

**Footnote 228, 229, 230**

## Microsoft Outlook

---

**From:** Kumar, Aditya  
**Sent:** Wednesday, August 19, 2009 4:14 PM  
**To:** Levine, Jacob C.  
**Cc:** Bailey, Kevin; Zichal, Heather R.  
**Subject:** RE: Solyndra

No, it does not.

Ron told me this morning to figure out what Heather's funding community concern was and we discussed other concerns and thought they had been dealt with. We teed this up to DoE but they couldn't think of what it would be – obviously, we can't address a concern if we don't know what it is. Ron wants to have this move through the process and NOT be in a "holding pattern". He has talked to Rahm about this, and feels like Rahm wants this too (barring any concerns)—POTUS involvement was Rahm's idea. Obviously we should all be on board before moving forward (we love you guys and would want nothing less), so you should know we have NOT taken it to comms and NOT given Alyssa / Danielle their scheduling sheet back because we want to make sure we're all good with the funding community point you're raising, and then can move forward together :-)

Kevin is point for me from here. I'm juggling a bunch of other stuff. Will gladly re-engage when there's more info or a plan to go forward. Thanks guys.

Adi

---

**From:** Levine, Jacob C.  
**Sent:** Wednesday, August 19, 2009 3:41 PM  
**To:** Kumar, Aditya  
**Cc:** Bailey, Kevin  
**Subject:** RE: Solyndra

Hey – so my understanding is that Heather had a series of conversations yesterday with Ron et al and that there were some timing and comms questions that we were waiting to have resolved. So I think we're in a holding pattern. Also conflicting jobs creation numbers. Does that square with your latest?

---

**From:** Kumar, Aditya  
**Sent:** Wednesday, August 19, 2009 3:23 PM  
**To:** Levine, Jacob C.  
**Cc:** Bailey, Kevin  
**Subject:** RE: Solyndra

+ Kevin who is POC for us

---

**From:** Kumar, Aditya  
**Sent:** Wednesday, August 19, 2009 3:22 PM  
**To:** Levine, Jacob C.  
**Subject:** RE: Solyndra

Need to know what heather's concerns are with the funding community

---

**From:** Levine, Jacob C.  
**Sent:** Wednesday, August 19, 2009 3:22 PM

**To:** Kumar, Aditya  
**Subject:** Solyndra

Hey there –

Heather asked me to jump in as the point of contact on this so wanted to reach out and see if there were any developments since we talked yesterday. Let me know – thanks,

Jake

Jake Levine  
Office of Energy and Climate Change  
[REDACTED]

**Footnote 232, 234**

**Microsoft Outlook**

---

**From:** Zichal, Heather R.  
**Sent:** Wednesday, August 19, 2009 10:20 PM  
**To:** Levine, Jacob C.  
**Subject:** Re: Solyndra meeting

Pfeiffer?

Already done.

---

**From:** Levine, Jacob C.  
**To:** Zichal, Heather R.  
**Sent:** Wed Aug 19 17:26:54 2009  
**Subject:** Fw: Solyndra meeting

Do you mind if I touch base with Dan re your concerns (finance, jobs numbers, already announced) or rather I punt? Having relayed your earlier message to Adi today (without any mention of the finances), I don't think responding substantively to Adi/Kevin will be useful.

---

**From:** Bailey, Kevin  
**To:** Levine, Jacob C.; Kumar, Aditya; Hurlbut, Brandon K.  
**Sent:** Wed Aug 19 17:16:59 2009  
**Subject:** RE: Solyndra meeting  
All - Following up from our brief huddle this afternoon, here's the next steps we discussed:

- Brandon will follow up with Comms to ensure the WH wants to magnify this event during the back-to-school messaging.
- Kevin will continue to track the technical requirements for live sat feed with WHCA, and will continue to liaise with DOE and the Recovery team to move the event forward
- Adi will step back from daily involvement unless we need to pull him back in.

Did I leave anything out? Jake, if you have any issues which arise and you need to raise, please feel free.

Thanks guys,  
kb

---

**From:** Levine, Jacob C.  
**Sent:** Wednesday, August 19, 2009 4:49 PM  
**To:** Bailey, Kevin; Kumar, Aditya; Hurlbut, Brandon K.  
**Subject:** RE: Solyndra meeting

Just seeing this. Will drop in and see if you are still there

---

**From:** Bailey, Kevin  
**Sent:** Wednesday, August 19, 2009 4:18 PM  
**To:** Kumar, Aditya; Hurlbut, Brandon K.; Levine, Jacob C.  
**Subject:** RE: Solyndra meeting

Jake, we're planning to meet in Adi's office at 4:30 (in 15 mins). Would love you to join.

See you all in 15.

---

**From:** Kumar, Aditya  
**Sent:** Wednesday, August 19, 2009 4:16 PM  
**To:** Bailey, Kevin; Huribut, Brandon K.  
**Subject:** RE: Solyndra meeting

I'm in 104A so why don't you just come here when you guys are ready. Should be quick. Should include Jake Levine too.

---

**From:** Bailey, Kevin  
**Sent:** Wednesday, August 19, 2009 10:27 AM  
**To:** Huribut, Brandon K.; Kumar, Aditya; Zichal, Heather R.  
**Subject:** RE: Solyndra meeting

Sorry Heather, just realized you're in Alaska. Brandon and Adi, let's talk at 4:30, and if Heather can join that'll be great.

KB

---

**From:** Bailey, Kevin  
**Sent:** Wednesday, August 19, 2009 10:15 AM  
**To:** Huribut, Brandon K.; Kumar, Aditya; Zichal, Heather R.  
**Subject:** RE: Solyndra meeting

Heather, does 1pm work for you?

