra's application for $535 million loan guarantee provided the company meets its obligations.

Before offering a conditional commitment, DOE takes significant steps to ensure risks are properly mitigated for each project prior to approval for closing of a loan guarantee. The Department performs due diligence on all projects, including a thorough investigation and analysis of each project's financial, technical and legal strengths and weaknesses. In addition to the underwriting and due diligence process, each project is reviewed in consultation with independent consultants.

Secretary Chu initially set a target to have the first conditional commitments out by May – three months into his tenure - but today's announcement significantly outpaces that aggressive timeline. Secretary Chu credited the Department's loan team for their work accelerating the process to offer this conditional commitment in less than two months, demonstrating the power of teamwork and the speed at which the Department can operate when barriers to success are removed.

U.S. Department of Energy, Office of Public Affairs, Washington, D.C.

$olyndra Received More $timulus $$$ than 35 States Received for Highways, Roads, and Bridges

$olyndra's Bill: $535,000,000

State	Total Distribution	State	Total Distribution
Alabama	513,692,083	Mississippi	354,564,343
Alaska	175,461,487	Montana	211,793,391
Arizona	521,958,401	Nebraska	235,589,279
Arkansas	351,544,468	Nevada	201,352,460
Colorado	403,924,130	New Hampshire	129,440,556
Connecticut	302,053,956	New Mexico	252,644,377
Delaware	121,828,650	North Dakota	170,126,497
D.C.	123,507,842	Oklahoma	464,655,225
Hawaii	125,746,380	Oregon	333,902,389
Idaho	181,934,631	Rhode Island	137,095,725
Iowa	358,162,431	South Carolina	463,081,483
Kansas	347,817,167	South Dakota	183,027,359
Kentucky	421,094,991	Utah	213,545,653
Louisiana	429,859,427	Vermont	125,791,291
Maine	130,752,032	Washington	492,242,337
Maryland	431,034,777	West Virginia	210,852,204
Massachusetts	437,865,255	Wisconsin	529,111,915
Minnesota	502,284,177	Wyoming	157,616,058

Source: U.S. Department Transportation Federal Highway Administration

Apportionment of Funds for Highway Infrastructure Investment Pursuant to the American Recovery and Reinvestment Act

Goldman Sachs Was The Devil In All Of The Details

PROOF DISCLOSED SHOWING THAT GOLDMAN SACHS AND TESLA ARE RUNNING A PONZI SCHEME AND THAT SACHS RAN SCAMS WITH SOLYNDRA AND OTHERS

– Goldman Sachs was involved in each of the dirty Steven Chu Department of Energy Cleantech Crash Schemes that lost America taxpayers nearly a trillion dollars but gained Goldman Sachs billions of dollars of personal profits from stock market pumps and fee skims

– Investigators have long charged Tesla and Sachs with running a criminal banking scam but Obama Administration officials continue to protect them because they funded the Obama Administration.

– Goldman Sachs and Tesla were the key promoters of the invasion of Afghanistan for the purpose of taking over the lithium mines in Afghanistan for Musk's cars.

- Charges of "absolute criminality" filed against Tesla and Sachs in Public lawsuit at: https://ricotsla.wordpress.com

Goldman's tangled relationship with Tesla draws fire

By Claudia Assis and Ciara Linnane

Goldman to be co-lead on $2 billion Tesla share sale just hours after upgrading stock*But since the Obama Administration has ordered the SEC to NOT investigate it's campaign backers, nothing is expected to happen.)*

Tesla Motors Inc. announced that Goldman Sachs Group Inc. GS, -3.28% is one of the*But since the Obama Administration has ordered the SEC to NOT investigate it's campaign backers, nothing is expected to happen.)* lead book runners on the electric-car maker's $2 billion secondary offering of shares.

That news arrived just hours after Goldman analysts upgraded the stock to buy, predicting that Tesla TSLA, +1.91% would need to raise about $1 billion from capital markets to be able to fuel its expansion. That includes making 500,000 vehicles a year by 2018 and getting its mass-market all-electric sedan, the Model 3, off the factory floor by late next year.

While secondary stock offerings aren't subject to the same blackout period that prevents investment

banks from publishing research on a stock during an initial public offering, the timing of the two announcements looks uncomfortably close.

*But since the Obama Administration has ordered the SEC to NOT investigate it's campaign backers, nothing is expected to happen.)*Investment banks are obliged to keep a "Chinese Wall" between their research and investment-banking teams to avoid any potential conflict of interest. Goldman said it has fully complied with that rule.

"Our research is independent," the bank said in emailed comments. "We followed all of our standard policies and procedures with respect to our research publication on Wednesday."

Tom Gorman, a partner at law firm Dorsey & Whitney LLP and former lawyer for the Securities and Exchange Commission, said the timing of the two announcements is likely a coincidence, although he acknowledged the appearance is troubling. (*But since the Obama Administration has ordered the SEC to NOT investigate it's campaign backers, nothing is expected to happen.)*

"The whole question of research overlapping with investment banking has long been a hot topic and one that is regularly looked at by the SEC," he said. "I would fully expect that Goldman has such policies in place."

Goldman has worked hard in recent years to improve its reputation, which was battered by the 2008 financial crisis and Rolling Stone magazine's infamous description of the bank as a "vampire squid wrapped around the face of humanity."

Chief Executive Lloyd Blankfein has become a regular fixture on financial TV and at conferences as the bank strives to present itself in a warmer light.

But that hasn't stopped it from being the poster child for corporate villainy, with the name popping up regularly in the presidential campaigns of both political parties as a term to describe the dark side of boardroom politics.

Twitter Inc. users responded to the two developments with a mix of acrimony and sass:

> $GS Goldman upgrades $TSLA this morning...Secondary comes out after the close...leading underwriter...Goldman @ajwiIIiams
>
> — Stephen Catignani (@scatignani) May 18, 2016
>
> Lol who wants to bet Goldman is an underwriter ? https://t.co/7dFmBxnxBv
>
> — Chris Muoio (@cpmuoio) May 18, 2016
>
> Dear Goldman Sachs:
> We're glad you're bullish on our stock.
> Because we need to sell $1.4b more of it.
> Love, Tesla$TSLA

— Kayla Tausche (@kaylatausche) May 18, 2016

Tesla upgraded by Goldman Sachs earlier in day. $GS named as one of underwriters for $TSLA stock offering after bell. Circle of life. Sachs and Tesla are, clearly practicing Flash Boy pump-and-dump skims enabled by Google search engine rigging.

U.S. House of Representatives

Committee on Oversight and Government Reform

The Department of Energy's Disastrous Management of Loan Guarantee Programs

STAFF REPORT
U.S. HOUSE OF REPRESENTATIVES
112TH CONGRESS
March 20, 2012

THE U.S. CONGRESS REPORTED:

"After conducting a substantial review of the Department of Energy's (DOE) loan guarantee program, it is clear that the significant losses absorbed by taxpayers as a result of Solyndra's collapse is just the beginning. The investigation conducted by the House Committee on Oversight and Government Reform has uncovered numerous examples of dysfunction, negligence and mismanagement by DOE officials, raising troubling questions about the leadership at DOE and how it has administered its loan guarantee programs. ... DOE has overseen a process wrought with misdirection, changing and expanding requirements, unexplained delays, gross mischaracterizations, and a never-ending cycle of excuses. Not only does it appear that DOE purposely directed taxpayer funds at a failing enterprise, DOE's action robbed taxpayers of genuine investment toward renewable energy."

The George Mason University Study

MERCATUS CENTER
George Mason University
Bridging the gap between academic ideas and real-world problems

TESTIMONY

ASSESSING THE DEPARTMENT OF ENERGY LOAN GUARANTEE PROGRAM

VERONIQUE DE RUGY
Senior Research Fellow

In his famous book *Economics in One Lesson*, economist Henry Hazlitt wrote, "Government encouragement to business is sometimes as much to be feared as government hostility."[1]

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 bearing the cost of the loan.

For obvious reasons, more than any other recent events, the waste of taxpayers' money due to Solyndra's failure has attracted much attention. However, 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 (1) every loan guarantee program transfers the risk from lenders to taxpayers, (2) is likely to inhibit innovation, and (3) increases the overall cost of borrowing. At a minimum, such guarantees distort crucial market signals that determine where capital should be invested, causing unmerited lower interest rates and a reduction of capital in the market for more worthy projects. At their worst, they 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.[2]

Yet, these loan programs remain popular with Congress and the executive. That's because in general most of the financial cost of these guaranteed loans will not surface for many years. That means that Congress can approve billions of dollars to benefit special interests, with little or no immediate impact to federal appropriations in the short term, because they 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 Vehicle Manufacturing (ATVM) loans. Here are descriptions of the three loan programs, as explained by DOE:[3]

1. Henry Hazlitt, *Economics in One Lesson*, in Chapter VI Credit Diverts Production, Laissez-Faire Books, Benicia, CA, 1946, p. 27.
2. Matt Mitchell, The Pathology of Privileges (working paper, Mercatus Center at George Mason University, July 2012).
3. United States Department of Energy, accessed June 13, https://lpo.energy.gov/.

For more information or to meet with the scholars, contact
Robin Bowen, (703) 993-8582, rbowen3@gmu.edu
Mercatus Center, 3301 Fairfax Drive, 4th Floor, Arlington, VA 22201

- 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.

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).[4] 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.[5] 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 the following: 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.[6]

As with other loan programs, to prevent taxpayers' exposure, the federal government has established a credit subsidy fee. In this case, the cost of the fee is determined by DOE, with guidance from 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.

This is not the case 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."[7]

DOE does not provide loans directly. Instead, borrowers have to apply to qualified finance organizations. These lenders are expected to perform a complete analysis of the application. Then DOE reviews the lender's credit analysis rather than conducting a second analysis. DOE still 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

4. Section 1703 of the Energy Policy Act of 2005 (P.L. 109-58).
5. Section 1705 of the Energy Policy Act of 2005 (P.L. 109-58). Section 1705 was created by amending the EnergyPolicy Act of 2005 through the American Recovery and Reinvestment Act of 2009 (P.L. 111-5)
6. However, the Office of Management and Budget has calculated that only 55 percent of loan can be recouped from the sale of assets.
7. 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-8mzszy/$File/CRSSolar.pdf.

not have gotten capital on their own). Absent such a private-sector deficiency, the DOE's activities would simply be a wasteful at best, politically motivated at worst subsidy 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 not otherwise serve or would supply at suboptimal levels. But do they?

In describing its role in the economy, the DOE proclaims that its loans help save the planet[8] by helping to secure funding for the earlier-stage technologies or the later commercialization stage—known as the manufacturing "Valley of Death."[9] It also claims that the 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—namely, 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.

A close examination demonstrates that neither stated DOE policies nor its actual lending patterns provide evidence that its loan guarantees serve any of its defined public policy purpose.

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 14 percent through the ATVM.[10]

Loan Guarantees by Program

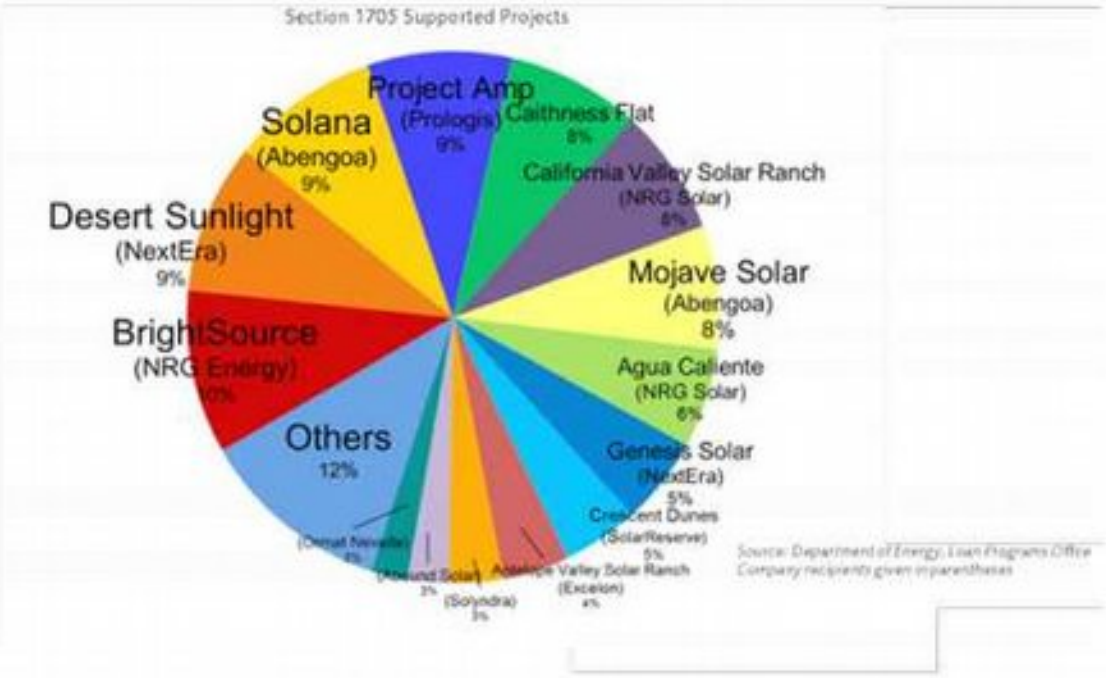
Source: U.S. Department of Energy, Loan Guarantee Programs

The 1705 (under which Solyndra received funding) authorized loan guarantees for programs for "certain renewable energy systems, electric power transmission systems and leading edge biofuels projects that commence construction no later than September 30, 2011." This program is a product of the economic stimulus bill of 2009. As mentioned before, this program offered borrowers better terms than the 1703—in some cases the government paid for a substantial fee out of appropriated funds, one that is the borrower's responsibility under the 1703. Also, many 1703-eligible projects were also eligible under the 1705.

The data shows that:

8. 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 (Nonproliferation Policy Education Center, 2012)
9. Sustainablebusiness.com, "Clean Energy: Crossing the Valley of Death," June 2010, http://www.sustainablebusiness.com/index.cfm/go/news.display/id/20544.
10. U.S. Department of Energy, Loan Programs Office: https://lpo.energy.gov/?page_id=45

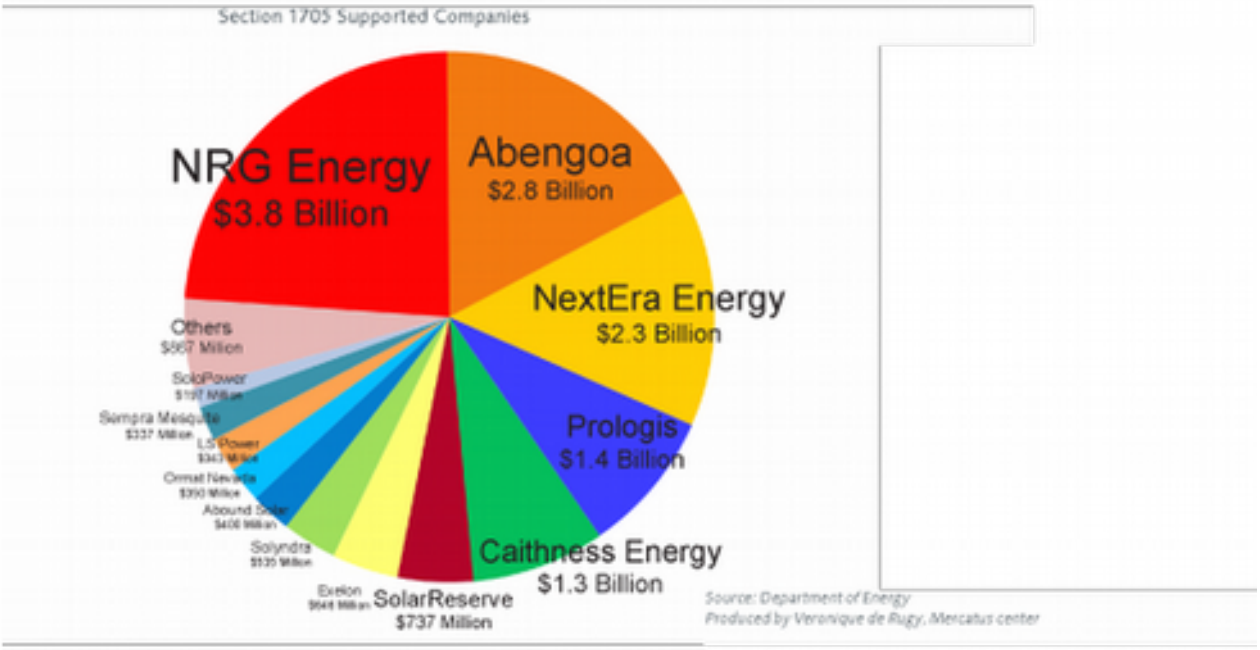
- 26 projects were funded under the 1705, and guaranteed roughly $16 billion in total.
- Some 2,378 permanent jobs were claimed to be created under the program. This works out to a cost per job of $6,731,034.
- The recipient of the most 1705 loans is NRG Energy Inc. (BrightSource).
- NRG Energy Inc. (BrightSource) received $1.6 billion (11 percent of the overall amount guaranteed under the 1705).
- The top 10 recipients of loans under the 1705 program:
    - Are all solar generation companies,
    - Received 76 percent of the overall amount guaranteed,
    - Received $12.2 billion in loan guarantees, and
    - Included 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.
- Solyndra, the now bankrupted solar company, received $535 million in loan guarantees or 3.34 percent of the total.
- Cogentrix, a wholly owned subsidiary of the *Goldman Sachs* Group Inc, received a $90 million guarantee from the government.



If we organize the data by companies receiving 1705 loans, we find:

- The recipient of the most 1705 loans is NRG Energy Inc.
- NRG Energy Inc. received $3.8 billion (23.7 percent of the overall amount guaranteed under the 1705).
- Four companies received 64 percent, or $10.3 billion, of the total amount guaranteed under the 1705 program. These companies are:
    - NRG Energy,
    - NextEra Energy,
    - Arbogea, and
    - Prologis.

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 it could create 5 million jobs in America through investment in green technology.



Also, to the extent that "green jobs" were created, the $6.7 million cost per job is quite spectacular. This trend and number probably dismisses this particular loan program as a job program.

Second, as we can see here, under the 1705 program most of the money has gone to large and established companies rather than startups. These include 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 com-

panies 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.[11]

This probably means that if there were an actual gap between the supply and demand for loans for energy companies, startups, or 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 very much resembles cronyism.

Third, 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 additional grants under the American Recovery and Reinvestment Act (ARRA). For example, Prologis (which benefitted from $1.4 billion in subsidized loans) received a grant for $68,000 for the purpose of "rent for warehouse space" under the Recovery Act.

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 for NRG Energy distributed under the Section 1705 Loan Program.

NRG will also be eligible to receive $430 million from the Department of the Treasury.[12] In addition, many companies benefited from the Department of Treasury 1603 grants.[13]

Quoted in the *New York Times* recently, NRG's chief executive, David W. Crane, explained how his company and its partners have secured $5.2 billion in federal loan guarantees, plus hundreds of millions in other subsidies for four large solar projects. "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 in a recent interview. "It is just filling the desert with panels."[14]

Examples of companies benefitting from multiple assistance programs initiated during this period abound. 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 Ex-Im 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.

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

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11. CNN Money, America's Fortune 500 Companies. http://money.cnn.com/magazines/fortune/fortune500/2012/snapshots/10777.html
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 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. http://www.exim.gov/open/
17. Tim Carney, Firm Sells Solar Panel to Itself – Taxpayers Pay, The Washington Examiner, March 18th 2010, http://campaign2012.washingtonexaminer.com/article/firm-sells-solar-panels-itself-taxpayers-pay/434251.

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]

This double-dipping by energy companies isn't new, unfortunately. 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

A great deal of attention has been focused on Solyndra, a startup that received $528 million in federal loans to develop cutting-edge solar technology before it went bankrupt, had to lay off over a thousand workers, and left taxpayers to foot the bill. Obviously, the considerable waste of taxpayers' money is upsetting. But it is only one aspect of the fundamental problems caused by loan guarantee programs in general, and DOE's clean energy loan programs in particular.

1. Socialized Losses and Privatized Gains

Historically, loans guaranteed by the government have had a higher default rate than the loans issued by the private sector without government guarantee. 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.

Also, the Congressional Budget Office has calculated that the risk of default on the DOE's nuclear loan guarantee program, for example, is well above 50 percent.[20] In 2011, the CBO updated its study and replaced the embarrassing default rate with a list of variables affecting the rate.[21] While it doesn't provide a specific rate, the report asserts that higher equity financing of these projects would reduce the risk of default. However, this is rarely the case, 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."

Also, if the loan isn't repaid, then the cost of the investment is to taxpayers. However, if the loan is repaid as expected, the lender will benefit from all the interest payments it collected thanks to a fairly risk-free loan, and the borrower will collect the fruit of its successful business venture. In other words, loan guarantee programs are yet another way that the federal government socializes losses while privatizing benefits.[22]

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18. Tim Carney, Firm Sells Solar Panel to Itself – Taxpayers Pay, The Washington Examiner, March 18th 2010, http://campaign2012.washington-examiner.com/article/firm-sells-solar-panels-itself-taxpayers-pay/434251.
19. Veronique de Rugy, "Banking on the SBA" (Mercatus on Policy, 2007, Mercatus Center at George Mason University) accessed on June 13, 2012, http://mercatus.org/publication/mercatus-policy-banking-sba.
20. Pamir Wang, "Federal Clean Energy Loan Guarantees: Their Moral Hazards," in Pute Risk: Federal Clean Energy Loan Guarantees ed. Henry Sokolski (Nonproliferation Policy Education Center, 2012)
21. Congressional Budget Office (CBO), "The Cost-Effectiveness of Nuclear Power for Navy Surface Ships," (May 12, 2011), http://www.cbo.gov/publication/41454.
22. Russ Roberts, "Gambling with Other people's money" Mercatus Center at George Mason University, April 28, 2010, accessed June 13, 2012, http://mercatus.org/publication/gambling-other-peoples-money.

2. 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 the lender will effectively vet the quality of the project. Also, the company that borrows the money has less skin in the game than it would if its loan weren't guaranteed. In addition, each time the government bails out a firm or has to shoulder the cost of a loan guarantee that got into financial trouble, it reinforces the signal to borrowers and bankers alike that it's OK 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, putting the fairness of decisions about what firms receive loan guarantees into question.[23] When GAO requested data from the DOE on the status of the applications, the DOE did not have consolidated data readily available and had to assemble these data over several months from various sources. Inadequate documentation and out-of-date review processes reduce the assurance that the DOE has treated applicants consistently.