---

**From:** Huribut, Brandon K.  
**Sent:** Wednesday, August 19, 2009 10:03 AM  
**To:** Bailey, Kevin; Kumar, Aditya; Zichal, Heather R.  
**Subject:** RE: Solyndra meeting

My schedule is packed today from 10:45 – 4 pm. Happy to talk after 4 but if you all need to get together before then – just fill me in later today.

---

**From:** Bailey, Kevin  
**Sent:** Wednesday, August 19, 2009 9:58 AM  
**To:** Kumar, Aditya; Zichal, Heather R.; Huribut, Brandon K.  
**Subject:** Solyndra meeting

Hi all,

Let's huddle today to better align and begin to talk through this DOE announcement. How is 1pm for everyone?

Thanks,  
Kevin

## **Footnote 242**

[REDACTED]

---

**From:** Spinner, Steve  
**Sent:** Monday, August 17, 2009 5:13 PM  
**To:** 'Kumar, Aditya'; [REDACTED]  
**Subject:** RE: Solyndra Proposal

My pleasure. If other projects like that come up, feel free to give me a ring as I might be able to help with additional resources, etc.

Steven J Spinner  
Small Business Loan Guarantee Program Advisor  
Recovery Act Team  
U.S. Department of Energy  
[REDACTED]

---

**From:** Kumar, Aditya [REDACTED]  
**Sent:** Monday, August 17, 2009 5:11 PM  
**To:** Spinner, Steve; [REDACTED]  
**Subject:** RE: Solyndra Proposal

Just talked to Jeff Zients—he said it was hugely helpful. I think there may be some follow-up work too, should he or others be interested. Thanks again in your help with that.

---

**From:** Spinner, Steve [REDACTED]  
**Sent:** Monday, August 17, 2009 5:09 PM  
**To:** Kumar, Aditya; [REDACTED]  
**Subject:** RE: Solyndra Proposal

Adi, I just submitted the proposal to Matt and Rod...they are reviewing and will give me the definitive response later today on dates. Will let you know asap.

BTW, I heard that [REDACTED] had a very productive time on Saturday. I hope you all achieved the desired outcome.

Steve

Steven J Spinner  
Small Business Loan Guarantee Program Advisor  
Recovery Act Team  
U.S. Department of Energy  
[REDACTED]

---

**From:** Kumar, Aditya [REDACTED]  
**Sent:** Monday, August 17, 2009 5:06 PM  
**To:** [REDACTED]  
**Cc:** Spinner, Steve  
**Subject:** RE: Solyndra Proposal

You guys just have so many fantastic people over there, it's hard to keep you all straight. Steve, the President's calendar is quite tight, so it would be great to get this back as soon as possible. Thanks.

---

**From:** [REDACTED]  
**Sent:** Monday, August 17, 2009 5:03 PM  
**To:** Kumar, Aditya  
**Cc:** Spinner, Steve  
**Subject:** RE: Solyndra Proposal

Adi,  
I think Steve Spinner is point on this. Steve can you help fill out the attached memo for a Solyndra event?

---

**From:** Kumar, Aditya [REDACTED]  
**Sent:** Monday, August 17, 2009 4:51 PM  
**To:** [REDACTED]  
**Subject:** RE: Solyndra Proposal

Haha. I think Matt said you would be point on this? Or am I wrong? Do you know when you'd be able to get something back by?

---

**From:** [REDACTED]  
**Sent:** Monday, August 17, 2009 4:43 PM  
**To:** Kumar, Aditya  
**Subject:** FW: Solyndra Proposal

Funny - I had sent it to Rod, but missed you!

---

**From:** [REDACTED]  
**Sent:** Monday, August 17, 2009 1:33 PM  
**To:** Rogers, Matt; O'Connor, Rod  
**Cc:** [REDACTED]  
**Subject:** FW: Solyndra Proposal

Looping Rod

---

**From:** Kumar, Aditya [REDACTED]  
**Sent:** Monday, August 17, 2009 12:25 PM  
**To:** Rogers, Matt; O'Connor, Richard M.; [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** FW: Solyndra Proposal

Folks,

Want to check in on Solyndra. We think that best option here is to have the Secretary and a Senior WH Official (e.g. Carol Browner) do the event, and have the President be able to satellite feed in to make remarks. Want to see if what works from your end (Secretary's schedule, etc.)

Also, the President's calendar is packed in September. The earliest this could be done is 9/8, I believe. Want to see how that looks for timing from your perspective. Lastly, we need to get the attached Scheduling Proposal to the schedulers

ASAP to try to get this locked. I have taken an initial crack at it, but as I was doing so, realized that you guys would be much better able to answer some of these questions. Could you please fill out the attached (feel free to change whatever I've done) and send back.

Thanks,

Adi

---

**From:** Crutchfield, Danielle M.  
**Sent:** Monday, August 17, 2009 11:51 AM  
**To:** Kumar, Aditya; Mastromonaco, Alyssa M.  
**Cc:** Jarvis-Shean, Elizabeth; Pfeiffer, Dan  
**Subject:** RE: Solyndra Proposal

September is completely packed. Can you fill out the attached scheduling proposal. The earliest this could be done is possibly the 8<sup>th</sup> which is the same day as our back to school speech.

---

**From:** Kumar, Aditya  
**Sent:** Monday, August 17, 2009 11:48 AM  
**To:** Crutchfield, Danielle M.; Mastromonaco, Alyssa M.  
**Cc:** Jarvis-Shean, Elizabeth; Pfeiffer, Dan  
**Subject:** RE: Solyndra Proposal

Not sure about set up and stuff. I'm assuming remarks would be no more than 5 mins, but I am copying Pfeiffer and would defer to him and the comms team.