These findings do not prove the ability of the DOE to fully assess and mitigate project risks. Moreover, while in the absence of government intervention the private sector builds the infrastructure to assess risk, 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 interest in local pork.[24]

The moral hazard of loan guarantees increases when rules intended to prevent the program from being a pure giveaway to companies are removed. This is the case, for instance, when as part of the stimulus bill of 2009, the government lifted the subsidy fees for 1705 loans. This move increases the cost to taxpayers and attracts high-risk companies.

3. Mal-investments

Loan guarantee programs can also have an impact on the economy beyond their cost to taxpayers.

Mal-investment—the misallocation of capital and labor—may result from these loan guarantee programs. In theory, banks lend money to the projects with the highest probability of being repaid. These projects are often the ones likely to produce larger profits and, in turn, more economic growth. However, considering that there isn't an infinite amount of capital available at a given interest rate, loan guarantee programs could displace resources from non-politically motivated 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 signals further. For instance, the data shows that private investors tend to congregate toward government guarantee projects, independently of the merits of the projects, taking capital away from unsubsidized projects that have a better probability of success without subsidy and a more viable business plan. As the Government Accountability Office noted, "Guarantees would make projects [the

23. Government Accountability Office (GAO), 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.
24. King and Montgomery, "Let's Reset," 22.

federal government] assists 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."[25]

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 importantly, 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.[26]

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 instance, was privately financed at the cost of $35 billion, making it one of the most expensive energy projects undertaken by private enterprise.[27] The project was ultimately abandoned in 2011 because of weak customer demand and the development of shale gas resources outside Alaska.[28] However, this 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.[29]

Finally, when the government picks winners and losers in the form of a technology or a company, it often fails. First, the government does not have perfect or even better information or technology advantage over private agents. In addition, decision-makers are insulated from market signals and won't learn important and necessary lessons about the technology or what customers want. Second, the resources that the government offers are so addictive that companies may reorient themselves away from producing what customers want, toward pleasing the government officials.

4. Crowding Out

To some (for example, those lucky enough to receive the loan guarantee), government money may seem to be free. But it isn't, of course. The government has to borrow the money on the open market too. This additional borrowing comes from Americans' savings, as does the money that Americans invest in the private sector's growth. There comes a point when there just aren't enough savings to satisfy both masters. In other words, when government runs a deficit to finance its preferred projects, it can affect private sector access to capital, and lead to a reduction in domestic investment.

Economists use the term "crowding out" to describe the contraction in economic activity associated with deficit-financed spending.[30]

In addition, the competition between public and private borrowing raises interest rates for all borrowers, including the government, making it more expensive for domestic investors to start or complete projects.

Over time, this could mean that American companies will build fewer factories, cut back on research and develop-

25. Wang, "Federal Clean, Energy"
26. Wang, "Federal Clean Energy," 15.
27. 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.
28. Ben Casselman, Alaska Pipeline Scrapped, May 18, 2011, Wall Street Journal, http://online.wsj.com/article/SB10001424052748703509104576329541913338186.html.
29. The Center for the Next Generation website, "Advanced Energy and Sustainability," accessed June 13, 2012, http://www.tcng.org/programs/advanced-energy-and-sustainability.
30. Matthew Mitchell and Jakina Debnam, "In the End, We're all Crowded Out," (working paper, Mercatus Center at George Mason University, 2010), http://mercatus.org/publication/long-run-we-re-all-crowded-out#.ct7.

ment, and generate fewer innovations. As a result, our nation's future earning prospects will dim, and our future living standards could suffer.

5. 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 be made to show a profit under reasonable economic assumptions, private lenders are unlikely to issue a loan. And they would be right not to.

Then why is the federal government still guaranteeing loans? One reason is 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. Congress can approve billions of dollars in loan guarantees with little or no impact to the appropriations or deficit because they are almost entirely off-budget. Moreover, unlike the Solyndra case, most failures take years to occur, allowing politicians to collect the rewards of granting a loan to a special interest while skirting political blame years later when or if the project defaults. It's like buying a house on credit without having a trace of the transaction on your credit report.

It is also easy to understand why companies and company executives benefit from these loans and may seek them out. However, this shouldn't obscure the fact that this preferential treatment comes at the expense of the taxpayer, and ultimately at the expense of our market and political system.

But another potential beneficiary of these loans is the financial institutions that issue them. With other loan programs such as the SBA, there is evidence 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 claims to the cash flows.

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 this is a possibility.

CONCLUSION:

The Department of Energy's loan guarantee programs have been the focus of much public attention since energy company Solyndra went bankrupt last year, leaving taxpayers with a $538 million bill. Of equal concern to the significance of this waste, however, is the distortion and incentives experienced by both lenders and companies that participate in the government loan program, as well as the distortion of market signals. Further looking at where the money is going, the evidence seems to go solidly against the idea that they are achieving their goals. And the systematic economic harm done by rewarding companies that forgo value creation in favor of pursuing financial benefit through the political system creates long term consequences for our economy and our country.

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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.

Report By The U.S. House of Representatives - Committee on Oversight and Government Reform

The Department of Energy's Disastrous Management of Loan Guarantee Programs

STAFF REPORT - U.S. HOUSE OF REPRESENTATIVES - 112TH CONGRESS

(References in red bold are referred-to evidence documents in outside file sets)

March 20, 2012 - **Executive Summary**

After conducting a substantial review of the Department of Energy's (DOE) loan guarantee program, it is clear that the significant losses absorbed by taxpayers as a result of Solyndra's collapse is just the beginning. The investigation conducted by the House Committee on Oversight and Government Reform has uncovered numerous examples of dysfunction, negligence and mismanagement by DOE officials, raising troubling questions about the leadership at DOE and how it has administered its loan guarantee programs.

By the expiration of § 1705 program in September 2011, the DOE had approved 27 projects totaling more than $14.5 billion in guaranteed loans. Inexplicably, DOE management has turned a blind eye to the risks that have been glaringly apparent since the inception of the program.

This report will demonstrate how DOE loan commitments exposed taxpayer funds to excessive risk as a result of DOE's bias toward approving loans without regard to warning signs.

The Committee identified many cases where the DOE disregarded their own taxpayer protections, ignored lending standards and eligibility requirements and, as a result, amassed an excessively risky loan portfolio. After review of internal emails, staff have identified instances demonstrating that when DOE faced barriers that placed loan approvals at risk, DOE staff simply sought to justify and overcome the barriers, rather than giving the barriers due consideration.

DOE has overseen a process wrought with misdirection, changing and expanding requirements, unexplained delays, gross mischaracterizations, and a never-ending cycle of excuses. Not only does it appear that DOE purposely directed taxpayer funds at a failing enterprise, DOE's action robbed taxpayers of genuine investment toward renewable energy.

Key Findings

· The Committee has identified a pattern indicative of poor management and a bias toward unconstrained lending that resulted in the creation of a high risk, speculative and undiversified loan portfolio that could ultimately result in substantial loss of taxpayer dollars. (pg. 3)

· From the very inception of the program, warnings signs existed pointing to a likely loss of taxpayer dollars that went ignored by Administration officials. (pg. 7)

· DOE invested a disproportionate amount of its funds into solar technology leaving taxpayers vulnerable by overemphasizing a single technology. 16 of the 27 1705-backed projects employed solar technology – that represented 80 percent of DOE's funds. (pg. 7)

· The billions of dollars in loan guarantees and cash grants directed at a Spanish firm, Abengoa, reveal the excessive risks associated with

directing that volume of subsidy to a single firm. Abengoa managed to obtain a DOE loan commitment for the lowest rated project across the entire DOE Junk portfolio – which received an extraordinarily low CCC rating and was still approved by DOE for a direct loan to the project. Thisover-investment in this single firm will likely cause substantial harm to the taxpayer. (pg.12)

· DOE's failure to diligently oversee costs and set prudent limitations on executive compensation while it distributed billions of dollars in loan commitments has created a significant moral hazard that has created enormous risks for DOE and taxpayer funds. (pg. 14)

· Beacon Power Corp, the second recipient of a § 1705 loan guarantee, paid three executives more than a quarter million dollars in bonuses in March 2010. Eighteen months later, Beacon declared bankruptcy – leaving taxpayers to repay the loan. (pg. 13)

· BrightSource Energy, recipient of a $1.6 billion loan guarantee to build a solar generation facility, has spent more than $56 million on a desert tortoise relocation program. BrightSource has indicated that the exploding cost of tortoise relocation program threatens to derail the entire $1.6 billion project – leaving taxpayers on the hook for the enormous sums on money spent on construction thus far. (pg. 14)

· DOE has engaged in a disturbing pattern of suspending the approval of a credible project that adheres to all stated standards, only to later approve massive funding for a project proven to be nowhere nearly as far along in the process as DOE purported. DOE's favoritism significantly harmed numerous companies that had relied on the promise of 1705 financing. The perception is that DOE actively misleads applicants about the status of their loan application, thereby encouraging these firms to misallocate capital, which has led to financial harm. (pg. 17-19)

· DOE loan commitments exposed taxpayer funds to excessive risk as a result of DOE's bias toward approving loans without regard to warning signs. The Committee identified many cases where the DOE disregarded their own taxpayer protections, ignored lending standards and eligibility requirements and, as a result, amassed an excessively risky loan portfolio. After review of internal emails, staff have identified instances showing that when DOE faced barriers that placed loan approvals at risk, DOE staff simply sought to justify and overcome the barriers, rather than giving the barriers due consideration. (pg.22)

· Substantial evidence indicates that in two cases officials in the Loan Programs Office deliberately mischaracterized substantively identical technologies as dissimilar. Additionally, there is evidence that applicants, with the encouragement of department officials, intentionally mischaracterized their projects as "innovative" in an effort to access the Federal Financing Bank and defeat these prudential requirements. (pg. 23-28)

· There appears to be a significant amount of evidence indicating that DOE manipulated analysis and strategically modified evaluations in order to issue loans to First Solar that would qualify under the statutory guidelines. An application that should otherwise fail, but instead passes under improper influence and through manipulation of analysis, results in the defrauding of taxpayers and misappropriation of assets. (pg. 32)

· DOE Violated the Statutory Requirement that Projects Commence Construction September 30, 2011. (pg. 32)

· In almost every public statement about its loan guarantee program, DOE touts job creation. DOE's Loan Programs Office webpage proudly proclaims that DOE expects the loans and loan guarantees to "employ" over 60,000 people. The site also breaks down the number of jobs created or saved by each loan or loan guarantee, and issues press releases for specific projects discussing job creation. These figures are misleading and attempt to pass off jobs that already existed as new jobs. (pg. 37-40)

· Solopower accepted $40 million of Oregon taxpayer money in addition to DOE's approval of a $197 million loan via the Federal Financing Bank (FFB). They received this federal assistance despite a rather dire prediction of Solopower's prospects by Standard & Poor's (S&P) which predicted that Solopower will fail to meet its debt obligations. (pg. 47)

· Despite warnings from both S&P and its own internal analysis regarding risky business models, DOE proceeded with a $25 million grant for Beacon Power. In April 2010, S&P evaluated the loan guarantee project and assigned it a dismal CCC+ credit rating noting that "Beacon is currently an unprofitable start-up" and that "significant exposure to commodity price volatility" could significantly hurt the company. S&P ran two defaultscenarios, both of which demonstrated that taxpayers would lose millions. (pg. 49)

· Fitch Ratings evaluated the Abound Solar project, which was approved for a $400 million conditional loan guarantee, and assigned it a junk credit rating. Fitch gave the project a credit rating of "B" (worse than Solyndra's) with a recovery estimate of only 45%. Fitch labeled the project "highly speculative" and described Abound as lagging in technology relative to its competitors, failing to achieve stated efficiency targets, and expecting that Abound Solar will suffer from increasing commoditization and pricing pressures. Abound Solar announced on March 1 st that it would stop producing solar panels and would fire 180 employees, even though it has already

received $70 million from DOE. (pg. 50-51)

· On June 15, 2010, DOE announced that it would conditionally issue a $98.5 million partial loan guarantee to Nevada Geothermal Power Company. The loan did not finance any new construction and therefore did not help to create a single new job. Yet, in the press release for the project, Secretary Chu and Senate Majority Leader Harry Reid touted Blue Mountain's potential, with Senator Reid stating, "I am glad to see economic recovery funding being used to put Nevadans to work on a project that will help us achieve energy independence..." DOE's awarding of this loan guarantee raises questions about why DOE was investing significant taxpayer resources in an entity with well- established financial difficulties. Nevada Geothermal has a well documented history of major financial problems. By the time DOE conditionally approved the loan guarantee, Nevada Geothermal had already violated contract terms and debt covenants relating to financing from its primary lender, TCW. According to Nevada Geothermal's financial statements, the firm would not avoid default without the benefit of a loan guarantee. (pg. 53-54)

I. Introduction

A. A History of Federal Government Loan Guarantees

For decades federal loan guarantees supported a variety of policy objectives, "including home ownership, university education, small business growth, international development, and others."

1 In 1976, the Congressional Budget Office (CBO) defined loan guarantees as "a loan or security on which the federal government has removed or reduced a lender's risk by pledging to repay principal and interest in case of default by the borrower."

2 Loan guarantees supporting "clean" energy-related projects began in the 1970s as a response to the perception of record high oil prices for the foreseeable future and the notion that the country was in the midst of an "energy crisis."

3 The Energy Security Act of 1980 authorized $20 billion for the development of a synthetic fuels industry via a new government enterprise, the U.S. Synthetic Fuels Corporation (SFC).

4 Loan guarantees were among the public finance tools available to SFC. The Great Plains coal gasification project was the only one of the five SFC projects to utilize a loan guarantee. The Great Plains project (located in Beulah, ND), "which converts lignite coal into pipeline-quality methane (the primary component of natural gas), received a $2 billion federal loan guarantee(approximately $1.5 billion of the loan guarantee was actually used) to construct the plant."

5 Because the value proposition of the project hinged on gas prices remaining high for a long period of time, in 1985, when gas prices dropped below the level at which Great Plains was cost competitive, the project "was not able to meet debt service requirements and subsequently defaulted on its loan obligations."

6 The Office of Alcohol Fuels at DOE, created by the Energy Security Act of 1980, had the authority to issue $265 million in loan guarantees for projects related to alcohol fuels.

7 Three projects received loan guarantees. Of them, "one had to refinance its loan, one experienced technology performance complications, and one ceased operations."

8 After the failures of loan guarantees via the Energy Security Act of 1980, clean energy loan guarantees were not again funded until the American Recovery and Reinvestment Act of 2009.

9 A recent report from the Congressional Research Service points out that in 1976 the Congressional Budget Office (CBO) identified inherent problems with loan guarantees that were relevant then and are still relevant today. The background paper, titled "Loan Guarantees:

PHILLIP R. B RWN , CONGRESSIONAL RESEARCH SERVICE , LOAN GUARANTEES FOR CLEAN ENERGY TECHNOLOGIES : GOALS , CONCERNS , AND POLICY OPTIONS (Jan. 17, 2012), available at http://www.crs.gov/pages/Reports.aspx?PRODCODE=R42152&Source=search, [hereinafter Brown]

CONGRESSIONAL BUDGET OFFICE , LOAN GUARANTEES : CURRENT CONCERNS AND ALTERNATIVES FOR CONTROL

(Aug. 1978).

Brown, supra note 1.

Title XVII of the Energy Policy Act of 2005 created the renewable energy loan guarantee program at the Department of Energy but did not provide funding for loan guarantees. See generally 42 U.S.C. §§ 16511-16514. Current Concerns and Alternatives for Control," explains that loan guarantees disorient risk evaluation:

When commercial lenders originate loans that are guaranteed by the government, these lenders may be more concerned with the adequacy of the loan guarantee agreement than by the actual risk of the project. As a result, projects may not receive an adequate amount of due diligence by the lender, therefore increasing the federal government's risk exposure. The CBO also notes that "while such guarantees reduce the risk of loss to lender and borrower, they cannot reduce the project's risk of economic failure." Furthermore, the paper explains that loan guarantees can be attractive to Congress because the costs, on paper, appear small but fail to fully account for unforeseen risks. 12 Failing to heed these warnings has led to widespread taxpayer losses from loan guarantees, from Great Plains in 1985 to Solyndra and Beacon Hill in 2011.

B. An Overview of the DOE Section 1703 and 1705 Loan Programs

Congress first authorized the Department of Energy's Loan Guarantee Program under title XVII of the Energy Policy Act of 2005. 13 The program purportedly incentivizes energy innovation by making it easier for companies to secure loans for projects that employ new technologies to promote energy efficiency, renewable energy, and advanced transmission. Section 1703 specifically authorizes the Secretary of Energy to make loan guarantees for projects that employ innovative technology to reduce greenhouse gas emissions. To date, the DOE has conditionally approved three projects under § 1703, totaling $10.4 billion in guaranteed loans.

The American Recovery and Reinvestment Act of 2009 significantly expanded the Secretary's loan guarantee authority under a newly-created § 1705. 17 This section authorized the Secretary to issue loan guarantees for renewable energy projects – including those employing non-innovative technologies – that commenced construction no later than September 30, 2011. Additionally, in contrast to loan guarantees issued under § 1703, the project sponsor did not have to pay for the cost of the loan guarantee because the government covered the credit subsidy

Brown, supra note 1.

42 U.S.C. §§ 16511-16514.

U.S. D P ' T OF ENERGY LOAN GUARANTEE PROGRAM , LOAN GUARANTEE SOLICITATION ANNOUNCEMENT : FED . LOAN GUARANTEES FOR PROJECTS THAT EMPLOY INNOVATIVE ENERGY EFFICIENCY , RENEWABLE ENERGY , AND ADVANCED TRANSMISSION AND DISTRIBUTION TECH . (July 29, 2009) [hereinafter Innovative Solicitation].

42 U.S.C. § 16513(a)

U.S. Dep't of Energy Loan Programs Office, List of Programs, available at https://lpo.energy.gov/?page_id=45

42 U.S.C. § 16516

42 U.S.C. § 16516(a)

costs. The short time-frame for eligibility and the congressional appropriation of the credit subsidy cost reflect § 1705's primary purpose: economic stimulus. The DOE issued its first § 1705 loan guarantee solicitation on July 29, 2009. By the expiration of § 1705 program in September 2011, the DOE had approved 27 projects totaling over $14.5 billion in guaranteed loans. The DOE's Loan Programs Office awards and administers loan guarantees under three sets of official rules: the statutory requirements of §1703 and 1705, the departmental regulations issued pursuant to statute, and the department's formal solicitations for loan guarantee applications. Naturally, these rules describe the eligibility requirements with increasing specificity. The redundancy and specificity of these criteria testifies to their importance; such prudential regulations make the difference between responsible stewardship of the program and a taxpayer-financed earmark.

This initial report focuses on the Department of Energy's portfolio of loan guarantees issued under § 1705 of Title XVII. These loan guarantees were issued under two solicitations which differed in their eligibility requirements and financing method. The first solicitation

targeted projects that employed innovative technologies. Under this solicitation, the project sponsor could acquire the underlying loan from U.S. government through the Federal Financing Bank. The second solicitation created the "Financial Institution Partnership Program." This program accepted projects that employed non-innovative (i.e., already commercialized) technology, but required the project sponsor to acquire the underlying loan from a private financial institution. Committee staff evaluated renewable energy projects that received loan commitments from DOE or from private lenders partnering with DOE. Staff identified a pattern indicative of poor management and a bias toward unconstrained lending that resulted in the creation of a high risk, speculative and undiversified loan portfolio. In this report, we consider all aspects of loan commitments in the context of the broader marketplace to reveal the extent of the risk taxpayers face as a result of competition within the domestic energy industry and the global renewable energy industry.

C. Overview and Brief History of the ATVM Program

Innovative Solicitation, supra note 14 ("the Recovery Act provides that five billion nine hundred sixty five million dollars ($5,965,000,000) in appropriated funds be made available until expended to pay the Credit Subsidy Costs").

American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, §3(a), 123 Stat. 115 (2009).

Innovative Solicitation, supra note 14.

U.S. Dep't of Energy Loan Programs Office, List of Programs, available at https://lpo.energy.gov/?page_id=45

42 U.S.C. §§16511-16516; 10 C.F.R. § 609 (2011); Innovative Solicitation, supra note 14; U.S. DEP ' T OF ENERGY

LOAN GUARANTEE PROGRAM OFFICE , LOAN GUARANTEE SOLICITATION ANNOUNCEMENT : FED . LOAN GUARANTEES

FOR COMMERICAL TECH . RENEWABLE ENERGY GENERATION PROJECTS UNDER THE FIN . INST . P' SHIP PROGRAM (Oct7, 2009) [hereinafter FIPP Solicitation].

Innovative Solicitation, supra note 14.

FIPP Soliciation, supra note 23.

The Advanced Technology Vehicle Manufacturing (ATVM) Program was created in 2008 as part of § 136 of the Energy Independence and Security Act of 2007. 28 According to the U.S. Department of Energy (DOE), the purpose of the ATVM Program is to provide "direct loans to support the development of advanced technology vehicles and associated components in the United States." 29 The Energy Independence and Security Act set aside $25 billion for direct loans and appropriated another $7.5 billion to support these loans. To qualify for a direct loan under the ATVM Program, the project and the sponsoring company must meet several criteria.

First, in order to be eligible for a loan a company must either manufacture an advanced technology vehicle (ATV) or manufacture components for ATVs. Companies must also be "financially viable without the receipt of additional federal funding for the proposed project other than the ATVM loan." 31 DOE defines "advanced technology vehicle" as a light duty vehicle that meets Clean Air Act regulations established by the U.S. Environmental Protection Agency (EPA) and is 125 percent of the average of the Corporate Average Fuel Economy (CAFE) for similar vehicles. The loan must finance the reequipping, expanding, orestablishing of a manufacturing facility in the United States or the costs of engineering integration performed in the United States.

As of February 2012, the ATVM Program loaned $8.3 billion to five projects. Most notably, two of the largest companies in the country, Ford Motor Company and Nissan North America, received over $7.3 billion to retool and upgrade manufacturing facilities for vehicles that were deemed ATVs by DOE. 35 Fisker Automotive and Tesla Motors received $529 million and $465 million, respectively, from the ATVM program. 36 Fisker produces plug-in hybrid electric vehicles in a manufacturing plant in Delaware. 37 Its first vehicle, the Karma, costs well over $100,000 to purchase. 38 Tesla produces three models of plug-in electric cars at its manufacturing plant in California. Finally, The Vehicle Production Group LLC received a $50 million loan to support the creation of a factory-built wheelchair vehicle that runs on compressed natural gas. 39 DOE had conditionally granted a loan of $730 million to Severstal North America, a steel subsidiary of OAO Severstal, a multi-billion dollar Russian company, to produce

Advanced Technology Vehicles Manufacturing Incentive Program, 73 Fed. Reg. 66,721, 66,722 (Nov. 12, 2008)

(to be codified at 10 C.F.R. pt. 611).