Dan: some background. This is a Recovery Act Grant. Details:

- Will be first DoE Loan Guarantee since 1980s (since the geothermal grants in the 80s, I believe).
- Total amount will be \$535M (with a \$107M govt subsidy)
- This is a solar panel manufacturing company in Fremont, CA
- Story is two things:
  - **JOBS:** Solyndra estimates this will create thousands of jobs (over 3,000K was on estimate I saw but not sure how dated that was)
  - **When Government Plays a Part, it can Bring the Private Sector Along:** Solyndra has secured over large amounts in private capital which is a story in itself

---

**From:** Crutchfield, Danielle M.  
**Sent:** Monday, August 17, 2009 11:38 AM  
**To:** Kumar, Aditya; Mastromonaco, Alyssa M.  
**Cc:** Jarvis-Shean, Elizabeth  
**Subject:** RE: Solyndra Proposal

How much of his time would this take?

---

**From:** Kumar, Aditya  
**Sent:** Monday, August 17, 2009 11:12 AM  
**To:** Crutchfield, Danielle M.; Mastromonaco, Alyssa M.  
**Cc:** Jarvis-Shean, Elizabeth  
**Subject:** RE: Solyndra Proposal

Yep--i was thinking early September, and seeing if there's a slot for POTUS that would make sense then.

---

**From:** Crutchfield, Danielle M.  
**Sent:** Monday, August 17, 2009 11:09 AM  
**To:** Kumar, Aditya; Mastromonaco, Alyssa M.  
**Cc:** Jarvis-Shean, Elizabeth  
**Subject:** RE: Solyndra Proposal

POTUS will be in Martha's Vineyard on Vacation until the 30<sup>th</sup>.

---

**From:** Kumar, Aditya  
**Sent:** Monday, August 17, 2009 9:56 AM  
**To:** Mastromonaco, Alyssa M.; Crutchfield, Danielle M.  
**Cc:** Jarvis-Shean, Elizabeth  
**Subject:** FW: Solyndra Proposal

Alyssa / Danielle,

Ron said this morning that the POTUS definitely wants to do this (or Rahm definitely wants the POTUS to do this)? DoE says they should be ready to do by 8/28 or soon thereafter. Have you guys been involved in this, and do you know what the POTUS schedule looks like for his ability to satellite into this event? Not sure what the technical or time requirements are for POTUS satelliting in, but wanted to see what potential dates could be so I can make sure DoE stands down and doesn't move ahead until we're ready.

Liz—this passed vet by the VP team, but do you want to do your own vet?

Adi

---

**From:** Kumar, Aditya  
**Sent:** Thursday, August 13, 2009 2:58 PM  
**To:** Klain, Ronald A.  
**Cc:** Hoffman, Alan L.  
**Subject:** Solyndra Proposal

Ron,

Alan and I just spoke about the best thing to do with Solyndra. We think perhaps the best way to go here is to have the Secretary and a Senior WH official (e.g. Carol Browner) go out there for an event. This would likely also give us more flexibility on dates. For POTUS involvement, if Rahm is interested, we can still do the satellite in (we just need to make sure there is an event he can satellite in for). And, I also would think that if we want VPOTUS to be with the POTUS when doing the satellite in or doing it himself, that would also be possible. Does that sound ok?

Adi

[REDACTED]

---

**From:** Spinner, Steve  
**Sent:** Tuesday, August 18, 2009 5:39 PM  
**To:** [REDACTED]  
**Subject:** RE: anything on Solyndra--want to get something back to the President's Scheduling team. (EOM)

Excellent. Thanks.

Are we set for request of POTUS for videoconference on Sept 8th?

Steven J Spinner  
Small Business Loan Guarantee Program Advisor Recovery Act Team U.S. Department of Energy  
[REDACTED]

-----Original Message-----

**From:** [REDACTED]  
**Sent:** Tuesday, August 18, 2009 5:25 PM  
**To:** Spinner, Steve  
**Subject:** RE: anything on Solyndra--want to get something back to the President's Scheduling team. (EOM)

Rod just spoke with Kevin Bailey out of the VP's office. He will send the solyndra request to him shortly. Thanks, [REDACTED]

-----Original Message-----

**From:** Spinner, Steve  
**Sent:** Tuesday, August 18, 2009 4:59 PM  
**To:** [REDACTED]  
**Subject:** RE: anything on Solyndra--want to get something back to the President's Scheduling team. (EOM)

No worries. I just want to work within Rod's process but have the WH be coordinated (and not consistently sending me emails). Thanks, [REDACTED]

FYI, I'm also holding off contacting Solyndra until I get the greenlight on date and effort from Rod.

Steve

Steven J Spinner  
Small Business Loan Guarantee Program Advisor Recovery Act Team U.S. Department of Energy  
[REDACTED]

-----Original Message-----

**From:** [REDACTED]  
**Sent:** Tuesday, August 18, 2009 4:58 PM  
**To:** Spinner, Steve  
**Subject:** RE: anything on Solyndra--want to get something back to the President's Scheduling team. (EOM)

He hasn't sent a proposal I believe; he was speaking with Brandon in Cab Affairs. He will be out of a meeting in the next 5 min and I will check with him. I will get back to you when I do.

thanks

-----Original Message-----

From: Spinner, Steve

Sent: Tuesday, August 18, 2009 4:56 PM

To: [REDACTED]

Subject: RE: anything on Solyndra--want to get something back to the President's Scheduling team. (EOM)

Question: who's he been talking to? Doesn't seem like WH is coordinated on this. Would like to tell Kevin and Adi who received the proposal from Rod.