U.S. Dep't of Energy Loan Programs Office, Description of ATVM program, available at

https://lpo.energy.gov/?page_id=43

Advanced Technology Vehicles Manufacturing Incentive Program, 73 Fed. Reg. 66,721, 66,722 (Nov. 12, 2008)

(to be codified at 10 C.F.R. pt. 611).

U.S. Dep't of Energy Loan Programs Office, Description of ATVM program, available at

https://lpo.energy.gov/?page_id=43

Advanced Technology Vehicles Manufacturing Incentive Program, 73 Fed. Reg. 66,721, 66,722 (Nov. 12, 2008)

(to be codified at 10 C.F.R. pt. 611).

U.S. Dep't of Energy Loan Programs Office, Description of ATVM program, available at

https://lpo.energy.gov/?page_id=43

U.S. Dep't of Energy Loan Programs Office, Projects: Fisker Automotive, available at https://lpo.energy.gov/?projects=fisker-automotive; U.S. Dep't of Energy Loan Programs Office, Projects: Tesla Motors, available at https://lpo.energy.gov/?projects=tesla-motors

Mike Ramsey and Neal E. Boudette, Fisker Hires Former Chrysler CEO, W ALL S T . J., Feb. 29, 2012.

U.S. Dep't of Energy Loan Programs Office, Projects: The Vehicle Production Group LLC, available at https://lpo.energy.gov/?projects=the-vehicle-production-group-llc

advanced high strength steel (AHSS) used to make component parts for ATVs. Almost 200 companies have applied for loans through the program; however, an overwhelming majority still await a decision from DOE on the status of their applications.

II. The DOE Portfolio of Loan Commitments

DOE committed to issuing 27 loans or loan guarantees under the § 1705 program. These loan commitments total in excess of $16 billion. At the outset, the ratings agencies rated 23 of these loans as non-investment grade categories, also known as "Junk," due to their poor credit quality, while the other four were rated BBB, which is at the lowest end of the "investment" grade of categories. Overall, DOE's 1705 portfolio's initial unweighted average rating was BB-, which is considered "Junk grade." According to Fitch, a 'BB' rating is speculative and indicates an elevated vulnerability to default risk. Accordingly a BB- is on the low end of what are considered to be "speculative investments," barely escaping the classification of "highly speculative" investments.

Press Release, Department of Energy Offers Severstal Dearborn, LLC a $730 Million Conditional Loan Commitment for Michigan Project, U.S. Dep't of Energy, July 13, 2011.

Tim Logan, Loans for Green Car Plants are in Limbo, Stltoday.com, Mar. 16, 2012, available at http://www.stltoday.com/business/local/loans-for-green-car-plants-are-in-limbo/article_89f33f3c-6ebf-11e1-89a9-0019bb30f31a.html.

Fitch Ratings, Definitions of Ratings and Other Forms of Opinion (2011), available at http://www.fitchratings.com/web_content/ratings/fitch_ratings_definitions_and_scales.pdf

10FIPP

Company

Parent Recovery Date of Date of Loan Size or

Rating Rating Estimate Agency Rating Loan (Millions) FFB

Solyndra, Inc BB-

Beacon Power Corporation CCC+

Kahuku Wind Power LLC BB+

Nevada Geothermal Power Company Inc

89%

Fitch 8/7/2009 Sept 2009 535 FFB

S&P 4/30/2010 Aug 2010 43 FFB

85-90% Fitch 5/26/2010 July 2010 117 FFB

BB+ 75-80% Fitch 7/20/2010 Sept 2010 78.8 FIPP

Abound Solar B 45% Fitch 11/4/2010 Dec 2010 400 FFB

Caithness Shepherds Flat, LLC BBB- 90-95% Fitch 11/12/2010 Oct 2010 1040 FIPP

Abengoa Solar, Inc (Solana) BB+ 80% Fitch 12/2/2010 Dec 2010 1446 FFB

U.S. Geothermal, Inc (Malheur County, Oregon) BB 64% S&P 12/29/2010 Feb 2011 97 FFB

Record Hill Wind, LLC BB+ S&P 1/7/2011 Aug 2011 102 FFB

LS Power (Transmission Line project) BB+ 90-95% Fitch 1/21/2011 Feb 2011 343 FFB

BrightSource Energy, Inc - Ivanpah I BB+ 55% Fitch 1/25/2011 Apr 2011 1600 FFB

BrightSource Energy, Inc - Ivanpah II BB 55% Fitch 1/25/2011 Apr 2011 FFB

BrightSource Energy, Inc - Ivanpah III BB+ 55% Fitch 1/25/2011 Apr 2011 FFB

NRG Solar, LLC (Agua Caliente) BB+ 90-95% Fitch 5/13/2011 Aug 2011 967 FFB

SoloPower Inc CCC+ S&P 7/11/2011 Aug 2011 197 FFB

NextEra Energy Resources, LLC (Genesis Solar) BBB+ 84.50% S&P 7/21/2011 Aug 2010 681.6 FIPP

Cogentrix of Alamosa, LLC B 44-55% Fitch 7/22/2011 Sept 2011 90.6 FFB

1366 Technologies Inc B 65-70% Fitch 7/25/2011 Sept 2011 150 FFB

Abengoa Solar, Inc (Mojave Solar) BB BB 70-75% Fitch 7/27/2011 Sept 2011 1200 FFB

Granite Reliable Power, LLC BB BBB- 75-80% Fitch 8/10/2011 Sept 2011 135.12 FIPP

Ormat Nevada, Inc BB S&P 8/13/2011 Sept 2011 280 FIPP

Exelon (Antelop Valley Solar Ranch) BBB- 90-95% Fitch 8/17/2011 Sept 2011 646 FFB

SolarReserve Inc, LLC (Crescent Dunes) BB 80-85% Fitch 8/19/2011 Sept 2011 737 FFB

Prologis (Project Amp) BB B+ 80-90% Fitch 8/21/2011 Sept 2011 1120 FIPP

Mesquite Solar I, LLC (Sempra Mesquite) BB+ BBB+ 80-85% Fitch 8/23/2011 Sept 2011 337 FFB

NRG Energy (California Valley Solar Ranch) BB+ B+ 85-90% Fitch 8/23/2011 Sept 2011 1237 FFB

NextEra Energy Resources, LLC (Desert Sunlight) BBB- A- 85-90% Fitch 8/24/2011 Sept 2011 1199.2 FIPP

Abengoa Bioenergy Biomass of Kansas LLC CCC BB 65-70% Fitch 8/26/2011 Aug 2010 132.4 FFB

BB

AAA

B+

BBB+

A-

Within the range of non-investment grade credit risk, six of the Junk loans were rated at the lower tiers of the range. Specifically, these six projects or loans received ratings within either the "B" or "CCC" categories under the Fitch or Standard and Poor's classifications.

Despite lending to highly speculative and troubled projects, the government only charged those green energy firms its own cost to borrow money. In other words, the government sought no profit or compensation for credit risk. Given the extent of losses already apparent, the failure to seek any compensation for credit risk inevitably means the taxpayer will lose substantial funds. This is distinguishable from normal business practices, where banks or investment firms charge a premium or require more upfront capital as a condition for agreeing to finance riskier projects; thus, if the project were to go completely under, the banks would have some capital to show for the losses.

A. DOE's High Risk Loan Portfolio

At an October 2011 press conference, after the collapse of Solyndra, President Obama commented on the 1705 loan portfolio saying that "we knew from the start that the loan guarantee program was going to entail some risk, by definition. If it was a risk-free proposition, then we wouldn't have to worry about it. But the overall portfolio has been successful."

However, the risk conceded by President Obama is larger than he or Secretary Chu have publically acknowledged. Left unsaid is the continuing and mounting risks taxpayers face with each additional disbursement of funds.

As this report reveals, it appears that taxpayer losses associated with Solyndra are just the tip of the iceberg. Clues warning of this risk have been apparent from the inception of the program. This does not bode well for the future of DOE's loan portfolio. Moreover, most of the energy projects funded under 1705 continue construction or just plan to begin construction. As projects proceed and spend their capital, additional weaknesses will be exposed and more loan recipients will begin to fail.

Secretary Chu has done very little to mitigate these risks. In the first instance, DOE failed to abide by the number one investment rule of thumb – diversify your portfolio. Instead of making investments in a broad range of emerging technologies, DOE sunk 80% of its funds into either solar manufacturing or solar generation projects. This overemphasis on one type of technology leaves taxpayers vulnerable to changes in the market for solar energy. After Solyndra collapsed, Energy Secretary Steven Chu claimed that "this company and several others got caught in a very, very bad tsunami" and then blamed China and the recession in Europe. Secretary Chu neglected to mention the extraordinarily clear warning by Fitch Ratings (Fitch) prior to DOE's commitment. Specifically, Fitch stated:

[C]hanges in business or economic conditions center upon the intermediate and longer term pricing of PV solar panels which are now under extreme competitive pressures. Fitch expects PV pricing pressures throughout the term of the DOE loan and this factor will be the largest challenge facing Solyndra and the largest credit risk incurred in repayment of the Fab 2 loan according to its terms.

As the above excerpt reveals, prior to approving Solyndra, Fitch warned DOE that extreme competition within the solar panel market threatened pricing of solar panels in the coming months and years and that this was the greatest risk to Solyndra's survival. Even

News Conference by the President, The White House (October 6, 2011), available at:

http://www.whitehouse.gov/the-press-office/2011/10/06/news-conference-president.

U.S. Dep't of Energy, Loan Program office, Our Projects, available at https://lpo.energy.gov/?page_id=45

Matthew Wald, Panel Hears Defense of Loan to Solyndra, N.Y. T IMES , Nov. 17, 2011, available at:

http://www.nytimes.com/2011/11/18/business/energy-environment/energy-secretary-defends-solyndra-loan.html.

Solyndra rating report letter to Wilbeur Stover, FitchRatings, p.1 (August 7, 2009).

knowing this, DOE chose to invest billions of taxpayer dollars despite the clear warning - 16 of the 27 section 1705-backed projects employed solar technology, the very technology that experts were warning about. These loans for solar projects totaled more than $13 billion – more than 80% of the total portfolio. DOE also concentrated its investments in two solar companies in particular, Abengoa and First Solar, to such an extent that financial troubles with either company would affect a significant portion of the loan portfolio. In addition to over investing in solar, the Federal government also permitted "double dipping," wherein a company received multiple federal grants and loans to cover the cost of a project, thereby reducing the company's "skin in the game." DOE also allowed large and financially sound parent entities to undercapitalize their loan guarantee projects, which effectively shifted the risk away from the company to the taxpayer. It appears that for most DOE loan recipients, a low cost loan, in and of itself was insufficient to attract private investors.

In compiling this report, staff considered many troubling issues that deserve attention, yet, because of the magnitude of problems associated with this program, only a share of the concerns could be investigated. Committee staff, therefore, considers this an initial report. The following sections examine the various actions that DOE took while building its financially vulnerable portfolio that jeopardizes billions in taxpayer funds.

B. Major Risk Factors to the Loan Portfolio

1. Falling Natural Gas Prices Hurt Renewable Projects

In addition to the poor credit risk determinations of 1705 recipients, the falling price of natural gas poses a material risk to the sustainability of these renewable energy projects. This section of the report attempts to explain how the market for natural gas has evolved and how it interacts with the market for renewable technologies.

Advances in hydraulic fracturing ("fracking") technology over recent years dramatically improved domestic natural gas and natural gas liquids production. Over the past few months, in particular, this increase in production resulted in an extraordinary decline in the domestic price of natural gas, substantially widening the efficiency gap between fossil fuels and renewable technologies. 48 In other words, natural gas has become so cheap that other energy technologies are having difficulty competing, even after federal subsidies.

The high price of oil incentivizes fracking for natural gas liquids, which supply valuable raw materials to oil refiners. 49 In areas where fracking produces both natural gas and gas liquids, frackers often produce natural gas at a loss, but, in the aggregate, profit due to the high price of gas liquids. 50 This unique result reduces the responsiveness of natural gas producers to the price

U.S. Dep't of Energy, Loan Program office, Our Projects, available at https://lpo.energy.gov/?page_id=45

See U.S. Energy Info. Admin., Monthly Natural Gas Gross Withdrawals, available at

http://205.254.135.7/dnav/ng/hist/n9010us2m.htm.

See Natural Gas Supply Ass'n, Processing Natural Gas, available at

http://www.naturalgas.org/naturalgas/processing_ng.asp#seperateng; see also Emanuel V. Ormonde, IHS Inc.,

Natural Gas Liquids, available at http://chemical.ihs.com/CEH/Public/Reports/229.2500/

See Peter Gardett, AOL Energy, A Little Liquid Gas and Oil Goes a Long Way for Energy Producers (Feb. 17,

2012), available at http://energy.aol.com/2012/02/17/a-little-liquid-gas-and-oil-goes-a-long-way-for-energy-

producers/

of natural gas. This ability to continue to profit from the premium price of gas liquids changes the economics of natural gas production enabling a secular decline in natural gas prices.

The resulting low natural gas price reduces the market price for power generation in most areas, as natural gas fired generators usually set the market clearing price. Below is a chart reflecting natural gas prices since 1992. 51 Today's low prices for natural gas have not been seen since the 1990's and, when adjusted for inflation are at historically low levels. While this is good news for consumers of electricity who will benefit from lower rates, this is bad news for the renewable energy industry.

a. Low Natural Gas Prices Reduce Power Purchase Agreement Revenues for Renewable Projects

As natural gas powered generation provides the market clearing price in most regions within the United States, the recent drop in natural gas prices lowered market prices for power.

These falling power prices reduce the expected value of anticipated Power Purchase Agreements (PPAs), which are agreements that provide power purchasers, such as utilities and suppliers of energy, such as renewable energy generators, with certainty over future prices. The energy industry relies on PPAs to manage risks associated with the purchase and sale of power. The pricing of PPAs largely depends on expectations with regard to future power prices. The recent

Federal Reserve Bank of St. Louis, Economic Data, Natural Gas Price: Henry Hub, Louisiana, available at

http://research.stlouisfed.org/fred2/series/GASPRICE

collapse in natural gas prices reduced the potential revenue for PPAs that have not yet been executed.

Lower natural gas prices increase the risks of renewable energy projects that have not yet entered into long term contracts to sell the power they expect to generate because buyers of their product now have cheaper options. Project Amp and other projects that fail to meet benchmarks necessary to maintain a PPA, suffer the risk that they cannot negotiate agreements sufficient to support the cost of the renewables project, even with the benefit of multiple substantial subsidies.

Accordingly, it is reasonable to expect utilities to seek an exit from expensive PPAs whenever the renewable company fails to meet certain benchmarks, whether those benchmarks relate to commercial operation date, insufficient output, reliability or other variables. In other words, given the falling price of power in areas where natural gas is the marginal supplier, it is reasonable to expect revenues from risky renewables projects to be at risk to these falling power prices. If a PPA with a solar producer reflects a price based on markets where $4.00 per million British thermal unit (MMBtu) of natural gas was prevalent, the utility paying for that solar power might act on any opportunity to renegotiate or exit the unprofitable PPAs now that natural gas prices are below $3.00. Specifically, as DOE-backed projects come online over the next few years, any failure to meet the production or capacity requirements stated in the PPA may enable the power purchaser to exit or renegotiate the contract, subjecting the renewable project to lower power prices, and thus lower revenues for the company than was predicted at the time DOE negotiated the loan agreement.

In other words, given that power prices have fallen since these projects executed PPAs, there is substantial risk that the power purchasers will find a way out from the PPAs they entered into with the renewable projects. A PPA provides the renewable project security that it will earn a specific amount of revenue. If a party, such as a Utility, that is purchasing power from the renewables project can find a way out of the PPA, this places the revenue of the project at risk.

If the renewable projects are forced to renegotiate at current market prices, they will suffer a substantial loss of revenue.

This is particularly concerning in the case of newer technologies, where many of these projects may fail to achieve target operation dates, or may not generate as much power as the contract requires simply as a matter of not having enough experience with the newer technology. Given this risk, many of these projects face the danger of losing the benefit of a higher priced PPA.

One good example comes from the recent reports that First Solar's solar panels are suffering higher failure rates in the desert. This unexpected underperformance will reduce the output of their plants. Such output is a key performance variable considered in the PPA.

b. Low Gas Prices Reduce Demand for Solar Panels

Falling market prices for power as described above impacts all aspects of renewable projects. Despite solar panel prices, the demand for solar panels declines as the relative economic benefits of their installation fall. Solar companies currently suffer from excessive competition in panel manufacturing, and also likely face decreasing demand as a result of the competition from cheaper natural gas

generation. To the extent low natural gas prices persist, 15this represents a sea-change that threatens the viability of all solar manufacturing investment that DOE and Treasury subsidized.

2. DOE's Failure to Diversify

a. DOE Overinvests in Solar Manufacturing despite Ample Warnings DOE should have averted some of the risks it created in its portfolio by diversifying its investments across renewable energy technologies. DOE's investment in multiple solar manufacturers added to a heated global competition that was already creating an excessive supply of solar panels. These manufacturers were forced to compete both against each other and other solar companies worldwide. As a result, the average selling price per watt for solar panels has continued its decline.

Despite Solyndra's fall, there remains excessive competition in the manufacturing of solar panels. Just this past month, both Abound Solar and First Solar cut solar panel production globally, reflecting this excessive supply and heated competition. 52 While U.S. solar generation projects can take advantage of falling panel prices to offset a share of the impact of reduced power prices, it appears solar manufacturers that suffer both supply and demand shocks can only survive through continued provision of subsidies. Unfortunately for these manufacturers, there is growing evidence that the subsidies are drying up.

With regard to subsidies on a global scale, Germany, the leader in solar subsidies, having invested over $130 billion to date, is now giving up the habit. According to news reports:

Germany once prided itself on being the "photovoltaic world champion", doling out generous subsidies—totaling more than $130 billion, according to research from Germany's Ruhr University—to citizens to invest in solar energy. But now the German government is vowing to cut the subsidies sooner than planned and to phase out support over the next five years. What went wrong?

Using the government's generous subsidies, Germans installed 7.5 gigawatts of photovoltaic capacity last year, more than double what the government had deemed "acceptable." It is estimated that this increase alone will lead to a $260 hike in the average consumer's annual power bill.

According to Der Spiegel, even members of Chancellor Angela Merkel's staff are now describing the policy as a massive money pit. Philipp Rösler,

Cassandra Sweet and Ryan Tracy, Loan Reicipient Abound to Cut Jobs, Retool Colorado Factory, W ALL S T . J., Feb. 29, 2012, available at http://online.wsj.com/article/BT-CO-20120229-719672.html; Ehren Goossens, Solar Suppliers Head for First Demand Drop as Subsidy Cut, B LOOMBERG N EWS , Mar. 9, 2012, available at http://www.bloomberg.com/news/2012-03-09/solar-panel-sales-seen-dropping-first-time-in-decade-feeding-glut-energy.html

Germany's minister of economics and technology, has called the spiraling solar subsidies a "threat to the economy." The ratings agencies fully informed the DOE of their expectations for falling panel prices due to excessive global competition. Both Germany and the U.S. appear to be phasing out subsidies over the coming years, and this should eventually help reduce the excessive supply; however, it does so at the expense of the subsidized solar firms. In other words, the apparent cure to the oversupply is the outright shuttering of a large share of solar panel manufacturers worldwide.

b. DOE Overinvested in Abengoa and First Solar Projects

As DOE failed to diversify the portfolio sufficiently across industries, DOE also failed to diversify across award recipients. A single Spanish firm, Abengoa, received an aggregate $2.45 billion in loans and loan guarantees plus $818 million in Treasury cash grants. 54 This reveals excessive risk and subsidies provided to a single firm via multiple subsidiaries. Abengoa has a credit rating of BB, which is considered Junk, thus making this concentration of investment in one company speculative and highly questionable. Exemplifying the risk DOE took in the case of Abengoa, Abengoa managed to obtain a DOE loan commitment for the lowest rated project across the entire DOE Junk portfolio; Abengoa Bioenergy Biomass of Kansas received an extraordinarily low CCC rating and yet the DOE approved a direct loan to the project.

Bjørn Lomborg, Germany is cutting solar-power subsidies because they are expensive and inefficient, S LATE , Feb. 18, 2012, available at http://www.slate.com/articles/news_and_politics/project_syndicate/2012/02/why_germany_is_phasing_out_its_solar_power_subsidies_.html

See FitchRatings credit report for Mojave Solar, LLC, dated July 27, 2011, where DOE committed to an $862 million loan and Treasury committed to a $340 million grant; FitchRatings credit report for Abengoa Solar, Inc.'s Solana Generating Station, dated December 2, 2010, where DOE committed to a $1.445 billion loan guarantee and the Treasury committed to a $455 million grant; and, FitchRatings credit report for Abengoa Bioenergy Biomass of Kansas, dated August 26, 2011, where DOE committed to a $130 million loan and Treasury committed to a $23 million grant.

See FitchRatings credit report for Abengoa Bioenergy Biomass of Kansas, dated August 26, 2011.

Abengoa's prospects look dim due to its investments in Europe, particularly Spain, and suffer the risk of declining subsidies as Spain contends with its own declining credit quality and the potential need for a bailout of its own government in the coming months or years. Now that Germany and Spain cut back solar subsidies, this will undoubtedly harm the European renewable investments of Abengoa. 56 Even if Abengoa investments initially appeared attractive to DOE, overinvestment in this single firm will likely cause substantial harm to the taxpayer. DOE similarly overinvested in First Solar, as we describe in Section III; the taxpayer will undoubtedly suffer losses from that investment as well.

3. DOE Allowed "Double Dipping" – Multiple Subsidies to Single Projects

The junk quality loan portfolio of loan guarantees amassed by DOE reflects funding that substantially exceeds the amounts loaned by DOE. To understand the full extent of funds invested into these renewable firms, all state and federal subsidies need to be considered. For example, most of the 1705 projects benefitted from multiple enormous subsidies, such as grants that covered a third of the cost to build a generation facility, low interest DOE loans, state subsidies, beneficial access to power grids and mandates that require renewable production

See Ben Sills, Spain Halts Renewable Subsidies to Curb $31 Billion of Debts, B LOOMBERG N EWS , Jan. 27, 2012, available at http://www.bloomberg.com/news/2012-01-27/spain-suspends-subsidies-for-new-renewable-energy-plants.html. See also Germany to Axe Solar Panel Installations by More than Half in 2012 (Jan. 19, 2012), available at http://www.greenworldinvestor.com/2012/01/19/germany-to-axe-solar-panel-installations-by-more-than-half-in-2012/.

known as renewable portfolio standards. Such mandates result in premium pricing for power generated by renewable technologies.

Even with the benefit of these massive government subsidies, DOE continues to hold a portfolio of "Junk" grade loans and commitments. This defies the natural assumption that layer upon layer of government subsidies, and billions in costless equity should at some point cause an entity to become profitable; however, given the poor quality of the DOE portfolio, this has failed to occur.

4. DOE Allowed Large Energy Companies to Undercapitalize Projects and Shifted Risk to

Taxpayers

Even when a company had significant assets to cover a project, DOE put the taxpayer at a greater risk because of the way they structured the guarantee. In four cases among the 27 loan guarantees and Federal Financing Bank (FFB) loans, the parent or project sponsor that sought the benefit of a loan guarantee or FFB loan had a credit rating significantly above that of the project itself. In other words, in four cases, the borrower undercapitalized the project and refused to extend a parental guarantee.

As a result, the taxpayer takes on greater risk, despite the borrowers' ability to increase funding to the project. The most egregious use of this technique was in the case of Record Hill, LLC, where AAA rated Yale University created a project with a rating of only BB+. The idea that Yale would take a substantial taxpayer subsidy and still seek to protect its remaining assets from the liabilities of Record Hill reflects Yale's view of the Record Hill project and its disregard for taxpayers. It is inconceivable that any normal bank would take these kinds of risk when loaning money. Banks traditionally insist on a number of provisions to "protect" their investment. Yet DOE and Treasury did just the opposite, and essentially let these companies dictate terms favorable to them and not to the taxpayer. The result is when the company defaults on their obligations, the taxpayer is left with little to no remedy.

3. Systemic Risks from "Crony Capitalism" and Wasteful Spending

There is evidence a number of loan guarantee recipients have engaged in clearly profligate spending. Such wasteful spending threatens the financial viability of the recipient companies, creating risks to both the DOE's loan commitment portfolio and taxpayer dollars. It is particularly troubling that this waste often takes the form of large cash bonuses to company executives – such payments feed the perception that taxpayer funds are being used to line the pockets of green energy executives. Beacon Power Corp, the second recipient of a § 1705 loan guarantee, paid three executives more than a quarter million dollars in bonuses in March 2010. 58 Eighteen months

See M.J. Beck Consulting LLC, Renewable Portfolio Standards, available at

http://mjbeck.emtoolbox.com/?page=Renewable_Portfolio_Standards ("With few exceptions, utilities are allowed

to recover the additional cost of procuring renewable power."); see also Katerina Dobesova, Jay Apt, and Lester B.

Lave, Are Renewable Portfolio Standards Cost-effective Emission Abatement Policy? (Carnegie Mellon Electricity

Industry Center, Working Paper CEIC-04-06), available at

http://wpweb2.tepper.cmu.edu/ceic/pdfs/CEIC_04_06.pdf.

later, Beacon declared bankruptcy, leaving taxpayers to repay the loan. Adding insult to this injury, these bonuses were explicitly linked to the executives securing the DOE loan guarantee.

Similarly, bankruptcy records show Solyndra doled out executive payments just months prior to its late August collapse and early September bankruptcy. In Solyndra's case, former executives have stated that DOE explicitly allowed federal funds to be used to pay out executive bonuses.

The Department appears to recognize the unacceptability of this crony capitalism. DOE has stated, "We take our role as stewards of taxpayer dollars very seriously, and as such, we will make clear to loan recipients our view that funds should not be directed toward executive bonuses when the rest of the company is facing financial difficulty." The DOE has not explained why they waited three years into the program to finally take this view, or what – if any – concrete steps they will take to protect taxpayer monies.

Good government groups have severely criticized the DOE's administration of the loan guarantees with respect to executive compensation. Citizens Against Government Waste has stated that "[g]iving a bonus to the executives under these circumstances is rewarding failure with our money with no chance of getting it back. Taxpayers need some representation here.

They didn't really get it." Wasteful spending is not limited to executive compensation alone. BrightSource Energy, recipient of a $1.6 billion loan guarantee to build a solar generation facility, has spent more than $56 million on a desert tortoise relocation program. 62 Furthermore, BrightSource will build 50 miles of intricate fencing, at a cost of up to $50,000 per mile, designed to prevent relocated

tortoises from climbing or burrowing back into the solar generation facility. BrightSource has indicated that the exploding cost of tortoise relocation program threatens to derail the entire $1.6 billion project – leaving taxpayers on the hook for the enormous sums on money spent on

construction thus far.

The DOE's failure to diligently oversee costs and set prudent limitations on executive compensation while it distributed billions of dollars in loan commitments created a significant moral hazard that has created enormous risks for DOE and taxpayer funds.

C. Harm Posed to Our Economy

The DOE loan guarantee and ATVM loan programs may harm capital formation within the capital markets. As the government makes low cost loans available, private capital cannot compete with the subsidized low interest loans. As a result, many private investors and lenders cease to compete in the same space or may choose to invest in those subsidized firms that anticipate government loans. As intended, government subsidies redirect capital to less efficient

Ronnie Greene and Matthew Mosk, Green Firms Get Fed Cash, Gives Execs Bonuses, Fail, ABC N EWS , Mar. 6, 2012, available at http://abcnews.go.com/Blotter/green-firms-fed-cash-give-execs-bonuses-fail/story?id=15851653#.T1ZAcnm8hSx

Julie Cart, Saving desert tortoises is a costly hurdle for solar projects, L.A. T IMES , Mar. 4, 2012.

industries, causing a misallocation of capital. To the extent investors target subsidized firms, those funds that would have sought a more profitable opportunities that would have yielded greater efficiencies and benefits for the economy, instead invest in relatively less profitable industries, where the government subsidy compensates for the lost profit.

To the extent government loans programs proceed, the government must maintain the highest integrity in the allocative process. If government fails to impose a fair and impartial loan process that prioritizes genuinely eligible borrowers, then the government further misallocates capital within the subsidized industry, increasing economic harm. Relatively better businesses may suffer losses while waiting for subsidies that never materialize. Lower quality firms, with strong political ties, may succeed in gaining government support with inferior products, reflecting a multi-factored misallocation of capital.

The failure to maintain integrity and abide by the law when implementing the DOE loan program significantly impacts those that failed to receive subsidies as well.

On February 28, 2012, Bright Automotive announced it was shutting down operations. In a poignant and blunt letter to the Secretary, Bright Automotive's management team laid the blame squarely on the unprofessionalism and mismanagement of the DOE loan

guarantee program. Bright Automotive described a process wrought with misdirection, changing and expanding requirements, unexplained delays, gross mischaracterizations, and a never-ending cycle of excuses:

Bright Automotive

February 28, 2012

Secretary Steven Chu

U.S. Department of Energy

Washington, D.C.

Dear Secretary Chu,

Today Bright Automotive, Inc will withdraw its application for a loan under the

ATVM program administered by your department. Bright has not been explicitly

rejected by the DOE; rather, we have been forced to say “uncle”. As a result, we are winding down our operations.

Last week we received the fourth “near final” Conditional Commitment Letter since September 2010. Each new letter arrived with more onerous terms than the last. The first three were workable for us, but the last was so outlandish that most rational and objective persons would likely conclude that your team was negotiating in bad faith. We hope that as their Secretary, this was not at your urging.

The actions – or better said “lack of action” -- by your team means hundreds of great manufacturing and technical jobs, union and non-union alike, and thousands of indirect jobs in Indiana and Michigan will not see the light of day. It 21means our product, the Bright IDEA plug-in hybrid electric commercial vehicle, will not provide the lowest total cost of ownership for our commercial and government fleet customers, saving millions of barrels of oil each year. It means turning your back on a bona fide step forward in our national goal to wean America away from our addiction to foreign oil and its implications on national security and our economic strength.

In good faith we entered the ATVM process, approved under President Bush with bi-partisan Congressional approval, in December of 2008. At that time, our application was deemed "substantially complete." As of today, we have been in the “due diligence” process for more than 1175 days. That is a record for which no one can be proud.

We were told by the DOE in August of 2010 that Bright would get the ATVM loan "within weeks, not months" after we formed a strategic partnership with General Motors as the DOE had urged us to do. We lined up and agreed to private capital commitments exceeding $200M – a far greater percentage than previous DOE loan applicants. Finally, we signed definitive agreements with state-of-the-art manufacturer AM General that would have employed more than 400 union workers in Indiana in a facility that recently laid-off 350 workers. Each time your team asked for another new requirement, we delivered with speed and excellence. Then, we waited and waited; staying in this process for as long as we could after repeated, yet unmet promises by government bureaucrats. We continued to play by the rules, even as you and your team were changing those rules constantly – seemingly on a whim.

Because of ATVM's distortion of U.S. private equity markets, the only opportunities for 100 percent private equity markets are abroad. We made it clear we were an American company, with American workers developing advanced, deliverable and clean American technology. We unfortunately did not aggressively pursue an alternative funding path in China as early as we would have liked based on our understanding of where we were in the DOE process. I guess we have only ourselves to blame for having faith in the words and promises of our government officials.

The Chairman of a Fortune 10 company told your former deputy, Jonathan Silver, that this program "lacked integrity"; that is, it did not have a consistent process and rules against which private enterprises could rationally evaluate their chances and intelligently allocate time and resources against that process. There can be no greater failing of government than to not have integrity when dealing with its taxpaying citizens.

It does not give us any solace that we are not alone in the debacle of the ATVM process. ATVM has executed under $50 million of transactions since October of 2009. Going back to the creation of the program, only about $8 billion of the 22approved $25 billion has been invested. In the meantime, countless hours, efforts and millions of dollars have been put forth by a multitude of strong entrepreneurial teams and some of the largest players in the industry to advance your articulated goal of advancing the technical strength and clean energy breakthroughs of the American automotive industry. These collective efforts have been in vain as the program failed to finance both large existing companies and younger emerging ones alike.

Our vehicle would have been critical to meet President Obama's stated goal of one million plug-in electric vehicles on the road in 2015 and his commitment to buy 100 percent alternative fueled vehicles for the Federal Fleet. So, we are not the only ones who will be disappointed.

The ineffectiveness of the DOE to execute its program harms commercial enterprise as it not only interfered with the capital markets; it placed American companies at the whim of approval by a group of bureaucrats. Today at your own ARPA-E conference, Fred Smith, the remarkable leader of FedEx, made the compelling case to reduce our dependence on oil; a product whose price is manipulated by a cartel which has caused the greatest wealth transfer in our

history from the pockets of working people and businesses to countries, many of whom are not our allies. And yet, having in hand a tremendous tool for progress in this critically strategic battle -- a tool that drew the country's best to your door -- you failed not only in the deployment of funds from ATVM but in dissipating these efforts against not just false hope, but false words. For us, this is a particularly sad day for our employees and their families, as well as the employees and families of our partners. We asked our team members on countless occasions to work literally around the clock whenever yet another new DOE requirement came down the pike, so that we could respond swiftly and accurately. And, we always did.

Sincerely,

Reuben Munger

CEO

Mike Donoughe

COO

Bright Automotive is not alone in its frustration, as at least three additional companies, U.S. Geothermal, Inc., RenTech, and Tenaska, have suffered substantial harm at the hand of DOE's favoritism and blatant disregard of the law.

U.S. Geothermal, Inc.

U.S. Geothermal, Inc. submitted a DOE loan guarantee application for a geothermal power project in San Emidio, California. Like Bright Auto, U.S. Geothermal received several "clear assurances the DOE considers San Emidio a priority project and that [the] credit review

Letter, Reuben Munger and Mike Donoughe, Bright Automotive, to the Honorable Steven Chu, Sec'y of Energy, Feb. 28, 2012 (on file with author).

process could be accomplished within the required timeframe." Relying on these statements and assurances, U.S. Geothermal took action to advance the project and ensure full readiness and compliance with DOE's stated requirements. The company incurred numerous expenses, including fees to legal counsel and engineers, as well as resources devoted to the completion of engineer reports and a term sheet. 66 Most significantly, consistent with a DOE requirement for priority treatment within the 1705 program, U.S. Geothermal executed a 25 year PPA. U.S. Geothermal has taken every step to ensure that the San Emidio project embodies the "quality" and "readiness" requirements DOE has emphasized. The project, which "would be one of the smaller and more straight-forward transactions," was ready to enter the credit approval process by May 2011, only to be abruptly notified that DOE decided to suspend work on this loan guarantee.

DOE, in a draft letter to U.S. Geothermal, stated "there are a number of projects that are closer to the conditional commitment stage than yours, and we expect these projects, if they

reach financial close, to utilize all of our remaining appropriation." In this draft letter, Jonathan Silver further provided that "the decision does not reflect the merits of the project, but rather the timing and funding constraints of the program." This claim is dubious at best. As is revealed in Section III of this report, Project AMP failed to meet the eligibility requirement relating to commencement of construction; nonetheless, it received a $1.4 billion FIPP-based DOE loan guarantee commitment on September 30, 2011. Antelope Valley Solar Ranch failed to meet the "innovativeness" requirement and the "one technology per sponsor rule." Despite this, Antelope Valley succeeded in gaining a $646 million FFB direct loan commitment. These two projects consumed an enormous share of DOE's appropriation yet clearly were not "closer tothe conditional commitment stage."

According to its letter, U.S. Geothermal suffered substantial harm as a result of DOE's decision to violate the terms of its own program in providing loan commitments to ineligible projects. The company incurred significant expenses in its efforts to meet DOE's standards and secure the financing it needed to proceed. The greatest harm will result from the PPA U.S.

Geothermal entered into in reliance on DOE statements, which now contractually obligates them to provide power for 25 years or suffer penalties. 71 According to U.S. Geothermal's letter, in the absence of a DOE loan guarantee, the terms of the PPA create a significant obstacle to obtaining commercial financing for their project going forward.

Rentech

Letter, Daniel Kunz, U.S. Geothermal President & CEO, to Jonathan Silver, U.S. Dep't of Energy Loan Program

Office, Executive Director (May 11, 2011).

Draft letter, Jonathan Silver, U.S. Dep't of Energy Loan Program Office, Executive Director, to Daniel Kunz,

President of U.S. Geothermal (no bates stamp and no date).

Letter, Daniel Kunz, U.S. Geothermal President & CEO, to Jonathan Silver, U.S. Dep't of Energy Loan Program

Office, Executive Director (May 11, 2011).

Rentech submitted a proposal for financing for its Northwest Florida Renewable Energy Center Project (NWFREC). Like Bright Automotive and U.S. Geothermal, Rentech had progressed according to plan and adhered to DOE's prescribed schedule. In coordination with DOE staff, Rentech had taken such steps as signing sponsor payment letters, setting up necessary infrastructure, and entering the due diligence process.

Despite making every effort to fulfill all the requirements DOE laid out, DOE, again, unexpectedly suspended the approval process for the NWFREC Project. Given the steps Rentech took to ensure all requirements were being fulfilled, DOE seems to have made a decision based on favoritism rather than the law, choosing to fund larger, ineligible projects over a number of more suitable alternatives.

Tenaska

Tenaska sought financing for Imperial Solar Energy Center South (IESC South), a solar power project in Imperial County, California. Like the others, this company also received a letter from DOE suspending the loan approval process, indicating that other projects were closer to the conditional offer stage. iven the steps Tenaska appears to have taken prior to the suspension, this is unlikely.

Prior to receipt of DOE's letter, Tenaska had been working in coordination with DOE staff and was finalizing the execution of the required term sheet. 76 Additionally, the company was progressing through the due diligence stage and expected its preliminary Credit Assessment from Fitch in the very near future. It appears that, once again, DOE suspended the approval of a credible project adhering to all stated standards and working closely with DOE staff, only tolater approve massive funding for a project proven to be nowhere nearly as far along in the process as DOE purported. DOE's favoritism significantly harmed yet another company that hadrelied on the promise of 1705 financing.

The similarity of concerns and claims made by Bright Automotive, U.S. Geothermal, Rentech and Tenaska make clear that DOE actively mislead applicants about the status of their

loan applications, thereby encouraging these firms to misallocate capital, which has led to financial harm. When considered in the context of the excessively large loan guarantees provided to Abengoa, First Solar and ProLogis, and the outright violations associated with Antelope Valley and Project AMP, the claims of these companies bring to light the extent of harm that can result when a regulator fails to maintain integrity and allows inappropriate bias and influence to distort its decisions.

To the extent that political connections and lobbying efforts influenced the DOE loan program, this increases the potential harm to our capital markets and our economy. The large

Letter, D. Hunt Ramsbottom, Rentech, President & CEO to Jonathan Silver, U.S. Dep't of Energy Loan Program

Office, Executive Director (May 9, 2011).

Letter, David W. Kirkwood, Tenaska, Vice President & Treasurer, to Jonathan Silver, U.S. Dep't of Energy Loan

Program Office, Executive Director (May 17, 2011).

Letter, David W. Kirkwood, Tenaska, Vice President & Treasurer, to Jonathan Silver, U.S. Dep't of Energy Loan

Program Office, Executive Director (May 17, 2011).

number of troubling relationships between industry and government officials reflects an environment where fair impartial loan determinations did not occur, resulting in poor decisions.

For example, First Solar gained a unique advantage relative to its peers by mastering its relationship with government as we describe in Section III. Just six months after DOE provided First Solar three loan commitments totaling $2.4 billion, the Committee learned that DOE's prized achievement under the First Solar scheme, First Solar's Mesa solar panel manufacturing plant, will delay its startup and cut jobs while cutting back global production by 60%. We also learned Abound Solar, a solar panel manufacturer that received a $400 million DOE loan commitment, has since failed.

Following Solyndra, such a rapid pace of failure for solar projects, including the industry leader First Solar, leads us to expect many more solar projects will follow. As a result of these failures, we should also expect supply disruptions to solar generation projects, breaches of supply contracts, job loss, and dislocation to harm other taxpayer-backed solar firms. Based o these projections, it appears the DOE loan program, in the aggregate, will place a drag on the entire economy as investors in these firms and taxpayers face losses and bankruptcies.

D. The "Independent" Review of the Loan Guarantee Program

In October 2011, the White House ordered that an independent review be conducted by outside consultants in response to emerging problems, uncovered by the Solyndra scandal, with DOE's Loan Guarantee Programs. 78 The review, led by an "independent consultant," former Obama Administration Assistant Secretary of the Treasury, Herbert Allison, found serious systemic problems related to DOE management and issuance of loan guarantees. Among the findings, Allison reported that DOE's loan program office suffers from structural weaknesses.

The report finds:

- A lack of clarity in the lines of authority within the loan program office;

- A lack of balance between those with governmental experience and those with

"substantial private sector experience and skill in project management and finance;"

- A lack of clear guidance regarding DOE's standard of "reasonable prospect of

repayment;"

- A lack of clarity with regard to DOE's goals and tradeoffs with respect to financial goals

versus policy goals; and

- The fees charged to companies to administer the program are not adequate to last through

the duration of the loan guarantees.

While the institutional and managerial recommendations from the independent review are appropriate and helpful, the report falls short because it fails to consider whether political pressure played a role in the decision-making process at DOE. Additionally, the review does not

THE WHITE HOUSE , REPORT OF THE INDEPENDENT CONSULTANT ' S REVIEW WITH RESPECT TO THE DEPARTMENT OF ENERGY LOAN AND LOAN GUARANTEE P ORTFOLIO (Jan. 31, 2012), available at

http://www.whitehouse.gov/sites/default/files/docs/report_on_doe_loan_and_guarantee_portfolio.pdf

provide much insight into taxpayer risks – the independent review looks at "credit subsidy costs," which represent the net present value of the expected lifetime cost to taxpayers of these loans. Credit subsidy costs, however, do not fully capture the risks to which taxpayers are subjected. According to the non-partisan Congressional Research Service, the independent review "did not calculate expected losses that may be realized by the project portfolio, and the report states that eventual losses cannot be predicted [using the accounting methods adopted by the review]." In other words, unforeseen risks exist within DOE's portfolio which may have future budgetary implications but are incalculable using governmental accounting methods.

Furthermore, it has been widely reported that the independent review found the cost to taxpayers of the loan programs to be lower than originally projected. This reading of the report neglects to explain how these calculations came about. The independent review evaluated loans and loan guarantees, broken down into three categories created by the independent consultant: utility-linked loans and loan guarantees ("projects for the generation or transmission of alternative sources of energy"); Non-utility-linked loans and loan guarantees (generally, projects that bear greater technological risk; Beacon Power and Solyndra would fall into this category); and Ford and Nissan loans (loans to these two companies were broken out because these "projects are more typical of traditional secured corporate loans").

When looked at in the aggregate, the costs of the program have, in fact, decreased since the DOE's estimates at the time of origination. 83 However, this optimistic outlook is driven largely by the third category of loans and loan guarantees – those given to Ford and Nissan. The costs of the first two categories – utility-linked loans and non-utility-linked loans – increased by 14 percent and 71 percent, respectively, while the estimated cost of the Ford and Nissan loans decreased by 95 percent. The large drop in the cost of the loan to Ford and Nissan was largely driven by these two companies receiving credit ratings substantially greater than what DOE believed they merited at the time of DOE's loan origination. Looking just at utility-linked and non-utility-linked loans and loan guarantees, the expected cost to taxpayers has markedly increased. The Allison report glosses over this pertinent fact.

Lastly, the review excludes costs associated with Beacon Power and Solynda when it calculated taxpayer liabilities. This is a significant omission, as Beacon Power had drawn down 91 percent of its loan guarantee at a cost to taxpayers of $39 million, while Solyndra had drawn

Phillip Brown, James Bickley, Bill Canis, "Consultant Review of DOE's Loan and Loan Guarantee Portfolio:

Summary and Analysis of Key Findings and Recommendations," Congressional Research Service, Memorandum,

March 8, 2012.

THE WHITE HOUSE , REPORT OF THE INDEPENDENT CONSULTANT ' S REVIEW WITH RESPECT TO THE DEPARTMENT OF ENERGY LOAN AND LOAN GUARANTEE PORTFOLIO (Jan. 31, 2012), available at

http://www.whitehouse.gov/sites/default/files/docs/report_on_doe_loan_and_guarantee_portfolio.pdf

Phillip Brown, James Bickley, Bill Canis, "Consultant Review of DOE's Loan and Loan Guarantee Portfolio:

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*http://www.whitehouse.gov/sites/default/files/docs/report_on_doe_loan_and_guarantee_portfolio.pd*f

Phillip Brown, James Bickley, Bill Canis, "Consultant Review of DOE's Loan and Loan Guarantee Portfolio:

Summary and Analysis of Key Findings and Recommendations," Congressional Research Service, Memorandum,

March 8, 2012.

down 98 percent, or $527 million. This is $566 million in costs to taxpayers from the loan guarantee program that are completely ignored by the independent review.

III. DOE Violated Statutory, Regulatory, and Prudential Requirements

The Committee investigation and analysis reveals that, among many other concerns, DOE loan commitments exposed taxpayer funds to excessive risk as a result of DOE's bias toward approving loans without regard to warning signs. In some cases it appears the bias may stem from DOE's susceptibility to effective lobbying efforts, conflicts of interest present in the Administration, or from its overriding policy preference for renewable technology. The Committee identified many cases where the DOE disregarded their own taxpayer protections, ignored lending standards and eligibility requirements and, as a result, amassed an excessively risky loan portfolio. After review of internal emails, staff have identified instances when DOE faced barriers that placed loan approvals at risk, DOE staff simply sought to justify and overcome the barriers, rather than giving the barriers due consideration.