Thanks!!

Steven J Spinner

Small Business Loan Guarantee Program Advisor Recovery Act Team U.S. Department of Energy  
[REDACTED]

-----Original Message-----

From: [REDACTED]

Sent: Tuesday, August 18, 2009 4:44 PM

To: Spinner, Steve

Subject: RE: anything on Solyndra--want to get something back to the President's Scheduling team. (EOM)

Rod is working on it with WH staff. Will let you know once I have an update. Thanks,  
[REDACTED]

-----Original Message-----

From: Spinner, Steve

Sent: Tuesday, August 18, 2009 4:42 PM

To: [REDACTED]

Subject: FW: anything on Solyndra--want to get something back to the President's Scheduling team. (EOM)

Any update?

Steven J Spinner

Small Business Loan Guarantee Program Advisor Recovery Act Team U.S. Department of Energy  
[REDACTED]

-----Original Message-----

From: Bailey, Kevin [REDACTED]

Sent: Tuesday, August 18, 2009 3:56 PM

To: Spinner, Steve

Subject: FW: anything on Solyndra--want to get something back to the President's Scheduling team. (EOM)

Hi Steve,

I work in the VP's office and am starting to become more engaged on this event. I'm following up on Adi's earlier note. We still haven't received anything back from Rod and so I wanted to check back with you on the status of the Solyndra Scheduling Proposal.

Any help you can give to help prod this along is appreciated.

Thanks!

**Kevin**

**Footnote 244, 246**

[REDACTED]

---

**From:** Spinner, Steve  
**Sent:** Tuesday, August 25, 2009 11:54 AM  
**To:** Owens, Missy  
**Subject:** FW: Solyndra Update

Missy,  
I don't know why Adi reached out to me directly.

Friday, Sept 4th? The day before Labor Day weekend? Is anyone going to be around? Will anyone care?

The Solyndra team is hoping for Sept 8. Although I'm sure they'd be able to do Sept 4, they'd have to scramble to get the "production" event that was originally envisioned.

Assuming you'll take point with Adi on follow-up here. Just let me know the decision. Internal event planning still has S1, hopefully Browner and a videoconference with POTUS (or VPOTUS if unavailable). Noone has reached out to Solyndra (that I know of) yet..they're just waiting for the date and a call from Advance. Have held back until I got the greenlight.

Steve

---

**From:** Kumar, Aditya [REDACTED]  
**To:** Spinner, Steve  
**Cc:** Rogers, Matt; Oxhorn, Elizabeth A. [REDACTED]  
**Sent:** Tue Aug 25 10:28:26 2009  
**Subject:** Solyndra Update

We are thinking (technical logistics allowing) that we would want the VP can satellite into the event on 9/4 (next Friday). It's the same day unemployment numbers come out, and we'd want to use this as an example where the Recovery Act is helping create new high tech jobs. Does that work for you guys? Were you guys going to send Sec. Chu or someone else to CA? We are discussing the possibility of sending someone from here (e.g. Carol) out there as well.

Let me know if 9/4 sounds ok. Let me know what DoE would be thinking of doing with the Secretary or otherwise. Don't need a formal event memo in a rush, but just want to start planning things if this sounds generally ok. Glad to do a quick call with whomever. Thanks,

Adi

**Footnote 248, 249**

[REDACTED]

---

**From:** Colyar, Kelly  
**Sent:** Thursday, August 27, 2009 9:22 AM  
**To:** Spinner, Steve; [REDACTED]; Richardson, Susan; Frantz, David; Isakowitz, Steve  
**Subject:** RE: Solyndra Update

Steve,

I am checking with OMB to get a sense of their timing. I requested an update from them last night. I will follow up this morning.

-----Original Message-----

**From:** Spinner, Steve  
**Sent:** Thursday, August 27, 2009 9:07 AM  
**To:** Spinner, Steve; [REDACTED]; Colyar, Kelly  
**Subject:** RE: Solyndra Update

FYI, I have a 1PM call with the WH, so please send by noon. Thanks.

Steven J Spinner  
Small Business Loan Guarantee Program Advisor Recovery Act Team U.S. Department of Energy  
[REDACTED]

-----Original Message-----

**From:** Spinner, Steve  
**Sent:** Thursday, August 27, 2009 8:04 AM  
**To:** [REDACTED]; Colyar, Kelly  
**Subject:** Fw: Solyndra Update

Looks like the Solyndra event is going to be Friday, September 4. Per Matt's request below, can you please let me know any outstanding barriers/issues for closing and estimated dates? Thanks.

Steve

----- Original Message -----

**From:** Rogers, Matt  
**To:** Spinner, Steve  
**Sent:** Thu Aug 27 07:59:35 2009  
**Subject:** FW: Solyndra Update

Can you confirm with the program that we are on for Friday and let me know if there are any barriers? Thanks, mr

Matt Rogers  
Senior Advisor to the Secretary of Energy for Recovery Act Implementation US Department of Energy 1000 Independence Avenue, 7th Floor Washington, DC 20585  
[REDACTED]

-----Original Message-----

**From:** Owens, Missy  
**Sent:** Wednesday, August 26, 2009 8:01 PM

To: 'Elizabeth A. Oxhorn [REDACTED] Aditya Kumar [REDACTED] Spinner, Steve; [REDACTED]

Cc: Rogers, Matt; 'Brandon K. Hurlbut [REDACTED]

Subject: Re: Solyndra Update

Sure. Including DOE press.