A. DOE Repeatedly Violated Requirements Intended to Ensure Innovation and Manage Risk

1. Regulatory Requirements

The Energy Policy Act specifies that the Secretary may only make loan guarantees under §1703 for projects that employ "new or significantly improved technologies." 86 DOE's implementing regulation defines this as an energy technology "that is not a CommercialmTechnology, and that has either (1) Only recently been developed, discovered, or learned; or (2) Involves or constitutes one or more meaningful and important improvements in productivity and value, in comparison to Commercial Technologies in use in the United States. . . ." 87 In applying this definition, it is important to bear in mind the congressional intent underlying title XVII: to incentivize innovative technologies.The Loan Program Office's (LPO) first solicitation, issued on July 29, 2009, targeted innovative projects that satisfied the statutory and regulatory requirements of §1703. 89 Projects approved under this solicitation could access 100% financing through the Federal Financing Bank.

The LPO's second solicitation, issued on October 7, 2009, created the FinancialInstitution Partnership Program (FIPP) under § 1705. 90 This loan guarantee solicitation was An example of evidence indicating a strong ideology: Jonathan Silver, the former Director of the Loan Program Office (LPO) stated in an email to Matthew Winters dated June 9, 2011, in relation to a Treasury review of First Solar cost estimates, "Well done. Sorry you have to deal with all this. Hope the real story of how those folks tried to kill deals that would have moved the needle and created jobs because of a slavish attachment to a flawed and limited world view comes out."

42 U.S.C. § 16513(a)(2).

10 C.F.R. § 609.2 (2011).

Energy Policy Act of 2005, Pub. L. 109-58, title XVII, 119 Stat. 1117 (2005).

Innovative Solicitation, supra note 14.

FIPP Solicitation, supra note 23.

open to non-innovative (i.e., already commercialized) projects, but the project sponsor had to secure the loan itself from a private lender. This structure reflects a reasonable and prudent application of the Department's loan guarantee authority: a project that employs commercialized technology would only need a federal loan guarantee if it was an inherently high-risk venture.

The Department prudently sought to mitigate this risk by requiring that it be shared with a private financial institution.

A second requirement in the Code of Federal Regulations only allows for "one technology per project sponsor." 9Section 609.3(a) states that a Project Sponsor or Applicant may only submit one Pre-Application or Application for one project using a particular technology. The rule prohibits an Applicant from submitting a Pre-Application or Application for multiple projects using the same technology. This common-sense requirement mitigates the risk to taxpayer dollars by ensuring diversity, while increasing the potential for innovation within the Department's loan guarantee portfolio.

Nonetheless, in issuing these loans, DOE disregarded these constraints, often with the explicit encouragement of department officials. Substantial evidence indicates that, in two cases, officials in the Loan Programs Office deliberately mischaracterized substantively identical technologies as dissimilar. In other cases, DOE labeled a technology as "innovative" when it clearly should have been classified as a "proven technology" merely because the particular model had not been sold in the United States. Additionally, there is evidence that applicants, with the encouragement of department officials, intentionally mischaracterized their projects as "innovative" in an effort to access the Federal Financing Bank and defeat these prudentia requirements.

2. The First Solar Scheme

a. Overview

First Solar manufactures thin film cadmium telluride solar panels and also provides prefabricated solar plants, where buyers can purchase a ready to run solar generation facility that uses First Solar's cadmium telluride panels. 94 First Solar sought to create four turnkey projects with the assistance of DOE loan guarantees and direct loans. Contrary to the law governing DOE loans, these four projects relied on virtually identical solar technology. Accordingly, First Solar's use of the same technology across the four projects resulted in potential violations of federal regulations and the underlying loan solicitations. Specifically, through DOE's funding of three First Solar projects, DOE and First Solar may have violated regulations imposing the innovativeness requirement 95 and violated the regulation that allows only one technology per project sponsor.

10 C.F.R. § 609.3(a) (2011).

See discussion infra Part III.A.2.

See discussion infra Part III.A.2.e.

See First Solar, Product and Services, available at http://www.firstsolar.com/Products-and-Services/Products

The Energy Policy Act specifies that the Secretary may only make loan guarantees under §1703 for projects that employ "new or significantly improved technologies." 42 U.S.C. § 16513(a)(2). DOE's implementing regulation defines this as an energy technology "that is not a Commercial Technology, and that has either (1) Only recently been developed, discovered, or learned; or (2) Involves or constitutes one or more meaningful and important. First Solar submitted applications for two of the projects, Topaz and Desert Sunlight, under the DOE's FIPP solicitation that allowed for non-innovative projects. The other two projects, Agua Caliente and Antelope Valley Solar Ranch, sought and succeeded in gaining an advanced position in the application process by purchasing existing projects from Nextlight Renewable Power ("Nextlight") that previously filed applications with DOE. However, the projects purchased from Nextlight had applied under the DOE's "innovative" solicitation.

First Solar always intended to use the same technology across all four projects. However, given the innovativeness requirement that applied to Agua Caliente and Antelope Valley Solar Ranch, as a result of Nextlight's original applications, these projects still needed to be deemed innovative. Additionally, the two projects needed to comply with the one technology per project sponsor requirement. This latter requirement meant that the two "innovative" projects also needed to be differentiated from each other to qualify.

First Solar's Agua Caliente and Antelope Valley Solar Ranch received funding despite the fact that each project may have violated the regulations described above. In the next section, we describe these violations in greater detail, provide the motives of DOE and the

Administration, and offer documentation indicating DOE manufactured evidence of compliance with these rules while internally conceding their failure to adhere to the law.

b. The Manufacturing Plant that Motivated Action on All Four First Solar Projects

While DOE publicly talked about the merits of each First Solar project individually, internal DOE emails indicate that DOE favored First Solar projects and viewed them collectively because DOE sought to enable First Solar to build a new manufacturing plant in Arizona. The logic was simple: four solar generation projects would provide sufficient demand to justify and support locating a new First Solar manufacturing plant in Arizona. The White House planned to use this new manufacturing plant and the jobs that it supported as evidence of the indirect benefits of DOE loan guarantees for the economy.

Documents and e-mails obtained by the Committee offer unique insight on how decisions were made. In an e-mail from Jonathan Silver, Executive Director of the Loan Programs Office at DOE, to Deputy Energy Secretary Daniel Poneman in May of 2011 demonstrates DOE's plan to group the First Solar deals as a package. Silver wrote that "First [S]olar deals need to be considered as a package since they support the building of a manufacturing plant to service their collective needs." 99 The White House supported this packaging idea. In an email to other DOE officials from June 2011, Matthew Winters, Senior Advisor for Loan Programs at DOE, wrote:

We have often talked about how the 3 FSLR [First Solar] projects were are (sic) considering will support the building of a manufacturing facility in Arizona. Canimprovements in productivity and value, in comparison to Commercial Technologies in use in the United States..."

See 10 C.F.R. § 609.2 (2011).

Section 609.3(a) states "[a] Project Sponsor or Applicant may only submit one Pre-Application or Application for one project using a particular technology. The rule prohibits an Applicant from submitting a Pre-Application or Application for multiple projects using the same technology. See 10 C.F.R. § 609.3(a) (2011).

Email from Jonathan Silver, DOE, May 31, 2011 (on file with author)

one you (sic) please quickly draft a 1-2 sentence blurb that states exactly how this is the case, and give the location, size, and expected construction date of the mfg facility? This will go into a document for the White House that describes the manufacturing impact of the projects in our pipeline. 100 (emphasis added)

c. The Collective Application of First Solar

The DOE's treatment of the First Solar applications during the credit review process demonstrates the Department realized the projects all employed the same non-innovative technology. DOE considered packaging three First Solar projects as one vote in front of the DOE credit review board (the Antelope Valley, Topaz, and Desert Sunlight projects), despite the projects coming from different solicitations (innovative versus commercial). Margot Anderson, a Senior Advisor at DOE, wrote an email on June 25, 2011, before the DOE credit review board voted to grant conditional guarantees to three First Solar projects (Antelope Valley, Topaz, and Desert Sunlight), asking "[S]hould it be three separate votes or one vote for all three projects?" 101 While the credit review board appears to have voted separately for all three projects, this conversation reinforces the mindset within DOE that all First Solar projects represented a package and not individual projects.

Despite ultimately approving credit individually for each project, the next email shows the extent to which DOE wanted "all of the deals to look exactly alike":

Our question is simply "is there an issue if we bring all of the First solar projects including the various IEs (Luminate and Burns and Roe) into the same room to discuss the terms of the deals?" Essentially, we want all of the deals to look exactly alike. First Solar has suggested the meeting so they are on board the Ies are OK with it but one brought up the [Non-Disclosure Agreement] issue and I want to get that resolved. Jonathan want[s] the meeting to happen this week or early next, to get these projects going.

With this plan to package the First Solar deals, DOE granted conditional loan guarantees to four First Solar projects that used First Solar's

cadmium telluride photovoltaic solar panels. DOE describes this technology as “commercially proven” and “deployed since 2001.” 104 Yet, DOE was classified two of First Solar’s projects as innovative and ignored the “one sponsor per technology per solicitation.”.

Email from Matthew Winters, DOE, June 14, 2011. (Emphasis added).

Email from Margot Anderson, DOE, June 25, 2011.

Email from Jeffrey Walker, DOE, to Susan Richardson and Kimberly Heimert, DOE, Subject “Bridge [Non Disclosure Agreements] for this unusual circumstances,” (March 29, 2011, 8:21 AM).

DOE did not finalize First Solar’s Topaz project and only gave final approval to three First Solar projects. Upon finalization of its DOE loan guarantees, First Solar sold all of its development projects to large utilities, such as Exelon and NextEra.

“Energy Department Finalizes Loan Guarantee to Support California Solar Generation Project,” U.S. Department of Energy, September 30, 2011. Available at: https://lpo.energy.gov/?p=5324.

This scheme coincidentaly improved the financing terms of the programs by enabeling the government to provide a 100% direct loan as opposed to an 80% loan guarantee. Specifically, those entities approved under the innovative path received direct federal loans from the Federal Financing Bank (FFB) for 100% of the sought after amount. Had these entities gone through the commercial path, they would need to borrow from a private lender who would then First Solar’s Acquisition of NextLight's Projects to Enable All Four Projects to Proceed Together To understand why DOE manipulated the First Solar applications one must understand how these projects came to pass. First Solar purchased NextLight Renewable Power in a deal that included NextLight’s two pending DOE loan guarantee projects—Agua Caliente and Antelope Valley Solar Ranch—in April of 2010. 106 DOE had invited both NextLight projects into the due diligence level in the loan application process, 107 indicating that both continued to progress successfully towards ultimate approval. NextLight had applied for innovative loan guarantees for both projects. Under Nextlight’s applications, the Agua Caliente project would use amorphous silicon technology, and the Antelope Valley project would use crystalline siliconsolar technology.

When First Solar purchased NextLight, it planned to switch to its own proven – and non-innovative - technology relying on cadmium telluride panels for both projects. However, Firstn Solar wanted to keep both projects in the innovative technology queue. First Solar faced two challenges to keep both projects in the innovative queue. First, the company had to prove that both projects used innovative technology; while using First Solar cadmium telluride panels for the projects that would not qualify as innovative. Second, First Solar had to ensure that both projects used different “innovative” technologies, otherwise the projects would violate the DOE rule that one company could only sponsor one project using a specific innovative technologyunder the innovative technology solicitation.

e. Failure to Prove Innovativeness; Resorting to Falsification

First Solar planned to qualify both projects for the innovative solicitation by incorporating relatively minor new technologies into the solar plants. The Agua Caliente project would use standard First Solar cadmium telluride panels, but would use an inverter “fault ride-through and dynamic voltage regulation” technology 109 that would help the plant stay operational even if the sun did not shine constantly on a particular day. 110 First Solar relied on this inverter receive at most an 80% guarantee. Therefore, the non-innovative entities benefitted from the false “innovative” designation in that they received fully guaranteed funding, as opposed to partially guaranteed, reducing their cost of borrowing. The other two First Solar projects received partial loan guarantees as part of the Financial Institution Partnership Program.

Dealbook, First Solar Buys NextLight for $285 Million, N.Y. T IMES , April 29, 2010 available at http://dealbook.nytimes.com/2010/04/29/first-solar-buys-nextlight-for-285-million/.

Email from Daniel Tobin, Director of Loan Programs Intake Division and Senior Investment Officer, U.S. Dep't of Energy (July 23, 2010).

Internal Memo from Dong Kim, Chief Engineer of the Technical and Project Management Division, U.S. Dep't of Energy, to David Frantz, Director of Loan Guarantee Program Office, U.S. Dep't of Energy (July 25, 2010).

Press Release, U.S. Dep't of Energy, Department of Energy Finalizes a $967 Million Loan Guarantee to Support the Agua Caliente Solar Project (Aug. 5, 2011) available at http://energy.gov/articles/department-energy-finalizes-967-million-loan-guarantee-support-agua-caliente-solar-project.

U.S. Dep't of Energy, Internal Memo, "Next Light Antelope Valley Technical Eligibility Re-Evaluation" (July 21, 2010); See also email from Cathy Grover, Luminate, to Robin L Sampson, U.S. Dep't of Energy (Mar. 30, 201,1 3:39 PM EST), which stated, "The Project's inverter that we show currently specified is an SMA 630CP ... From a design perspective, switching to the 720CP (from the 630CP, if this is in fact what First Solar is doing), has no real impact on the electric energy production values."

to qualify the Agua Caliente project as innovative. 111 However, the innovativeness of this inverter technology is highly questionable based on the following issues identified through the review of email communications and internal DOE reports.

An email between DOE staff describes the lack of innovativeness of this inverter technology, stating, "The Project's inverter that we show currently specified is an SMA 630CP ... From a design perspective, switching to the 720CP (from the 630CP, if this is in fact what First Solar is doing), has no real impact on the electric energy production values." A DOE whitepaper reveals that more than 200 of these allegedly "innovative" inverters had been in use in Germany, Italy and Spain since September 2010. 113 While, according to the rule, foreign commercial use of a technology is not a bar to deeming domestic use innovative, the broad commercial use in Europe reflects the disrespect DOE applies to the actual innovativeness requirement.

Directly calling into question any determination that this technology is innovative, the DOE whitepaper provides that these inverters are "commercially ship[ped] today in the United States as well." 114 The report explains that "the technology being implemented is not new as compared to traditional turbine-based generators" and is commercially manufactured in Colorado. These facts emailed among DOE staff undermine any determination of innovativeness and clearly indicate that Agua Caliente failed to satisfy the requirements designed to spur development of new technologies. First Solar also planned to use this inverter technology to make the Antelope Valley project innovative; however, even if the technology were innovative with regard to Agua Caliente, its second application to Antelope Valley would violate the one technology per project sponsor requirement. To overcome this obstacle, First Solar added a "single axis tracking" system for the Antelope Valley project to differentiate it. This system simply allowed the panels to track the sun – a technology that has been around for decades. Additionally, First Solar1

See "NEXT LIGHT ANTELOPE VALLEY TECHNICAL ELIGIBILITY RE-EVALUATION" attachment (July 21, 2010) to email from Sarah Hetznecker, U.S. Dep't of Energy, to Patrick Gorman, U.S. Dep't of Energy, Subject:

"here is the antelope valley re-evaluation memo" (July 22, 2010 9:06 AM).

The Antelope Valley Project will use the new Fault Ride-Through Technology inverters that are being used in the Agua Caliente Project and were the basis for new and significantly improved technologies as compared to commercial technologies' for that project. While this is being used on both of these projects, it will meet the definition of "new of [sic] Singificantly Improved Technology and it is not a Commercial Technology, because it is not being used in three or more commercial projects in the US in the same general application and it has not been in operation for 5 years. In addition, First Solar will use single axis tracking on 50 MW of the 230 MW for the Antelope Valley Project. Based up on the re-evaluation, we conclude that the project will meet the eligibility criteria

Email from Cathy Grover, Luminate, to Robin Sampson, U.S. Dep't of Energy (March 30, 2011, 3:39 PM).

"Antelope Valley Solar Ranch 1 Project: Inverter Implementation Whitepaper" (May 18, 2011) (Email from Sarah Hetznecker to Jeffrey Walker (May 22, 2011, 12:14:03 PM)).

See supra note 87.

See supra note 91.

Dong Kim, U.S. Dep't of Energy Memo, "First Solar (Next Light) Antelope Valley Solar Ranch One Technical Eligibility Re-Evaluation"(Aug. 4, 2010).

only planned to install this system on 50 MW of the plant's 230 MW capabilities, less than 25% of the plant. Rather than force First Solar's Antelope Valley project to step out of the innovation queue, DOE quickly created a memo that allegedly justified the project remaining "innovative."

The memo claimed that the Antelope Valley project would use three different innovative technologies: Fault Ride-Through Technology, Dynamic Voltage Regulation, and single axis tracking. 120 Internal DOE emails reveal a rushed process that left certain DOE officials questioning the validity of the analysis. 121 DOE officials also heavily edited the memo to deemphasize First Solar's other pending projects and the fact that the Antelope Valley project used the same "innovative" technology as the Agua Caliente project. More importantly, on June 23, 2011, Dong Kim, Director of the Technical and Project Management Division, (who had edited the DOE memo on Antelope Valley's innovativeness referenced above) wrote an email indicating that the allegedly innovative tracking technology did not constitute innovativeness, was not considered innovative originally, and also pointed out that others continuously revised documents to incorrectly reflect that the trackers were "innovative."

Kim wrote:

Someone keeps changing [Antelope Valley Solar Ranch] Technical slides to include single axis trackers as an innovation. Be clear that this not an innovation. The record will show that we did not grade this as innovative

during intake review. It will not stand up to scrutiny if compared with CVSR

[California Valley Solar Ranch] trackers. Whoever continues to make this change

needs to understand that Technical does not support the 20 percent of the CVSR

field with trackers as an innovative component. 123 (emphasis added)

The apparent cover-up that led to Kim's stern email indicates that DOE staff sought to

maintain a false finding of "innovative" for the single axis trackers.

DOE's August 4, 2010, memo claimed that the Antelope Valley project used three innovative technologies. However, DOE's Director of the Technical and Project Management Division revealed that the single axis trackers did not qualify as innovative and DOE's own press release demonstrated that the Agua Caliente project already used both the fault ride-through and the dynamic voltage regulation technologies. 124 Since Agua Caliente had already received a loan guarantee using this "innovative" technology, Antelope Valley was barred from relying on the same technology for its innovativeness-based application. As a result, Antelope Valley provided

Email from Susan Grodin, U.S. Dep't of Energy (Aug. 3, 2010) (stating that "this memo was cobbled together from different sources and in so doing, an obvious piece was left out").

Dong Kim, U.S. Dep't of Energy, Technical memo (July 25, 2010) (discussing that DOE's tracked changes on the memo reveal that DOE removed references to First Solar's Desert Sun and Topaz projects from the second paragraph and removed an entire paragraph discussing how the Antelope Valley project and the Agua Caliente project use the same Fault Ride Through Technology).

Email from Dong Kim, U.S. Dep't of Energy (June 23, 2011).

Press Release, U.S. Dep't of Energy, Department of Energy Finalizes a $967 Million Loan Guarantee to Support the Agua Caliente Solar Project (Aug. 5, 2011) available at http://energy.gov/articles/department-energy-finalizes-967-million-loan-guarantee-support-agua-caliente-solar-project.

no innovative technology that would justify its eligibility for a DOE loan. DOE should have deemed First Solar's Antelope Valley project ineligible under the innovativeness solicitation.

f. Persistent Pressure to Approve the First Solar Projects and Achieve the Master Plan of Building a Manufacturing Facility First Solar kept pressure on DOE to approve the three projects in the final weeks leading up to DOE's issuance of conditional loan guarantees. On May 18, 2011, Jens Meyerhoff, an executive at First Solar, wrote a letter to Jonathan Silver implicitly threatening that First Solar might not commit to completing construction on the Arizona manufacturing plant if DOE did not approve all three First Solar loan guarantees.

Meyerhoff wrote:

A failure to receive DOE and U.S. government agency approvals for these

projects or missing the September 30 statutory deadline under the 1705

program would seriously jeopardize the financing for the Agua Caliente,

Antelope Valley Solar Ranch, Desert Sunlight and Topaz projects. As you

know, a major reason for choosing to build the manufacturing plant in Mesa, AZ was to provide solar modules to these large and important U.S. projects.

We will invest more than $300 million in the factory, put people in Mesa to work at a long-dormant industrial site that once was home to an automotive testing facility, and create high tech green jobs that did not exist before...

...First Solar consciously made the decision to build a new U.S. manufacturing center to support and recycle economic benefits created by favorable U.S. political support for renewable energy, including the 1703 and 1705 DOE loan guarantee programs.

The DOE loan programs provide an important financing 'bridge' at a time when the U.S. private debt markets have little or no experience financing first-of-their-kind utility-scale solar projects, and the capital markets remain constrained in the wake of the global financial crisis. If FirstnSolar's project applications are not approved, or if they're delayed beyond September 30, we believe it could jeopardize our ability to close financing (both debt and equity), jeopardize construction of 1,620 megawatts of solar capacity and, frankly, undermine the rationale for a new manufacturing center in Arizona.

First Solar also tried more friendly persuasion. Nikolas Novograd, Vice President at First Solar, sent Bill Pegues at DOE a picture of the construction taking place at First Solar's Arizona plant. Pegues planned to use the construction picture to help persuade members of the credit review board to vote for the First Solar projects. He forwarded the picture to several DOE officials, commenting, "[H]ere's a photo of the construction

Letter from Jens Meyerhoff, First Solar, to Jonathan Silver, Director of Loan Programs Office, U.S. Dep't of Energy (May 18, 2011) (emphasis added).

progress on the FSLR mfg plant in Mesa, Arizona as of Tuesday 6/14. I'll bring several copies to CRB [Credit Review Board] just in case we need them." Additionally, Rob Gillette, CEO of First Solar, arranged a phone call with the Deputy Energy Secretary on June 24, 2011, only days before the Credit Review Board met to decide whether to grant conditional loan guarantees to the three First Solar projects.

By June 22, 2011, several days before the Credit Review Board approved conditional loan guarantees for the projects, Secretary Chu's office had already planned a press release to announce the conditional loan guarantees for the First Solar projects that relied upon job creation numbers from First Solar itself. 128 Secretary Chu's office carefully coordinated the media strategy for the approval of the conditional loan guarantees for the three First Solar projects. Sonia Taylor at DOE wrote in an email on June 28, 2011, that

S1's office hopes to offer an advanced story to a national reporter on all three First Solar deals later today, with a story to run tomorrow along with the press release...

...If you haven't already, can you all please notify the appropriate people from First Solar and the other companies that the deal is official? I have been working with First Solar (under the guise of 'should the deal be approved'), and they do not plan on writing a press release. Can you all

please see whether the banks plan on issuing a release? If so, we'll need

to review it. 129 (emphasis added)

On June 30, 2011, DOE issued a press release that announced the conditional loan guarantees for the three First Solar projects for around $4.5 billion. 130 The six paragraph announcement only mentioned First Solar once and described the Antelope Valley project as featuring "a utility-scale deployment of innovative inverters with voltage regulation and monitoring technologies that are new to the U.S. market." The press release did not mention the trackers on the Antelope Valley project.

DOE would eventually issue final loan guarantee offers to First Solar's Antelope Valley and Desert Sunlight projects on the final day of the 1705 loan guarantee program (September 30, 2011). 132 Despite the issues surrounding the innovative nature of the Antelope Valley project, DOE finalized a 100% loan guarantee worth $646 million for the allegedly "innovative" project. Ultimately, DOE did not finalize First Solar's Topaz

Email from Bill Pegues, U.S. Dep't of Energy (June 23, 2011).

Email from Elizabeth Emanuel, U.S. Dep't of Energy (June 24, 2011).

Email from William Pegues, U.S. Dep't of Energy (June 22, 2011).

Email from Sonia Taylor, U.S. Dep't of Energy (June 28, 2011).

Press Release, U.S. Department of Energy, DOE Offers Conditional Loan Guarantee to Support Nearly $4.5

Billion in Loans for Three California Photovoltaic Solar Power Plants (June 30, 2011) available at

https://lpo.energy.gov/?p=4873.

DOE did not finalize First Solar's Topaz loan guarantee project.

project, but a subsidiary company of Warren Buffett's Berkshire Hathaway purchased the project from First Solar.

g. First Solar's Financial Problems since the Loan Guarantees

Since DOE finalized First Solar's three loan guarantees (for over $3 billion), First Solar has encountered serious financial problems that put the DOE funded projects in jeopardy. First Solar's stock declined the greatest compared to of any S&P 500 companies in 2011 and has lost over $100 per share over the past year. 134 First Solar has cut production of its solar panels worldwide. 135 Based upon the company's financial troubles, First Solar fired its CEO October. 136 Additionally, in March 2012, the Securities and Exchange Commission announced an investigation into whether First Solar had improperly disclosed information about whether the First Solar Topaz project would receive a loan guarantee from DOE.

More recently, First Solar has revealed problems that directly impact its three DOE loan guarantee projects. First Solar's Antelope Valley project had problems getting a permit and has yet to receive any DOE funding. 138 First Solar announced in late February that it would postpone manufacturing solar panels at its Mesa Arizona plant, which is still under construction, because of financial problems. 139 First Solar intended for the Mesa facility to provide panels to the four First Solar projects. This delay means that the indirect jobs that the White House wanted to create with the three loan guarantees will likely never materialize, and raises questions about whether First Solar will have problems supplying solar panels to its DOE loan guarantee projects. Additionally, First Solar has revealed that it has needed to replace millions of dollars worth of its solar panels under warranty because they did not last in hot climates. Consideringall three of First

Solar's DOE-based solar generation projects are located in hot desert climates,this issue raises serious concerns about whether the panels will work properly long term.

h. Conclusion

There appears to be a significant amount of evidence, based on documents received by the Committee and supplied by DOE and others, indicating that **DOE manipulated its analysis** and strategically modified evaluations in order to issue loans to First Solar that would qualify

Todd White and Marc Roca, Berkshire Buys $2 Billion Power Projects as Buffett Wagers on Solar Energy, BLOOMBERG , December 7, 2011 available at http://www.bloomberg.com/news/2011-12-07/berkshire-s-midamerican-energy-to-buy-topaz-solar-farm.html.

"First Solar (FSLR) Worst Stock in S&P 500 This Year," StreetInsider, December 30, 2011 available at http://www.streetinsider.com/Insiders+Blog/First+Solar+(FSLR)+Worst+Stock+in+S%26P+500+This+Year/7046826.html.

Patrick O'Grady, First Solar delays Mesa production plant, P HOENIX B US . J., February 29, 2012 available at http://www.bizjournals.com/phoenix/morning_call/2012/02/first-solar-delay-mesa-production-plant.html.

First Solar Ousts CEO, Shares Dive 24 Percent, R EUTERS , October 25, 2011 available at http://www.cnbc.com/id/45035458/First_Solar_Ousts_CEO_Shares_Dive_24_Percent.

Patrick O'Grady, SEC investigating First Solar, P HOENIX B US . J., March 4, 2012 available at http://www.bizjournals.com/phoenix/morning_call/2012/03/sec-investigating-first-sola.html.

Yuliya Chernova and Cassandra Sweet, California Solar Deal Hits a Snag, W ALL S T . J., February 11, 2012 available at http://online.wsj.com/article/SB10001424052970203646004577214973345400202.html.

O'Grady, supra note 132.

Ryan Randazzo, "First Solar replacing more solar panels," The Arizona Republic, March 1, 2012 available at http://www.azcentral.com/arizonarepublic/business/articles/2012/03/01/20120301first-solar-replacing-more-solar-panels.html.

under the statutory guidelines. This is cause for serious concern. An application that should otherwise fail, but instead passes under improper influence and through the manipulation of analysis, results in the defrauding of taxpayers and misappropriation of assets.

Furthermore,any advantage to an applicant disadvantages other applicants and improperly diverts DOE resources.

B. DOE Violated the Statutory Requirement that Projects Commence Construction by September 30, 2011

The Recovery Act states that the Secretary may only make loan guarantees under § 1705 for projects "that commence construction not later than September 30, 2011." 142 This provision is designed to effectuate the rapid deployment of renewable energy projects. Furthermore, § 3(b) of the Act mandates that the Secretary expend appropriated funds "as quickly as possible consistent with prudent management," so as to achieve the Act's stated goal of economic stimulus. 143 This "shovel-ready" requirement also helps to mitigate risks associated with too many unknown variables.

The DOE knowingly violated this explicit statutory mandate. The Department's FIPP loan guarantee solicitation from October 7, 2009, defined "commence construction on beforeSeptember 30, 2011" to mean that (i) the Borrower has completed all pre-construction engineering and design, has received all necessary licenses, permits and local and national environmental clearances, has engaged all contractors and ordered all essential equipment and supplies as, in each case, can reasonably be considered necessary so that physical construction of the Eligible Project may begin (or, if previously interrupted or suspended, resume) and proceed to completion without foreseeable interruption of material duration and (ii) such physical construction (including, at a minimum, excavation for foundations or the installation or erection of improvements) at the primary site of the Eligible Project has begun (or resumed).

On September 30, 2011 – the last day of the program – the Secretary approved a $1.4 billion loan guarantee for Project AMP. Project AMP intends to install solar panels on the rooftops of many of ProLogis' extensive real estate holdings. However, as the September 2011 application approval deadline approached, Project AMP was nowhere near prepared to commence construction, in part because it failed to secure contractual commitments to purchase energy from its proposed solar generation facilities. 144 Construction cannot begin for any phase of Project AMP until parties agree to a Power Purchase Agreement (PPA), which helps to ensure sufficient revenue to justify an installation of solar panels. As of March 6, 2012, Project AMP

See discussion infra Part V.A. and V.B.

42 U.S.C. § 16516(a).

American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, §3(a), 123 Stat. 115 (2009).

Email from Eric Mogilnicki, WilmerHale, counsel to Bank of America, the lead lender for Project AMP (Mar. 6, 2012) (on file with author).

had not signed any PPAs, had not purchased any solar panels, and had not begun construction at any locations. Consistent with Project AMP's lack of preparedness to commence construction, Fitch Ratings imposed a "framework" methodology to rate the credit risk of Project AMP. Fitch explained that, due to a lack of negotiated prices, a lack of known product suppliers, and a lack of PPAs, Fitch could not model cash flows or consider the credit quality of the businesses the project would transact with. For this reason, Fitch mandated the use of a framework approach that imposed minimum credit quality requirements and other controls to ensure adequate credit quality relating to future transactions. 148 Fitch also required that Project AMP return to Fitch to receive ratings for each phase prior to seeking DOE loan disbursements consistent with the framework approach. As of March 6, 2012, Project AMP had not sought ratings for any phase of Project AMP. This further clarifies the extent of Project AMP's failure to commence construction.

While the credit rating methodology appears appropriate given the circumstance, the need to apply this approach reflects Project AMP's failure to meet the specific requirements of the law. Nonetheless, DOE approved Project AMP's loan guarantee for $1.4 billion dollars. DOE approval of this project on the final day with pressure from Secretary Chu reflects improper influence and recklessness that led to an extremely large and inappropriate loan commitment. As we describe in Section D below, following DOE's approval of Project AMP, natural gas prices fell dramatically, resulting in substantially lower power prices in areas where natural gas generation provides the marginal supply of power. Lower market prices for power reduce potential revenue for all PPAs – in other words, solar power directly competes against natural gas fired generation. Had Project AMP locked in PPAs at the time DOE approved its loan, this loss of potential

revenue would have been avoided. Given the lag between approval and PPA negotiation, price risk materialized, likely reducing the aggregate value of Project AMP as a **direct consequence of Secretary Chu's inappropriate approval.**

Had DOE rejected Project AMP due to its failure to commence construction, the government and participants in the project would have avoided misallocating capital to a project that was premature.

C. DOE Violated the Statutory Requirement of "Superiority," Illegally Benefiting Banks at the Expense of Taxpayers

When it created the loan guarantee program, Congress took several steps to protect taxpayer funds and limit the DOE's risk exposure. These restrictions are recited in § 1702 of the

See Fitch Ratings, "Credit Rating for ProSun Project Company, LLC. - Project AMP" (August 21, 2011).

See id. for additional detail on ratings approach provided through discussions with Fitch Ratings staff responsible for Project AMP ratings and Bank of America staff involved with Project AMP.

Mogilnicki, supra note 144.

See Ryan Tracy and Cassandra Sweet, Emails Show Chu's Loan-Deal Role, W ALL S T . J., Feb. 18, 2012 available at http://online.wsj.com/article/SB10001424052970204059804577229661338221828.html.

Energy Policy Act and by statute apply to all loan guarantees issued under title XVII. 152 One of the most important risk-limiting provisions requires the Secretary to secure a superior claim to any assets in the event of a default. 153 The statute unequivocally requires that these rights must be "superior to the rights of any other person." This common-sense rule ensures that if the U.S. government is on the hook to pay off creditors, it should be able recover at least some of its losses.

This right to superiority over collateral is appropriate given that taxpayers enabled the transaction through provision of a subsidy. Given the substantial risk associated with DOE loan guarantees and the lack of any potential for the taxpayer to profit, the law required that the DOE at least maintain a superior position with respect to collateral to protect taxpayers in the event that a project failed. Private banks stand to profit if a project succeeds, while also avoiding substantial downside risk if a project fails. Given these clear benefits to lenders, Congress determined that lenders should not also gain parity with the DOE on the rights of collateral and inserted the "superiority" provision to prevent weakening the taxpayer's position.

In what can only be considered a preemptive bailout for banks, DOE eliminated taxpayer protections by agreeing to share its rights in the collateral of failed projects with private lenders.

Notwithstanding the clarity of the statutory requirement and the policy basis for it, the DOE enacted regulations that allowed banks to gain parity with the United States with regard to collateral. While this may have increased its lending authority, it did so by weakening the taxpayer's protections.

A review of the seven Financial Institution Partnership Program based loan guarantees reveals that DOE agreed to share its collateral rights with the lenders for all FIPP loans issued after enactment of the DOE regulations. Instead of selectively sharing collateral for the safestprojects, DOE instead applied this approach to all FIPP loans, irrespective of the highly varying deal terms, credit quality and loan amounts. 157 In no case did DOE withhold this benefit from banks to protect taxpayers. In effect, DOE behaved as if its new interpretation of the law mandated that banks be placed on par with taxpayers.

1. Superiority of Rights vs. Pari Passu Sharing

In the event of a default, a loan guarantee provides assurances to banks and other lenders that they will recover 80% of the money loaned to the renewable energy project. This money comes from the American taxpayer. Under the system designed by Congress, while taxpayers

42 U.S.C. § 16512 ("... the Secretary shall make guarantees under this or any other Act for projects on such terms and conditions as the Secretary determines, after consultation with the Secretary of the Treasury, only in accordance with this section).

42 U.S.C. § 16512(g)(2)(B) ("The rights of the Secretary, with respect to any property acquired pursuant to a loan guarantee or related agreement, shall be superior to the rights of any other person with respect to the property").

74 Fed. Reg. 63,544 (Dec. 4, 2009) (to be codified at 10 C.F.R. pt. 609).

See "Terms and Conditions relating to loan agreements for all DOE-backed FIPP projects agreed to after December 4, 2009" (on file with author).

See 42 U.S.C. § 16512(c) (stating "a guarantee by the Secretary shall not exceed an amount equal to 80% of the project cost of the facility that is the subject of the guarantee...").

are on the hook for at least 80% of the loan in case of default, they will at least be in first position to try to recover their investment based on the sale of the defaulting company' assets. However, under the contracts awarded under § 1705, DOE included pari passu terms, which puts a lender in a position equal to the taxpayer with respect to rights to collateral.

The Department of Energy's approach ignores the plain letter of the law. Section 1702(g)(2)(B) contains the Superiority of Rights provision ("Superiority"). 160 Superiority provides that "[t]he rights of the Secretary, with respect to any property acquired pursuant to a guarantee, shall be superior to the rights of any other person with respect to the property." The statute clearly requires that DOE maintain superiority with regard to assets acquired as a result of a guarantee, and, as a result, precludes sharing the collateral with other creditors. Such sharing of collateral also flies in the face of the FIPP program requirements, which mandate loan guarantees to cover no more than 80% of any loan.

Consider the following hypothetical example:

DOE guarantees 80% of a billion dollar loan, which defaults. Upon default, the DOE pays $800 million to the senior creditor protected by the DOE loan guarantee. Assume the leftover assets are worth $500 million. Under this Administration's pari passu construct, DOE shares its senior rights to the recovery with the senior lenders, who already received $800 millionfrom the loan guarantee. Therefore, DOE recovers 80% of the $500 million recovery, or $400 million; the non-guaranteed lenders recover an additional 20% of the $500 million, which equals $100 million.

Recall that the lenders already recovered $800 million for their guaranteed portion. This means that in the aggregate, the private lenders that received the DOE loan guarantee recovered $900 million of the total billion dollar loan or 90%. Yet the law intended for taxpayers to be in first position with respect to the full $500 million in this hypothetical. Accordingly, Pari Passu terms directly violate the FIPP solicitation requirements.

2. Congress Specifically Considered and Rejected Changes to the Superiority

Provision that Would Have Allowed for Pari Passu Credit Terms Supporters of pari passu credit terms for DOE loan guarantees sought to change the law to allow for such credit structures. On July 16, 2009, Senate Bill S. 1462, which would have modified Title XVII to allow for pari passu credit terms by disabling the Superiority provision, was passed by the Senate Energy and Natural Resources Committee, but failed to pass the full Senate. 161 Also, in the last Congress, the House of Representatives passed "Cap and Trade," under H.R. 2454. That

bill had an identical provision to disable Superiority under Title XVII.

H.R. 2454 also failed to become law. The time invested in drafting a bill and seeking to pass it in both the Senate and the House reflects the effort and analysis that many lawmakers put into this issue. This is the clearest evidence that Congress does not recognize the DOE's authority to provide § 1705 loans

See 42 U.S.C. § 16512(g)(2)(B).

See S. 1462, 111th Cong. § 103(b)(3) available at http://energy.senate.gov/public/_files/s1462pcs1.pdf.

with pari passu terms. Rather, the law requires Superiority to apply to any property acquired pursuant to the original guarantee or binding agreement to provide a guarantee.

3. The Department of Energy Knowingly Violated the Law

Notwithstanding Congress's rejection of these bills that were designed to weaken taxpayer protections, on December 4, 2009, the DOE issued final regulations to allow for pari passu treatment of DOE loan guarantees. 162 By these actions, the DOE disregarded the law and Congress. The specific approach used in both S. 1462 and H.R. 2454 highlights the fact that the law currently does not allow for pari passu treatment specifically due to the Superiority provision. DOE's awareness of Congress's failure to change the law indicates DOE understood it may be violating the law when it provided loan guarantees with pari passu credit terms.

The Committee raised these concerns in a letter to the Secretary dated December 7, 2011.

The Department of Energy responded by asserting that § 1702(g)(2)(B) only "governs post-default rights of the Secretary, rather than conditions that must be met at the time th Secretary determines to make a loan guarantee." 164 Under the DOE's interpretation of the statute, "[o]nce the Secretary has actually acquired property through the Secretary's right of subrogation in a post-default situation, the statute provides that, as a matter of law, the Secretary's rights in that acquired property are superior to any other claimant with respect to that requirement."

The Department's interpretation is lacking on three levels. First, the Secretary can onlysecure his superior of rights in collateral before entering in a loan guarantee contract. To say §1702(g)(2)(B) only applies after a default renders the provision useless. Second, the preceding quotation from the DOE's response letter evinces the circularity of its logic: once the Secretary has actually acquired property through the right of subrogation, there is no need to provide for a superiority of rights: he has already acquired the property. Finally, the Department's interpretation ignores Congress' clear pronouncements of its understanding that § 1702(g)(2)(B) prohibits pari passu terms. The DOE has never addressed these clear statements of congressional intent.

IV. DOE Has Artificially Inflated Job Creation Statistics

One characteristic of "green jobs" often touted by the Obama Administration is that green industries rely heavily on manpower, a trait that "makes them especially alluring when it comes to government-led job creation" measured in terms of jobs "created or saved." In studies heralding the creation of large numbers of jobs in green jobs programs, there is a consistent preference for inefficiency. This is contrary to the fundamental economic principle that high

74 Fed. Reg. 63544, 63545 (Dec. 4, 2009) (to be codified at 10 C.F.R. pt. 609).

Letter from Darrell Issa, Chairman, H. Comm. on Oversight and Gov't Reform, to the Honorable Steven Chu,

Sec'y of Energy (Dec. 7, 2011).

Letter from David G. Frantz, Acting Executive Director, Department of Energy Loan Program Office, to Darrell

Issa, Chairman, H. Comm. on Oversight and Gov't Reform (Jan. 19, 2012).

Liz Wolgemuth, The Truth and Green Jobs, U.S. N EWS AND W ORLD R EPORT , Mar. 25, 2009 available at

http://money.usnews.com/money/careers/articles/2009/03/25/the-truth-about-all-those-green-jobs.

Witnesses Provide Various Definitions of Green Jobs Before House Workforce Panel, D AILY L ABOR R EPORT ,

Apr. 4, 2009 at 60.

2labor productivity is a measurement of an efficient and healthy economy. The DOE's 1705Loan Guarantee Program follows this flawed principle precisely. According to a leading expert, an economy based on "high paying, low-productivity jobs ... would require an economic structure unknown in human history."

While the energy sector is a very large source of employment, it is a mistake to treat it as a government jobs program. Dr. David Montgomery, Senior Vice President at NERA EconomicConsulting and a former CalTech professor, has explained:

It is a fundamental error in policymaking and economics to design or

justify federal support for new energy technologies as a jobs program.

It subverts the entire purpose of government involvement in R&D, and

is the greatest single cause of the continued failure of energy

technology programs

However, even accepting the premise that it is appropriate to base a jobs program on green energy development, the Administration fails at this objective.

In almost every public statement about its loan guarantee program, DOE touts job creation. DOE's Loan Programs Office webpage proudly proclaims that DOE expects the loans and loan guarantees to "employ" over 60,000 people. 171 The site also breaks down the number of jobs created or saved by each loan or loan guarantee, and issues press releases for specific projects discussing job creation. These figures are misleading. In reality, the 60,000 number includes jobs that existed at one time, but have since been eliminated; jobs that exist independent of the loan program; and jobs that already existed, but are now considered "green jobs."

One example of DOE's misrepresentation of jobs figures relates to a DOE loan guarantee to Ford Motor Company. DOE proclaims that this project, funded through the ATVM program, accounts for 33,000 of the 61,383 jobs. However, these jobs, which DOE represents to be "permanent jobs created or saved," already existed. Upon closer examination, it appears that DOE reports that the DOE loan "converted" existing jobs to green energy jobs. Had no loan occurred, presumably, the factory would continue to produce non-green energy vehicles; there isno evidence that Ford planned to lay off 33,000 employees if the company had not received the loan. This jobs statistic is also misleading given the statements of David Frantz, Acting Executive Director Loan Program Office and Acting Director ATVM to Committee staff. Mr.

Green Jobs and Red Tape: Assessing Federal Efforts to Encourage Employment: Hearing Before the Subcomm.

On Investigations and Oversight of the H. Comm. on Science, Space, and Technology, 112 th Cong. (2011)

(testimony of W. David Montgomery).

Andrew P. Morriss et. al., 7 Myths About Green Jobs, PERC Policy Series, No. 44, 2009 available at

http://www.perc.org/files/ps44.pdf .

Prepared Testimony of W. David Montgomery before the Subcomm. on Investigations and Oversight, H. Comm.

on Science, Space and Technology, Apr. 13, 2011, available at http://www.nera.com/nera-

files/Montgomery_Testimony_4_13_11.pdf

U.S. Dep't of Energy Loan Programs Office, "Projects" available at: https://lpo.energy.gov/?page_id=45.

U.S. Dep't of Energy Loan Programs Office, "Projects: Ford Motor Company" available at https://lpo.energy.gov/?projects=ford-motor-company.

Frantz stated during a phone interview, "[ATVM] is not a jobs program. [Job creation] is not a governing factor when we do a deal. It's only a matter of record."

DOE also includes failed projects and a project that refused DOE funding in its job creation numbers. Despite Solyndra going bankrupt and firing all of its employees, as of February 20 th , 2012, DOE still lists Solyndra as creating 3,000 construction jobs (see figure below). While those jobs may have briefly existed, touting jobs for a defaulted project that lost hundreds of millions in taxpayer dollars and including those jobs in a total jobs count prominently displayed on DOE's website is inappropriate and misleading.

Interview with David G. Frantz Acting Director ATVM Program Jan. 13, 2012.

DOE continues to include in its list of projects a $105 million loan guarantee it finalized with POET, LLC to build an ethanol plant. According to DOE's website, POET, LLC's loan guarantee will create 40 permanent jobs and 200 construction jobs. However, POET announced on January 23, 2012, that it had decided not to accept the DOE loan guarantee because it had acquired private financing. 174 Despite POET declining DOE's money, as of February 20, 2012, DOE had continued to include it in its job creation numbers (see figure below).