----- Original Message -----

From: Oxhorn, Elizabeth A. [REDACTED]

To: Kumar, Aditya [REDACTED]; Owens, Missy; Spinner, Steve [REDACTED]

Cc: Rogers, Matt; Hurlbut, Brandon K. <Brandon\_K.\_Hurlbut [REDACTED]>

Sent: Wed Aug 26 18:49:36 2009

Subject: RE: Solyndra Update

Alright, everyone - thanks for your patience as we nailed this down here.

It looks like this will definitely be a VPOTUS event after all - and it would need to be on the 4th in that case.

I hear [REDACTED] had a good visit out there and things look feasible from a logistical standpoint - but much more to discuss. Shall we hop on a call tomorrow to discuss further? How about 1:00 PM? If that works, will circulate number.

From: Kumar, Aditya

Sent: Tuesday, August 25, 2009 11:54 AM

To: Owens, Missy; Spinner, Steve; [REDACTED]

Cc: Rogers, Matt; Oxhorn, Elizabeth A.

Subject: RE: Solyndra Update

Sounds good. POTUS on the 8th was what we were going for, but that's looking unlikely. With POTUS unlikely, we wanted to give this to the VPOTUS, and 4th was looking best.

Glad to discuss tomorrow.

From: Owens, Missy [REDACTED]

Sent: Tuesday, August 25, 2009 11:51 AM

To: Spinner, Steve; Kumar, Aditya; [REDACTED]

Cc: Rogers, Matt; Oxhorn, Elizabeth A.

Subject: RE: Solyndra Update

hey all - lets talk about this, as of last Friday the POTUS was set to satellite in and the event has been moved to the 8th.

Where did you see Solyndra was on the 4th? Worried about the dates you have Adi, want to make sure we're all on the same page. You, [REDACTED] and I should probably discuss when tomorrow's event is over.

---

From: Spinner, Steve  
Sent: Tuesday, August 25, 2009 11:48 AM  
To: 'Kumar, Aditya'; Owens, Missy  
Cc: Rogers, Matt; Oxhorn, Elizabeth A.  
Subject: RE: Solyndra Update

Adi, I am looping in Missy Owens. Thanks.

Steven J Spinner  
Small Business Loan Guarantee Program Advisor Recovery Act Team U.S. Department of Energy  
[REDACTED]

---

From: Kumar, Aditya [REDACTED]  
Sent: Tuesday, August 25, 2009 10:28 AM  
To: Spinner, Steve  
Cc: Rogers, Matt; Oxhorn, Elizabeth A.  
Subject: Solyndra Update

We are thinking (technical logistics allowing) that we would want the VP can satellite into the event on 9/4 (next Friday). It's the same day unemployment numbers come out, and we'd want to use this as an example where the Recovery Act is helping create new high tech jobs. Does that work for you guys? Were you guys going to send Sec. Chu or someone else to CA? We are discussing the possibility of sending someone from here (e.g. Carol) out there as well.

Let me know if 9/4 sounds ok. Let me know what DoE would be thinking of doing with the Secretary or otherwise. Don't need a formal event memo in a rush, but just want to start planning things if this sounds generally ok. Glad to do a quick call with whomever. Thanks,

Adi

**Footnote 250, 252**



**OMB Briefing**  
**August 25, 2009**

**Solyndra FAB 2, LLC**

***\$733 Million Capacity Expansion for  
Manufacturer of Thin film  
Omnifacial Solar Modules for  
Commercial Roof Top Applications***

## **Solyndra FAB 2, LLC**

## **Overview**

---

- **Transaction Summary**
- **Project Overview and Timeline**
- **Project Update**
- **Financial Structure**
- **Critical Issues, Risks and Mitigants**
- **Probability of Default**
- **Security/Collateral**
- **Financial Model and Stress Tests**
- **Summary**
- **Appendix**

# Solyndra FAB 2, LLC

# Summary

## **Background & Company/Project Description**

The Applicant has developed and is scaling to high volume manufacturing a unique, high performance, photovoltaic (PV) panel design, which provides electrical energy production utilizing a thin film technology. The Applicant's cylindrical design and "air flow" panel packaging enable improved collection of all available light, thereby providing the Applicant a cost advantage relative to competing technologies. The project is expected to create over 550 permanent jobs in the San Jose region.

## **Transaction Opportunity**

The Applicant proposes to construct a 650,000 square feet manufacturing facility in Fremont, California that will produce ready-to-install PV panels capable of producing 231 MW of production capacity. The costs for the project are approximately \$733 million. The Applicant is applying for a \$535 million loan guarantee on funding to be obtained from the Federal Financing Bank.

## **Summary Economics**

Financial estimates provided by the Applicant suggest that the Applicant can amortize project debt under 18 equal quarterly payments beginning approximately 32 months after financial close. Minimum debt service coverage ratios under base case assumptions is [REDACTED]

## **Key Risks**

The key risks relate to the project's cost structure relative to existing and potential competitors and the industry's growth and potential for price competition. These concerns are mitigated by the product's low cost of installation, its niche market applications and the short tenor of the project debt.