DOE also includes 180 jobs that Abound Solar announced, on February 29, 2012, it will be laying off due to a "retooling" of manufacturing facilities. Abound struggles to compete with Chinese manufactures that provide a comparable solar panel for a more competitive price. When asked about the layoffs, Abound's CEO, Craig Witsoe, stated, "We hate to have any job loss in the company. But it was the right decision for the business." 175 Of the $400 million DOE loan guarantee received by Abound, the company had already drawn down $70 million at the time of the layoffs.

Timothy Gardner, Ethanol maker POET declines U.S. government loan aid, R EUTERS , Jan. 23, 2012 available at http://www.reuters.com/article/2012/01/23/us-usa-ethanol-loanaid-idUSTRE80M20K20120123 .

Matthew Mosk, More Green Energy Layoffs: Colorado Solar Firm Cuts Workforce in Half, ABC N EWS , Feb. 29, 2012 available at http://abcnews.go.com/Blotter/abound-solar-lays-off-180-workers/story?id=15816806.

DOE also incorporates jobs figures for Fisker Automotive (Fisker), which announced a 26 employee layoff on February 6, 2012, at their Wilmington, Delaware plant, as well as for Beacon Power Corp, which filed for Chapter 11 bankruptcy in October 2011, eliminating 34 construction and permanent jobs.

In addition to misleading the public regarding the number of permanent jobs created by the loan program, DOE obfuscates the number of jobs "created" by combining temporary andpermanent jobs. For each listed loan and loan guarantee project, DOE provides a figure for permanent jobs and construction jobs. As loan projects generally require significant construction, these projects predominantly create temporary construction jobs, which terminate upon a project's completion. For example, solar generation projects require few permanent

employees to maintain and operation the facility. In the case of Antelope Valley Solar Ranch, DOE's posting reflects 350 temporary construction jobs and only 20 permanent jobs.

Nonetheless, DOE reports the number of jobs "saved or created" as 370, even though 95% are temporary.

V. The Broken Process for Awarding Loan Guarantees

A. External Pressures on the Program

DOE's Inspector General explained that the administration of Recovery Act funds proved to be "more challenging that many had originally envisioned," and specifically asserted that "the loan guarantee program could not always readily demonstrate through documentation how it resolved or mitigated relevant risks prior to granting loan guarantees." 177 In addition to these

concerns, the Committee has also discovered the existence of a revolving door of persons who worked at green energy investment groups only to later be hired by the Administration, which present significant conflicts of interest. These connections raise the specter of undue influence over the loan guarantee process.

The Revolving Green Door Payola Scams

Google

Over 300 Google staff were placed in the White House and adjacent agencies after Google provided Green Energy search engine news rigging and cash to the Obama Campaign. Google VC's and executives skimmed billions in contracts, jobs, and stock perks from the program.

Nancy Ann DeParle

Nancy Ann DeParle, the current Deputy Chief of Staff for Policy in the White House, had a financial stake in the success of Granite Reliable, which received $168.9 million loan from DOE. Prior to joining the White House, DeParle was a Managing Director of multi-billion dollar private equity firm CCMP and she both had a financial interest in and sat on the Board of Directors for Noble Environmental Power, LLC. 178 Noble owned Granite Reliable, a wind

The Green Energy Debacle: Where Has All the Taxpayer Money Gone?: Hearing Before the Subcomm. on Regulatory Affairs, Stimulus Oversight, and Government Spending of the H. Comm. on Oversight and Gov't Reform, 112th Cong. (2011) (statement of Gregory Friedman, Inspector General, U.S. Dep't of Energy).

CCMP Capital Company Website available at http://www.ccmpcapital.com/.

energy project. Prior to her departure, her position on Noble's board of Directors positioned her to understand the most confidential and material aspects of Noble Environmental and its subsidiary Granite Reliable. DeParle misrepresented her relationship with Noble Energy, claiming on disclosure forms that her interest had been divested, when in fact it had merely been transferred to her 10 year old son. During her time at the White House, Granite Reliable sought and, in September 2011, obtained a partial guarantee of a $168.9 million loan. 181 Granite Reliable's application for a DOE loan guarantee was made at least by early 2010, and probably earlier than that, according to signed documents relating to the loan application. Noble sold Granite Reliable in December 2010 to Brookfield Asset Management, just 6 months prior to the conditional approval of the DOE loan guarantee and deep into the application process. The DOE loan guarantee was conditionally approved on June 2011 and finalized in September 2011. DeParle's ownership stake in Noble, which owned Granite Reliable, a beneficiary of a DOE loan, represents a clear conflict ofinterest.

Michael Froman

Michael Froman currently serves as the Deputy Assistant to the President and Deputy National Security Advisor for International Economic Affairs. 182 He was a friend of President Obama's from law school, 183 and supported his political career by bundling over $200,000 for his 2008 presidential candidacy. Prior to his arrival at the White House, Froman was the Managing Director of Alternative Investments at Citigroup, 185 where he managed infrastructure and sustainable development investments. 186 Citigroup became a major investor in SolarReserve, 187 which ultimately received a $737 million loan guarantee in September 2011.

Press Release, Noble Environmental Power, Noble Environmental Power Signs Agreement for the Sale of its Interest in its New Hampshire Wind Project (Dec. 7, 2010) available at http://www.noblepower.com/pressroom/documents/10-12-7_NEP-SignsAgreementForSaleOfNHWindProject_Final.pdf.

Nancy Ann DeParle, Executive Branch Personnell Public Financial Disclosure Report (Mar. 9, 2009) available at http://www.scribd.com/doc/62509267/DeParle-Nancy-Ann-278-10A.

U.S. Dep't of Energy Loan Programs Office, 1705 Program, "Projects: Granite Reliable" available at https://lpo.energy.gov/?projects=granite-reliable.

Center for Responsive Politics, "Barack Obama Bundlers," OpenSecrets available at http://www.opensecrets.org/pres08/bundlers.php?id=N00009638.

Jonathan Weisman, Obama Taps Froman For Joint Security, Economic Post, W ALL S T . J., Jan. 30, 2009 available at http://online.wsj.com/article/SB123328110238231817.html.

OpenSecrets, supra note182.

DealBook, Citigroup Fund Hit a Speed Bump, N . Y . T IMES , July 20, 2009 available at http://dealbook.nytimes.com/2009/07/20/citigroup-funds-hit-speed-bump/?ref=michaelfroman.

Press Release, Harvard Law School, Michael Froman '91 joins White House in joint security, economic post (Feb. 3, 2009) available at http://www.law.harvard.edu/news/2009/02/03_froman.html.

Steve Westly

Steve Westly co-founded the Westly Group, a clean energy venture capital firm that, according to DOE records, has reaped over $600 million in DOE loans for its portfolio of investments. One recipient company was Tesla Motors, a premium electric vehicle manufacturer to which DOE awarded a $465 million loan guarantee in January 2010. Westly also sat on Tesla's Board of Directors in the company's early days. Westly is a personal friend of President Obama and bundled over $500,000 for his 2008 campaign. Since the election, Westly has visited the White House multiple times for both business and pleasure, and has privately dined with the President in small group fundraising settings.

After President Obama's election, Westly was rumored to have been a primary candidate for Energy Secretary. When Secretary Chu received the appointment, Westly was given the opportunity to serve on an advisory board to the DOE, "a pivotal [sic] advisory committee that made recommendations to the secretary on alternative energy policies." One committee initiative included a recommendation to modify federal rebates for electric cars, a change that would benefit companies such as Westly Group's Tesla. E-mails released by the White House also indicate that Westly's advisory role gave him access to Obama's top advisors and senior White House officials, including advisor Valerie Jarrett.

David Sandalow

Jim McElhatton, Feds guarantee $1 billion in new solar loans, W ASH . T IMES , Sept. 28, 2011 available at http://www.washingtontimes.com/news/2011/sep/28/feds-guarantee-1-billion-in-new-solar-loans/?page=all.

U.S. Dep't of Energy Loan Programs Office, "1705 Program: Projects" available at https://lpo.energy.gov/?page_id=45.

Carol D. Leonig and Joe Stephens, Venture capitalists play key role in Obama's Energy Department, W ASH . P OST , Feb. 14, 2012 available at http://www.washingtonpost.com/politics/venture-capitalists-play-key-role-in-obamas-energy-department/2011/12/30/gIQA05raER_story.html.

The Westly Group Company Website, "Portfolio" available at http://westlygroup.com/portfolio/.

U.S. Dep't of Energy Loan Programs Office, Advanced Technology Vehicle Manufacturing Program, "Projects: Tesla Motors" available at https://lpo.energy.gov/?projects=tesla-motors.

Stephen Frank, "Steve Westly: the Lynchpin to Funny White House Loans," California Political News and Views (Oct. 17, 2011) available at http://capoliticalnews.com/2011/10/17/steve-westly-the-linchpin-to-funny-white-house-loans/.

Leonnigg and Stephens, supra note 189.

Frank, supra note 192.

Leonnigg and Stephens, supra note 189.

David Sandalow currently serves as the Assistant Secretary for Policy and Internationaln Affairs at DOE, where he acts as Secretary's Chu's principal adviser on energy policy as well as coordinates DOE's foreign policy involvement. Sandalow's ties to the White House date back to the Clinton Administration, during which he worked with President Clinton on environmental issues. After having gained this experience, Sandalow became the influential Chair of the Energy & Climate Working Group of the Clinton Global Initiative. 201 He went

on to advise President Obama's presidential campaign in 2008. 202 Prior to joining the Obama Administration, Sandalow was a senior advisor to Good Energies, Inc., an energy-focused venture capital firm. 203 Good Energies is an investor in SolarReserve, 204 a solar power company that received a $737 million loan guarantee from DOE in September 2011. 205

Sanjay Wagle

Sanjay Wagle has most recently served as Renewable Energy Advisor to DOE under Secretary Chu, where he helped oversee the $11 billion renewable energy program under the Recovery Act. 206 Wagle was an Obama fundraiser for the 2008 presidential campaign, garnering much of his support through his Clean Tech for Obama group. Another venture capitalist that has acquired an influential role at DOE, his industry colleagues believed that Wagle, among others, "would help ensure commercial successes from 'the steady flow of dollars coming out of DC.'"

Prior to arriving in Washington, Wagle was a principal at Vantage Point Venture Partners (Vantage Point), a cleantech venture capital firm whose investments received $2.4 billion in taxpayer funds. 208 Among them were Brightsource, which received $1.6 billion for solar generation; Tesla Motors, which received $465 million for electric car manufacturing; and

Energy.gov, "About Us: David Sandalow" available at http://energy.gov/contributors/david-sandalow; "Who Runs Gov: David Sandalow," W ASH . P OST available at http://www.washingtonpost.com/politics/david-sandalow/gIQAR6wHAP_topic.html.

"Who Runs Gov: David Sandalow," supra note 199.

Press Release, The White House, President Obama Announces More Key Administration Posts (Mar. 20, 2009) available at http://www.whitehouse.gov/the-press-office/president-obama-announces-more-key-administration-posts-32009.

Good Energies Company Website, "Investments" available at http://www.goodenergies.com/investment/companies.

U.S. Dep't of Energy Loan Programs Office, 1705 Program, "Projects: SolarReserve, LLC" available at https://lpo.energy.gov/?projects=solarreserve-llc-crescent-dunes.

Leonnig and Stephens, supra note 189; Event Announcement, Full Circle Fund, Environment/Energy Circle Meeting (Nov.16, 2011) available at http://www.fullcirclefund.org/event.php?id=838.

Leonnig and Stephens, supra note 189.

Mascoma, which received $80 million for an ethanol plant. 209 Wagle left Vantage Point and moved to DOE shortly after Obama's election, "just as the administration embarked on a,massive program to stimulate the economy with federal investments in clean-technology firms." His former firm and the companies it invested in, therefore, had a large stake in thenfinancing decisions being made by

DOE at the time.

Steve Spinner

Steve Spinner served as an advisor to Secretary Chu from April 2009 to September 2010. In that position, Spinner helped oversee the strategic operations of the clean energy loan guarantee program under the Recovery Act. 212 Spinner was previously an energy-focused venture capitalist and high-tech consultant. 213 He is also an Obama bundler, having raised over $500,000 for the President in 2008, 214 and over $200,000 thus far for 2012. Spinner's wife, Allison Berry Spinner, is a partner at Wilson Sonsini Goodrich & Rosati, the law firm that represented Solyndra on matters related to the DOE loan. According to federal records, the firm received at least $2.4 million in federal funds for legal fees related to the representation.

White House e-mails released late last year indicate that Spinner was influential in securing the $528 million loan to now-bankrupt Solyndra. Many of those emails were written just days after he signed an ethics agreement pledging that he would "not participate in any

discussion regarding any application involving" his wife's law firm. In one message to a DOE official on August 28, 2009, Spinner wrote, *"How hard is this? What is he waiting for? . . . I have OVP and WH breathing down my neck on this." The e-mail went on to demand that the DOE official "walk over there and force [the official working on the Solyndra evaluation] to give [him] an answer."* After just being contacted by Solyndra, Spinner inquires in another e-mail, "Any word on OMB? Solyndra's getting nervous." The e-mail correspondence occurring in the final days before the Solyndra loan closed in September 2009 centers heavily on Spinner's

Matthew Daly, Steve Spinner, Energy Department Advisor, Pushed Solyndra Loan, Emails Show, H UFFINGTON P OST , Oct. 7, 2011 available at http://www.huffingtonpost.com/2011/10/07/obama-fundraiser-pushed-s_n_1000826.html.

Matthew Mosk, Obama Fundraiser Pushed Solyndra Deal From Inside, ABC N EWS , Oct. 7, 2011 available at http://abcnews.go.com/Blotter/obama-fundraiser-pushed-solyndra-deal-inside/story?id=14691618#.TzrE9MXQIsI.

OpenSecrets, supra note 182.

BarackObama.com, "Obama For America Victory Fund 2012 Volunteer Fundraisers" available at http://www.barackobama.com/pages/volunteer-fundraisers-Q2/.

Mosk, supra note 213.

Daly, supra note 212.

Mosk, supra note 213.

efforts to coordinate plans for either the President or Vice President to announce the first loan approval at a scheduled visit to Solyndra.

Peter Weeks

Peter Weeks currently serves as Clean Energy Advisor at DOE, a position to which he was appointed in March 2009. 223 To be clear, there is no apparent connection between Mr. Weeks and a project that received a loan from DOE. However, his profound lack of experience in the renewable energy arena before being named as a top DOE advisor causes some concern.

Prior to joining the Administration, Weeks's resume consisted primarily of Democratic campaign positions with groups such as Obama for America, Maine Democratic Party, Kerry for President, and Gephardt for President. His prior experience was limited to communications and politics, and includes no record of any energy policy expertise.

According to Weeks, his work at DOE has included helping to "develop due diligence and procurement plans of 200 awards worth over $10 billion," as well as "manage two multi- billion dollar energy tax programs." Additionally, Department e-mails also indicate that Weeks participated in meetings with and had access to high-level officials, including Ron Bloom, giving him the opportunity to participate in decisions and exert some degree of influence. Weeks's position at DOE appears to involve highly technical issues with high stakes and great sensitivity.

It is puzzling how someone without any prior energy, project management, or finance experience would be appointed to a position with responsibilities of this magnitude and particular nature. A private sector institution responsible for due diligence for billions of dollars in loans would never trust someone with only campaign experience to be involved with such technical issues. Given Weeks's consistent history of strong support of the Democratic Party and President Obama, his appointment adds to the perception that many of the Administration's decisions have been driven by politics as opposed to any viable, coherent, energy policy.

There are a vast list of other revolving door conflicts-of-interest and apparent job payola positions.

VI. Concerns Relating to Section 1705 Loan Guarantee Recipients

A. Solopower at CCC+ Setting the Standard for Inappropriate Loan Commitments

Peter Weeks, Linked In, Profile available at http://www.linkedin.com/in/weekspeter.

E-mail from Peter Weeks, Clean Energy Advisor, U.S. Dep't of Energy, to Brandon Hurlbut, Udai Rohatgi, Peter

Gage, Tom Reynolds, and Rachel Tronstein (Feb. 23, 2011, 6:36 PM EST) (on file with author).

Solopower is a European firm that seeks to build a solar factory in Oregon. Solopower accepted $40 million of Oregon taxpayer money in addition to DOE's approval of a $197 million loan via the Federal Financing Bank (FFB). 229 They received this federal assistance despite a rather dire prediction of Solopower's prospects by Standard & Poor's (S&P). According to internal documents obtained by the Committee, S&P warned DOE that:

We believe that [average selling price (ASP) per watt] could decline to $1 or less within the next 1-2 years. From the output provided by the DOE, we concluded that even if SoloPower achieves the efficiency and yield projections of the DOE's base case, an ASP of $1 or less would severely strain SoloPower's ability to meet its debt service obligations. In other words, S&P predicted that Solopower will fail to meet its debt obligations.

Additionally, the loan's already extremely poor S&P rating of CCC+ appears to depend on lender protections that prevent loan disbursements unless benchmarks are met:

It is to lenders' advantage that the company will not have access to the credit facility until it constructs and operates Line 1A at expected levels of performance. Similarly, the company cannot make the first or subsequent draws unless 30% of installed capacity is under contract to be sold. According to S&P, these lender protections enable S&P to provide a CCC+. In short, the primary protection against losing $197 million of taxpayer money is the small chance that Solopower will ever get the money. Without these protections, it can only be presumed that the credit rating would fall to levels reflecting default.

The story of Solopower reflects a very concerning form of waste that creates substantial uncertainty as a byproduct, tying up private investor capital and federal funds until the entity fails (or succeeds) to achieve targeted benchmarks. If Solopower fails to achieve success sufficient to receive DOE funds, then those private investors anticipating the benefit of DOE loans will suffer substantial loss, resources will have been wasted, and employees will be let go after a short time. However, if Solopower meets the requirements for disbursement, then the likelihood for failure and loss to the taxpayer are significant as the base case for the panel manufacturer's production costs does not reflect expectations for sufficiently competitive pricing.

What Solopower lacked in economic value, it made up for in political connections.

Unlike other 1705 loan guarantee recipients, Solopower exerted bipartisan political influence on DOE through strong ties to both the Bush and Obama Administrations. Solopower itself built the ties to the Obama Administration.

Bruce Khouri

...who served on the Board of Directors

Ted Sickinger, Solyndra Meltdown a Cautionary Tale for Oregon and SoloPower, its Latest Solar Bet, The Oregonian, Sept. 27, 2011, available at http://www.oregonlive.com/business/index.ssf/2011/09/

solyndras_plight_casts_cautionary_tale_for_oregon_and_solopower_its_latest_solar_bet.html.

Standard &Poors Credit Report, Solopower, Inc., July 11, 2011 (on file with author).

Board of Directors, Solopower,available at http://www.solopower.com/brucekhouri.html (last visited Mar. 15,

2012).

and now serves as the Chief Commercial Officer, 234 donated $28,500 to the Democratic National Committee's "Obama Victory Fund" in 2008. 235

Lou DiNardo

...who served as interim CEO 236 and now serves as Chairman of the Board of Directors, previously worked as a General Partner at VantagePoint Venture Partners where DOE stimulus advisor Sanjay Wagle worked. Solopower, based in San Jose, California, developed an ally in Democratic San Jose Mayor Chuck Reed. Mayor Reed sent letters to DOE and talked with DOE's Jonathan Silver in person to advocate for and attempt to speed up Solopower's loan guarantee.

Hudson Clean Energy Partners, the biggest investor in Solopower, had strong ties to the Bush-era DOE. Craig Cornellius, a member of the Board of Directors at Solopower and Managing Director at Hudson Clean Energy Partners, and Alexander Karsner, a member of the Hudson Clean Energy Partners Advisory Board, both worked in renewable energy positions for DOE during the Bush Administration. Another Managing Partner for Hudson Clean Energy Partners, Neil Auerbach, donated tens of thousands of dollars to Republicans in 2008. Hudson Clean Energy Partners also retained BlueWater Strategies to lobby both branches of Congress and the White House. According to BlueWater Strategies' website, Andrew Lundquist, founder and Managing Partner, "led George W. Bush's transition team for the Department of Energy" and "served as a senior advisor and strategist on energy issues for the President and Vice President."

With its ties to DOE officials in both the previous and current Administrations, Solopower had people on both sides of the political aisle that could use their influence to pressure DOE into issuing and finalizing Solopower's loan guarantee.

B. Beacon Power: Taxpayers Predictably Lose Millions

Led by CEO …

F. William Capp

... an Obama donor 244 – Beacon Power became the second 1705 loan guarantee recipient to go bankrupt on October 31, 2011. 245 Despite warnings from

Management,Solopower,available at http://www.solopower.com/management.html (last visited Mar. 15, 2012).

Federal Election Commission, FEC Form 3X filed by 2008 Obama Victory Fund, at 1650.

Press Release SoloPower Prepares for Market Entry and Names Lou DiNardo as Interim CEO, July 8, 2009, available at http://www.solopower.com/ceov11.html.

Lou DiNardo,SoloPower, available at http://www.solopower.com/loudinardo.html (last visited Mar. 15, 2012).

Aaron Glantz, After Solyndra, a 2 nd Solar Energy Firm Is Scrutinized, N.Y. T IMES , Oct. 15, 2011, available at: http://www.nytimes.com/2011/10/16/us/after-solyndra-a-2nd-solar-energy-firm-is-scrutinized.html?pagewanted=all.

Joel Gehrke, Solopower, a Connected Company with DOE Support, T HE E XAMINER , Nov. 9, 2011, available at http://campaign2012.washingtonexaminer.com/blogs/solopower-connected-company-doe-support.

Aaron Glantz, After Solyndra, a 2 nd Solar Energy Firm Is Scrutinized, N.Y. T IMES , Oct. 15, 2011, available at: http://www.nytimes.com/2011/10/16/us/after-solyndra-a-2nd-solar-energy-firm-is-scrutinized.html?pagewanted=all.

Andrew D. Lundquist, available at http://www.bwstrategies.com/ index.php?option=com_content&task=view&id=35&Itemid=22 (last visited Mar. 15, 2012).

Center for Responsive Politics, available at http://www.opensecrets.org/indivs/ search.php?name=capp&state=MA&zip=&employ=&cand=&c2012=Y&c2010=Y&c2008=Y&sort=N&capcode=wsp3w&submit=Submit+your+Donor+Query (last visited Mar. 15, 2012).

Dawn McCarty, Beacon Power, Backed by U.S. Loan Guarantees, Files Bankruptcy, B LOOMBERG , Oct. 31, 2011, available at: http://www.businessweek.com/news/2011-10-31/beacon-power-backed-by-u-s-loan-guarantees-files-bankruptcy.html.

both S&P and its own internal analysis regarding risky business models, DOE proceeded with a deal that will cost taxpayers millions in

losses.

Before its demise, Beacon Power relied on funding from the federal government. DOE gave Beacon Power over $25 million in grants. However, the largest investment came when DOE announced a conditional $43 million loan guarantee to Beacon Power on July 2, 2009, to create a "20 megawatt flywheel energy storage plant" in Stephentown, New York. 247 In April 2010, S&P evaluated the loan guarantee project and assigned it a dismal CCC+ credit rating, even though the rating incorporated the benefit of the $43 million loan guarantee. The S&P rating noted that "Beacon is currently an unprofitable start-up" and that "significant exposure to commodity price volatility" could significantly hurt the company. S&P ran two default scenarios, both of which demonstrated that taxpayers would lose millions. 250 DOE conducted its own risk analysis and also assigned Beacon Power a junk CCC+ rating. DOE, however, ignored these warnings and finalized the loan guarantee in August 2010. As predicted, Beacon Power continued to remain unprofitable and burn through money at a rapid rate. In the weeks leading up to its bankruptcy, Beacon Power began spending hundreds of thousands of dollars on law firms. When Beacon Power went bankrupt, DOE tried to minimize the bad publicity by arguing that it had required "many protections for the taxpayer" in the loan guarantee contract. However, as Beacon Power continues to go through the bankruptcy process, DOE now admits that taxpayers will likely lose millions on this bad investment. 255 DOE could have avoided these loses by taking the warnings of S&P and its own analysis seriously and not risking over $39 million on a company destined for failure.

C. Abound Solar: Politics and a Risky Investment Collide

Steven Mufson and Juliet Eilperin, Beacon Power Declares Bankruptcy; Second Loan Guarantee Recipient to Falter, T HE W ASH . P OST , Oct. 31, 2011, available at http://www.washingtonpost.com/national/health-science/beacon-power-declares-bankruptcy-second-loan-guarantee-recipient-to-falter/2011/10/31/gIQACNAaaM_story.html.

Press Release, Obama Administration Offers $59 Million in conditional Loan Guarantees to Beacon Power and Nordic Windpower, Inc., U.S. Dep't of Energy, July 2, 2009, available at: https://lpo.energy.gov/?p=834. Beacon Power created a wholly owned subsidiary called Stephentown Regulation Services, LLC., that ran the DOE funded flywheel energy storage plant and directly received the DOE loan guarantee. When Beacon Power, the parent company, went bankrupt on October 31 st , it decided to place its subsidiaries in bankruptcy as well.

Letter from Swami Venkataraman, Standard & Poors, to Beacon Power, April 30, 2010 (on file with author).

Letter from David Frantz, Acting Executive Director of Loan Program Office, U.S. DOE, to Hon. Darrell Issa, Chairman, H. Comm. on Oversight and Gov't Reform, Feb. 14, 2012 (on file with author).

Beacon Power Corporation, U.S. Dep'tt of Energy, available at https://lpo.energy.gov/?projects=beacon-power-corporation (last visited Mar. 15, 2012).

Beacon Power Bankruptcy Filings, Provided to Committee by U.S. DOE (on file with author).

Dawn McCarty, Beacon Power, Backed by U.S. Loan Guarantees, Files Bankruptcy, B LOOMBERG , Oct. 31,

2011, available at: http://www.businessweek.com/news/2011-10-31/beacon-power-backed-by-u-s-loan-guarantees-files-bankruptcy.html.

Letter from David Frantz, Acting Executive Director of Loan Program Office, U.S. DOE, to Hon. Darrell Issa, Chairman, H. Comm. on Oversight and Gov't Reform, Feb. 14, 2012 (Stating "the DOE stands to recover more than 70 percent of the taxpayer's investment." However, even if DOE recovered 80 percent of its investment, taxpayers would still lose millions).

On July 3, 2010, President Obama announced during his weekly radio address that DOE would again invest hundreds of millions of dollars in a risky solar panel manufacturer. Much like Solyndra, Abound Solar manufactures solar panels using unproven technology, received a dismal credit rating for its loan guarantee, and has strong Democratic political connections. In fact, DOE finalized Abound Solar's loan in the same month that DOE worked to restructure the failing Solyndra's loan.

In between DOE issuing Abound Solar its $400 million conditional loan guarantee and finalizing it in December 2010, Fitch Ratings evaluated the project and assigned it a junk credit rating. Fitch gave the project a credit rating of "B" (worse than Solyndra's) with a recovery estimate of only 45%. 256 Despite including the benefit of the DOE loan guarantee in the rating (which likely made the rating more favorable), Fitch labeled the project "highly speculative" and described Abound as lagging in technology relative to its competitors, failing to achieve stated efficiency targets, and expecting that Abound Solar will suffer from increasing commoditization and pricing pressures. 257 In addition to these concerns, Fitch worried that Abound Solar needed to raise more private money to build its new facilities and that, if it could not, Abound Solar could default on its DOE loan.

Recently, Abound Solar began encountering the financial problems that Fitch predicted.

In line with Fitch's prediction, Abound Solar has recently struggled to raise additional capital, causing DOE to stop disbursing loan payments to the company. 259 More troubling, Abound Solar announced on March 1 st that it would stop producing solar panels and would fire employees, even though it has already received $70 million from DOE. Abound Solar continues to claim publicly that it does not have serious financial problems and will survive;

Letter from Jason Paraschac, Senior Director, Fitch Ratings, to Steve Abely, Chief Financial Officer, Abound Solar, Nov. 4, 2010 (on file with author).

"Abound's lagging conversion efficiency negatively impacts the panel's installed costs which should negatively impact expected panel [average selling prices]. In addition, Fitch expects further price pressures in this market over the next 3-5 years..."

"Abound has not provided an explanation as to why gains in [solar panel] conversion efficiency have not materialized as expected..."

"[Average selling price] assumptions in the new model are significantly below the prior plan. While this may in part reflect the lower conversion efficiency of [Abound's] solar panel, it is largely a reflection of severe price contractions in the [solar photovoltaic panel] market over the past 24 months.".

"Abound must raise additional equity to fund the completion of its planned manufacturing facilities. An inability to access equity markets could force an early default of the loan before construction is complete

but also before the loan is fully drawn down.”.

Yuliya Chernova and Cassandra Sweet, California Solar Deal Hits a Snag, T HE W ALL S T . J., Feb. 11, 2012, available at: http://online.wsj.com/article/ SB10001424052970203646004577214973345400202.html.

Todd Woody, Abound Solar, Recipient of $400 Million Federal Loan Guarantee, Halts Production, F ORBES , Mar. 1, 2012, available at http://www.forbes.com/sites/toddwoody/2012/03/01/abound-solar-recipient-of-400-million-federal-loan-guarantee-halts-production/.

however, its inability to raise capital and meet DOE’s requirements likely indicate serious troubles ahead for the company, as predicted by Fitch.

Abound Solar has ties to Democratic politicians at the federal level and the state level in Colorado. Bohemian Companies, LLC, founded by Pat Stryker, became an early investor in Abound Solar (at the time AVA Solar) in October, 2008. In addition to the initial funding, th CEO of Bohemian Companies, Joseph Zimlich, has served as both a director and a board member of Abound Solar. Pat Stryker is a major Democratic donor who Forbes included on its 2011 list of top liberal spenders. In 2008, Stryker donated $50,000 and bundled $87,500 for President Obama’s 2009 inauguration, and has given $35,800 to the 2012 Obama Victory Fund. Abound Solar also developed ties to Congressional Democrats. The company hired then Democratic Congressman Paul Kanjorski’s nephew Russell as its vice president for marketing. Abound Solar supported the 2009 cap and trade bill in the House of Representatives and funded an advertisement thanking then-Colorado Democratic Congresswoman Betsy Markey for her vote in favor of the bill. At the state level, then-Democratic Colorado Governor Bill Ritter strongly supported Abound Solar and its application for a DOE loan guarantee. When Energy Secretary Chu visited Colorado, Governor Ritter handed Secretary Chu a letter urging him to approve Abound Solar’s loan guarantee because it would allow the company to expand and hire new workers.

The combination of Abound Solar’s junk credit rating, financial problems, and the company’s political connections raise serious concerns about whether DOE based the decision to invest $400 million on merit and whether taxpayers could again lose millions on a dubious solar manufacturing project.

D. Ormat Nevada: Strong Ties to Harry Reid

Senate Majority Leader Harry Reid

...announced on September 23, 2011, that DOE finalized a $350 million partial loan guarantee for three geothermal power plants owned by Ormat Nevada, Inc. 269 Ormat also benefitted from the $98.5 million loan guarantee to Nevada

Press Release, AVA Solar Completes $104 Million Equity Financing, Abound Solar, Oct., 2008, available at http://www.abound.com/news/ava-solar-completes-104-million-equity-financing.

Se: U. S. Securities and Exchange Commission Form D, AVA Solar, Inc., Dec. 21, 2010, available at: http://sec.gov/Archives/edgar/data/1391624/000139162410000003/xslFormDX01/primary_doc.xml.

See The Board of Governors of the Colorado State University System, Colorado State University System, vaailable at http://csusystem.edu/pages/board.asp.

Jon Bruner and Clare O'Connor, Liberal Spenders, F ORBES , Sept. 21, 2011, available at http://www.forbes.com/forbes/2011/1010/forbes400-11-networks-data-driven-liberal-spenders-bruner-oconner.html.

Keenan Steiner, Another Renewable Energy Loan Recipient Hires Lobbyists, has Fundraising Ties to Obama, Sunlight Foundation, Nov. 30, 2011, available at http://reporting.sunlightfoundation.com/2011/ another-renewable-grantee-hires-lobbyists-has-fundraising-ties-o/.

Bill O'Boyle, Kanjo Nephew Works at firm that Gets Loan, T HE T IMES L EADER , July 13, 2010, available at http://www.timesleader.com/news/Kanjo_nephew_works_at_firm_that_gets_loan_07-12-2010.html.

Thank You Betsy Markey, The Environmental Defense Action Fund, July 15, 2009, available at http://www.youtube.com/watch?v=uvBD3XvRf2Y (last visited Mar. 15, 2012).

Cathy Proctor, Ritter Backing Colo. Companies Seeking Department of Energy Loan Guarantees, D ENVER B US . J., May 17, 2009, available at http://www.bizjournals.com/denver/stories/ 2009/05/18/story5.html?page=all.

Press Release,Reid Announces Finalized Loan Guarantee for Ormat Geothermal Projects, United States Senator Harry Reid, Sept. 23, 2011, available athttp://reid.senate.gov/newsroom/ pr_092311_geothermalloan.cfm.

Geothermal (see below) as Ormat received an almost $80 million engineering, procurement, and construction contract to build Nevada Geothermal's Blue Mountain plant. Meaningful ties exist between the Senator and Ormat. Two of Ormat's federal lobbyists previously worked for Senator Reid. Ormat's outside lobbyist, Kai Anderson of Cassidy and Associates, served as Senator Reid's Deputy Chief of Staff up until 2005. Anderson lobbies both the House of Representatives and the Senate for Ormat. Anderson has given close to $90,000 to Democratic candidates and campaign committees over the past three cycles, including thousands to Senator Reid. Ormat's company lobbyist, Director of Policy and Business Development Paul Thomsen, served as a "Regional Representative" for Senator Reid through 2005. Thomsen gave thousands in political contributions to Senator Reid. During Senator Reid's 2010 reelection campaign, Thomsen starred in a campaign ad for Senator Reid to advertise the benefits of Ormat's loan guarantee for Nevada. In addition to Anderson and Thomsen, Ormat's President, Yoram Bronicki, gave thousands in political contributions to Senator Reid. The strong ties between the company and the Senate Majority leader raise questions about whether the DOE acted in the best interests of the American people when it approved the loan guarantee.

E. Nevada Geothermal's Blue Mountain Project

On June 15, 2010, DOE announced that it would conditionally issue a $98.5 million partial loan guarantee to Nevada Geothermal Power Company (Nevada Geothermal). This loan enabled Nevada Geothermal to refinance the Blue Mountain Geothermal Project (Blue Mountain) through John Hancock Financial Services (John Hancock). In other words, the DOE Nevada Geothermal Application for DOE

Loan Guarantee, U.S. Dep't of Energy, Nov. 2, 2009 (on file with author).

Eric Lipton and Clifford Krauss, A U.S.—Backed Geothermal Plant in Nevada Struggles, N.Y. T IMES , Oct. 2,

2011, available at http://www.nytimes.com/2011/10/03/business/a-us-backed-geothermal-plant-in-nevada-struggles.html?pagewanted=all; Kai S. Anderson, Congressional Staffer—Salary Data, Legistorm: Transparency's Sidekick, available athttp://www.legistorm.com/person/ Kai_S_Anderson/201.html.

See Lobbying Report for Cassidy & Associates, available at http://soprweb.senate.gov/index.cfm?event=getFilingDetails&filingID=68E4AB5B-FB37-4072-AA8E-187A97BF8E66.

Center for Responsive Politics, available athttp://www.opensecrets.org/indivs/search.php?capcode=t3hhk&name=anderson,%20kai&employ=&cand=&state=DC&zip=&all=n&old=N&c2008=Y&c2010=Y&c2012=Y&sort=N&page=1.

Eric Lipton and Clifford Krauss, A U.S.—Backed Geothermal Plant in Nevada Struggles, N.Y. T IMES , Oct. 2, 2011, available at http://www.nytimes.com/2011/10/03/business/a-us-backed-geothermal-plant-in-nevada-struggles.html?pagewanted=all ; Paul Thomsen, Congressional Staffer—Salary Data, Legistorm: Transparency's Sidekick, available at http://www.legistorm.com/person/Paul_Thomsen/30414.html; Legislative Hearing on H.R. 2170, H.R. 2171, H.R. 2172 and H.R. 2173 Before H. Comm. on Energy and Power, 112th Cong. (2011) (statement of Paul A. Thomsen, Director of Policy and Business Development, Ormat Technologies, Inc.).

Center for Responsive Politics, available athttp://www.opensecrets.org/indivs/search.php?name=&state=&zip=&employ=ormat&cand=&c2012=Y&c2010=Y&c2008=Y&sort=N&capcode=xbhnq&submit=Submit+your+Donor+Query (last visited Mar. 15, 2012).

See Geothermal, Harry Reid 2010, June 10, 2010, available athttp://www.youtube.com/watch?v=XvI_AY68BjQ&feature=plcp&context=C305c198UDOEgsToPDskIRhi7yhmpxqikeNWd9-nC0; Reid Campaign Releases TV Ads on Clean Energy Jobs, Friends for Harry Reid, available athttp://www.harryreid.com/index.php/news/release/reid_campaign_releases_tv_ads_on_clean_energy_jobs/.

Press Release, Energy Department Offers Conditional Commitment to Support Nevada Geothermal Development with Recovery Act Funds,U.S. Dep'tt of Energy, June 15, 2010, available at: https://lpo.energy.gov/?p=805.

loan paid back a prior financial obligation of Nevada Geothermal. This was the first of DOE's "Financial Institution Partnership Program" (FIPP) loan guarantees, under Section 1705, where private investment groups worked with DOE to provide financing to energy projects. 279 Less than three months after the conditional approval, DOE finalized this loan guarantee, enabling Nevada Geothermal to refinance a loan from TCW through John Hancock. The loan did not finance any new construction and therefore did not help to create a single new job. DOE's awarding of this loan guarantee raises questions about why DOE was investing significant taxpayer resources in an entity with

well-established financial difficulties.

In the press release for the project, Secretary Chu and Senate Majority Leader Harry Reid touted Blue Mountain's potential, with Senator Reid saying that, "I am glad to see economic recovery funding being used to put Nevadans to work on a project that will help us achieve energy independence. Northern Nevada is the Saudi Arabia of geothermal energy and I thank Secretary Chu for recognizing the Silver State's enormous job-creating potential to produce plenty of clean and affordable energy." 281 It was known to him at that time, however, that the loan would not create a single job, but instead simply refinance an existing loan, despite DOE's claim that it would create over 200 jobs.

1. Misuse of the DOE Loan Guarantee as a Tool to Bailout Creditors

Nevada Geothermal has a well documented history of major financial problems. By the time DOE conditionally approved the loan guarantee, Nevada Geothermal had already violated contract terms and debt covenants relating to financing from its primary lender, TCW.

According to Nevada Geothermal's financial statements, the firm would not avoid default without the benefit of a loan guarantee.

On October 2, 2011, The New York Times ran a story about the financial difficulties of Nevada Geothermal, relying partially on a September 2011 Deloitte & Touche audit of the company which stated "significant doubt about the company's ability to continue as a going concern." 283 In response, DOE dismissed the financial problems of Nevada Geothermal and instead pointed to the alleged financial health of Blue Mountain to argue that the loan guarantee would be repaid. Given that Nevada Geothermal's principal operation is Blue Mountain's Faulkner I Power Plant, such a distinction has questionable merit.

Press Release, Department of Energy Issues Loan Guarantee Supported by Recovery Act for Nevada Geothermal Project,U.S. Dep'tof Energy, Sept. 7, 2010, available at https://lpo.energy.gov/?p=787.

Loan Programs Office, U.S. Dep't Of Energy, available at https://lpo.energy.gov/?page_id=45 (last visisted Mar. 15, 2012).

Eric Lipton and Clifford Krauss, A U.S.-Backed Geothermal Plant in Nevada Struggles, N.Y. T IMES , Oct. 2, 2011, available at http://www.nytimes.com/2011/10/03/business/a-us-backed-geothermal-plant-in-nevada-struggles.html?pagewanted=all.

Peter Urban, DOE Remains Confident in Nevada Geothermal Plant, L AS V EGAS R EVIEW -J OURNAL , Oct. 4, 2011, available at http://www.lvrj.com/news/doe-remains-confident-in-nevada-geothermal-plant-131035678.html.

See Nevada Geothermal Power Inc., Consolidated Financial Statements, June 30, 2010 at 6, available athttp://www.nevadageothermal.com/i/pdf/Annual_Financials_2010.pdf.

As noted above, at the time DOE approved the conditional loan guarantee, Nevada Geothermal had already violated terms to the loan agreement with its primary creditor, TCW.

Based on financial disclosures, Nevada Geothermal avoided default as a result of TCW's granting a waiver and extension in anticipation of the John Hancock financing backed by the DOE loan guarantee. The resulting DOE bailout of Nevada Geothermal was planned out in advance, as made clear by Nevada Geothermal's March 31, 2010 Financial Statements:

The Company has engaged John Hancock to provide long term debt up

to $95 million which will be used to pay down the TCW loan and to fund additional drilling. However, this potential John Hancock loan is subject to due diligence and final credit committee approval by John Hancock. There is no certainty that the anticipated debt financing through John Hancock will be obtained. Failure to obtain the John Hancock loan, or a similar loan from another lender, and/or unsuccessful drilling may result in a default under the terms of the TCW loan agreement. In the event of a default TCW may elect to call the loan and execute upon the security, which would result in a material adverse effect on the Company, including delay or indefinite postponement of operations and further exploration and development of our projects with the possible loss of such assets. (emphasis added)

The story continued to unfold in Nevada Geothermal's June 30, 2010 Financial Statements, where the plan to bailout their lender, TCW, was successfully executed by DOE:

As at June 30, 2010, the Company was not in compliance with the terms of the TCW loan. The non-compliance results from the Company having exceeded the maximum loan amount of $180 million, and having exceeded the drilling expenditure budget by more than $3.8 million, as well as some instances of technical non-compliance with other loan terms .... As a result, for balance sheet purposes, the TCW long-term loan has been classified as a short-term liability. On November 20, 2009, TCW agreed in principle to waive the non-compliance until March 31, 2010 in return for 4.5 million NGP Inc. warrants exercisable at CAD 1.50 (Note 21(f)). Subsequently, TCW agreed to extend the agreement in principle, without change, until the John Hancock loan [guaranteed by DOE 287] closed. The John Hancock loan was closed on

Nevada Geothermal Power, Inc., Consolidated Financial Statements, Mar. 31, 2010, at 11, available at http://www.nevadageothermal.com/i/pdf/Q3_March_31_2010.pdf.

Nevada Geothermal Power, Inc., Consolidated Financial Statements, June 30, 2010, at 55, available at http://www.nevadageothermal.com/i/pdf/Annual_Financials_2010.pdf (Explainingthe John Hancock loan guaranteed by DOE: "On October 13, 2009 the Company [Nevada Geothermal] announced that it appointed John Hancock Life Insurance Company ("John Hancock") to be the exclusive debt provider for up to $95 Million 20-year term loan. Further to the above, on October 7, 2009, the DOE announced its Financial Institutions Partnership

Program (“FIPP”), a program supported by the 2009 ARRA. The FIPP program is designed to facilitate long term financing for renewable development projects using commercial technology and applies to up to 80 percent of the loan amount. John Hancock, as Lender for the Blue Mountain 'Faulkner 1' geothermal project, made an application to the DOE for a Loan Guarantee under the FIPP. The loan guarantee was conditionally approved on June 15, 2010, and the loan closed on September 3, 2010....At the closing of the John Hancock/DOE loan after paying associated fees and funding reserve accounts for drilling, interest and plant maintenance the Company paid the TCW loan down to approximately $86.9 million. The Company plans to apply for a second ARRA grant based upon work, to 59September 3, 2010, and a repayment of $81,076,669 was made on the TCW loan. 288 (emphasis added)

Confirming this troubling misdirection of taxpayer funds, the Summary of Proposed Terms and Conditions for the Conditional Loan Guarantee, signed by Secretary Chu, provides that the “proceeds of the Guaranteed Obligation will be used for the following: (i) Partial repayment of intercompany loan from HoldCo [Blue Mountain], in the amount of approximately 80 million;...” 289 This intercompany repayment would ultimately flow to TCW as described above. The remaining amount of the loan went to the posting of cash collateral to NV Energy, Inc., funding a debt service reserve account, funding a maintenance reserve account, funding a drilling expenditure account (which included already incurred costs), and other fees. As these numbers total to around $98 million, it appears that little, if any, of the loan went to fund newdrilling or new construction.

2. This Bailout Appears to Violate the American Recovery and Reinvestment Act of 2009

Not only does it appear that DOE purposely directed taxpayer funds to a failing enterprise, DOE’s action robbed taxpayers of genuine investment toward renewable energy.

This loan guarantee bailed out lenders (TCW) and provided no assurance that TCW would apply the money that it recovered toward the economy or jobs as required by the American Recovery and Reinvestment Act of 2009.

Title XVI, Section 1602 of the American Recovery and Reinvestment Act of 2009, requires that “recipients shall also use grant funds in a manner that maximizes job creation and economic benefit.” 291 Paying off a creditor clearly does not maximize job creation and economic benefits. Rather, it provides an opportunity for private industry to exit an investment, deleverage and transfer the extraordinarily high default risk to taxpayers.

increase power production, subsequent to the first grant that will be partially funded by the John Hancock/DOE loan.”).