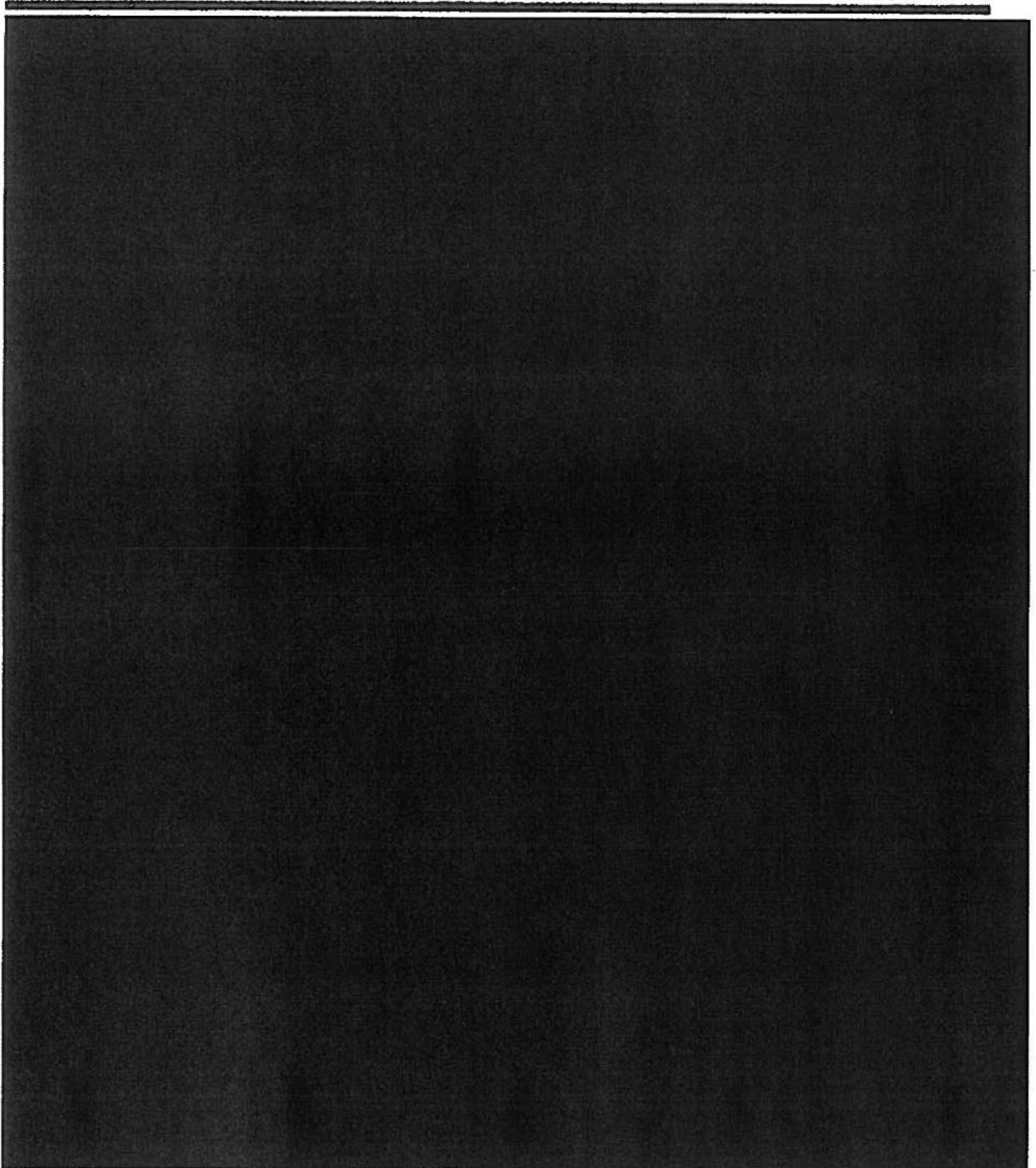
## **Rationale for Subsidy Inputs**

Final Credit Rating [REDACTED] and recovery estimate [REDACTED] reflect start-up nature of enterprise and attendant technology risks.

***As proposed, the transaction aligns well with the T-XVII policy objectives.***

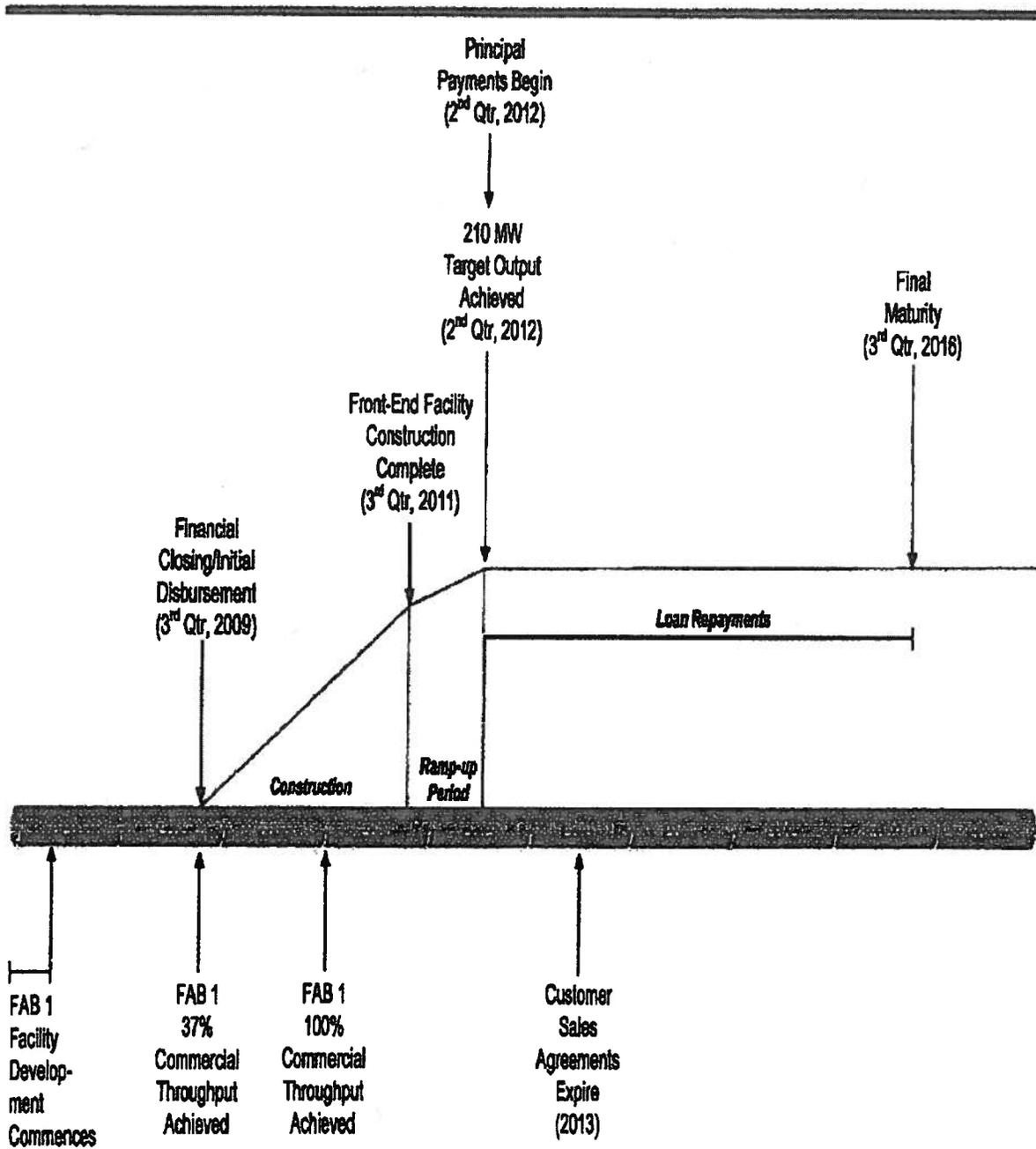
## Solyndra FAB 2, LLC

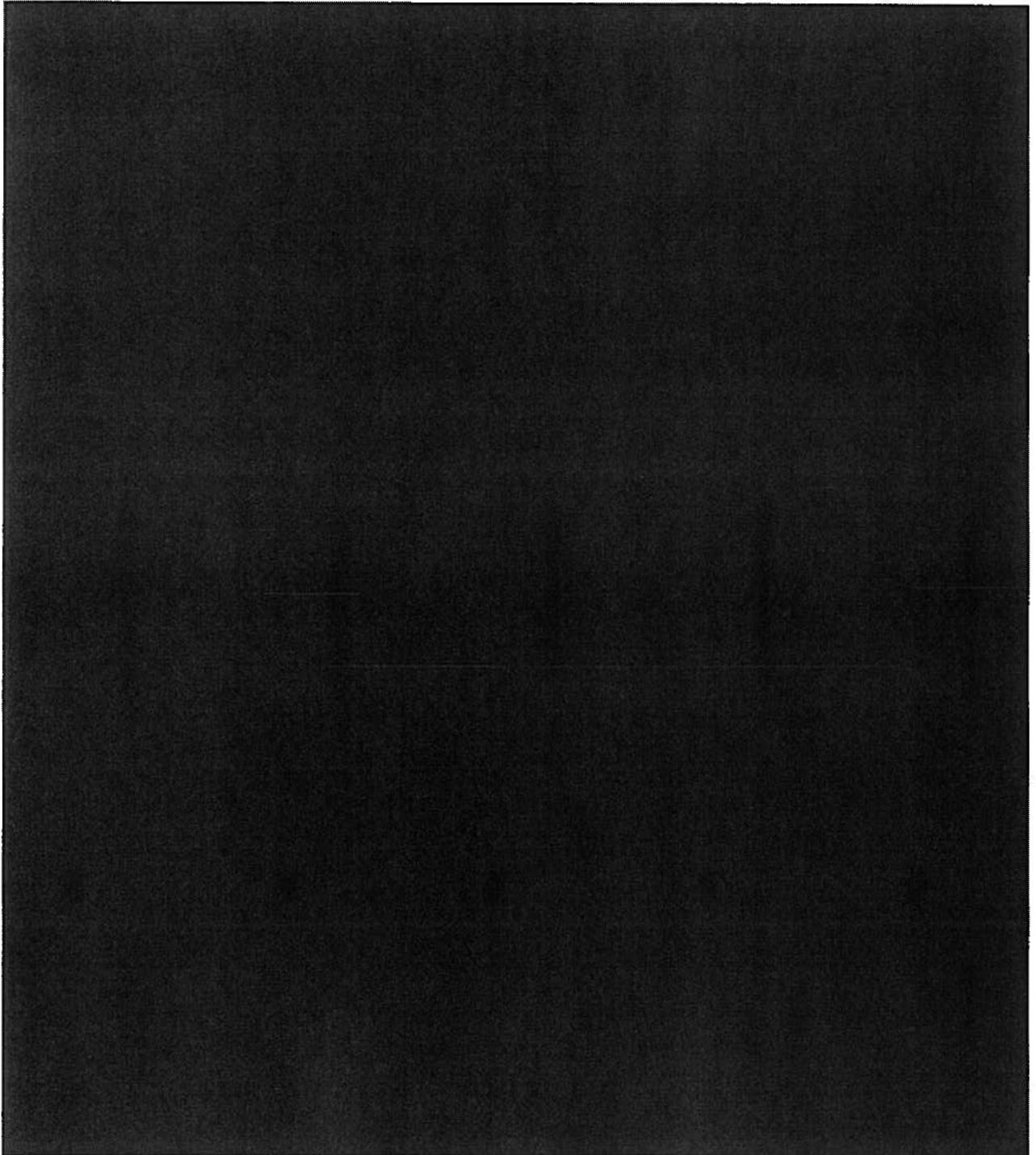
## Project Overview



# Solyndra FAB 2, LLC

# Project Timeline



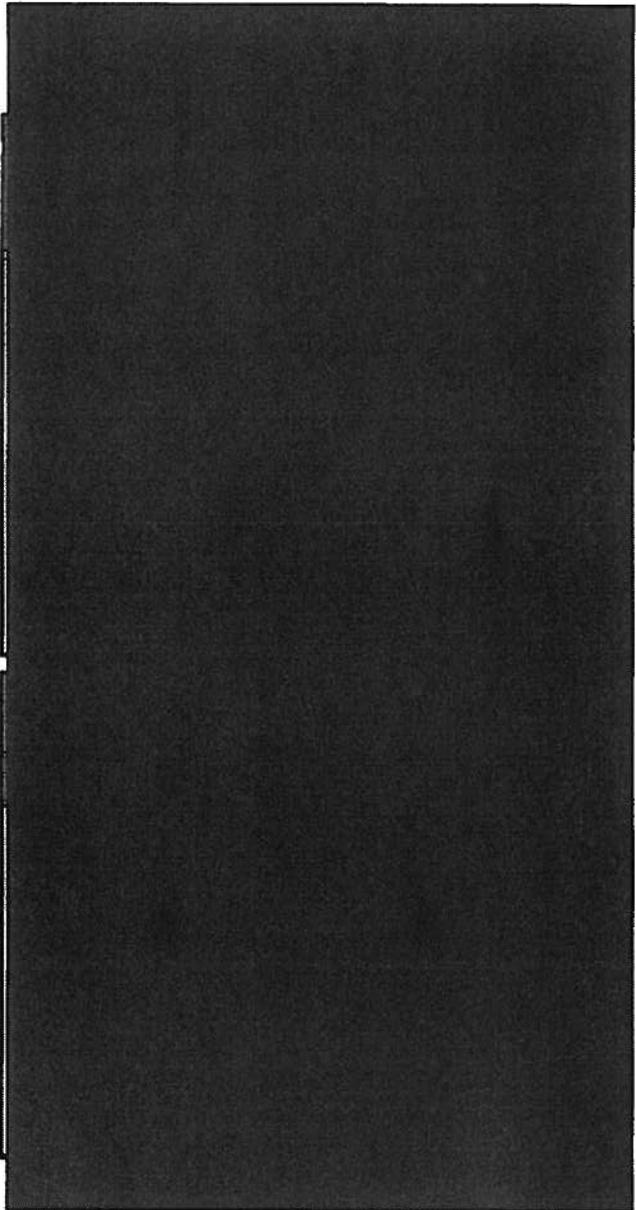


## Solyndra FAB 2, LLC

## Financial Structure

### Terms and Conditions

- Project to be funded with approximately 73% DOE guaranteed debt and 27% equity.
- 100% guaranteed debt instrument funded by the Federal Financing Bank.
- Closing to occur in 3<sup>rd</sup> Quarter 2009.
- Construction financing converting to an amortizing term loan in 2<sup>nd</sup> Quarter 2012.
- Interest will be paid on a current basis.
- Loan to be amortized on a level principal basis over five years with final maturity occurring on or about 3<sup>rd</sup> Quarter 2016.



# Solyndra FAB 2, LLC

# Critical Issues/Risks & Mitigants

Issues/Risks	Mitigants
<ul style="list-style-type: none"> <li>Scale-up of Unit Processes</li> </ul>	<ul style="list-style-type: none"> <li>Solyndra's development of its FAB 1 facility is up and on-line. FAB 1 will run at targeted commercial capacity commencing the FAB 2 ramp-up and will provide the manufacturing support to the FAB 2 development.</li> <li>Parachute capacity processes can be expanded to increase unit process throughput.</li> </ul>
<ul style="list-style-type: none"> <li>Construction Cost Overruns</li> </ul>	<ul style="list-style-type: none"> <li>Applicant has committed to fund a \$30 million cost overrun facility starting in the 15<sup>th</sup> month after close.</li> </ul>
<ul style="list-style-type: none"> <li>Operational Risk</li> </ul>	<ul style="list-style-type: none"> <li>Applicant will engage with process to relevant regulatory bodies.</li> <li>Management team of project from the FAB 1 facility.</li> <li>Commodity price to not affect ability and costs of sales.</li> </ul>
<ul style="list-style-type: none"> <li>Counterparty Risk</li> </ul>	<ul style="list-style-type: none"> <li>Project's principal counterparty is Solyndra, Inc. As such, the project's financial health is closely tied to that of its parent.</li> <li>Parent's financial prospects are strong given the significant equity investment in the FAB 1 facility.</li> <li>FAB 1/FAB 2 consolidated statements project cumulative net cashflow before distributions in excess of \$1.2 billion by 2016 (see Appendix).</li> </ul>
<ul style="list-style-type: none"> <li>Political Regulatory</li> </ul>	<ul style="list-style-type: none"> <li>Changing priorities with regard to incentives may be addressed by providing need for carbon credits and RPS standards.</li> <li>Company sells product into multiple countries, limiting dependence on any one incentive program.</li> </ul>

## Solyndra FAB 2, LLC

## Probability of Default

### Assessments:

**Credit Assessment:** Fitch rated the project a "B+," indicating that significant credit risk is present, but a limited margin of safety remains. Capacity for payment is contingent upon a sustained favorable business and economic environment.

**Final Rating:** Fitch rated the project a "BB-," indicating that there is a possibility of credit risk developing, particularly as the result of adverse economic change over time; however, business or financial alternatives may be available to allow financial commitments to be met. Capacity for payment is contingent upon a sustained favorable business and economic environment.

### **Internal Risk Rating**

OU:  indicating an adequate risk profile that is consistent with credit ratings in the  range

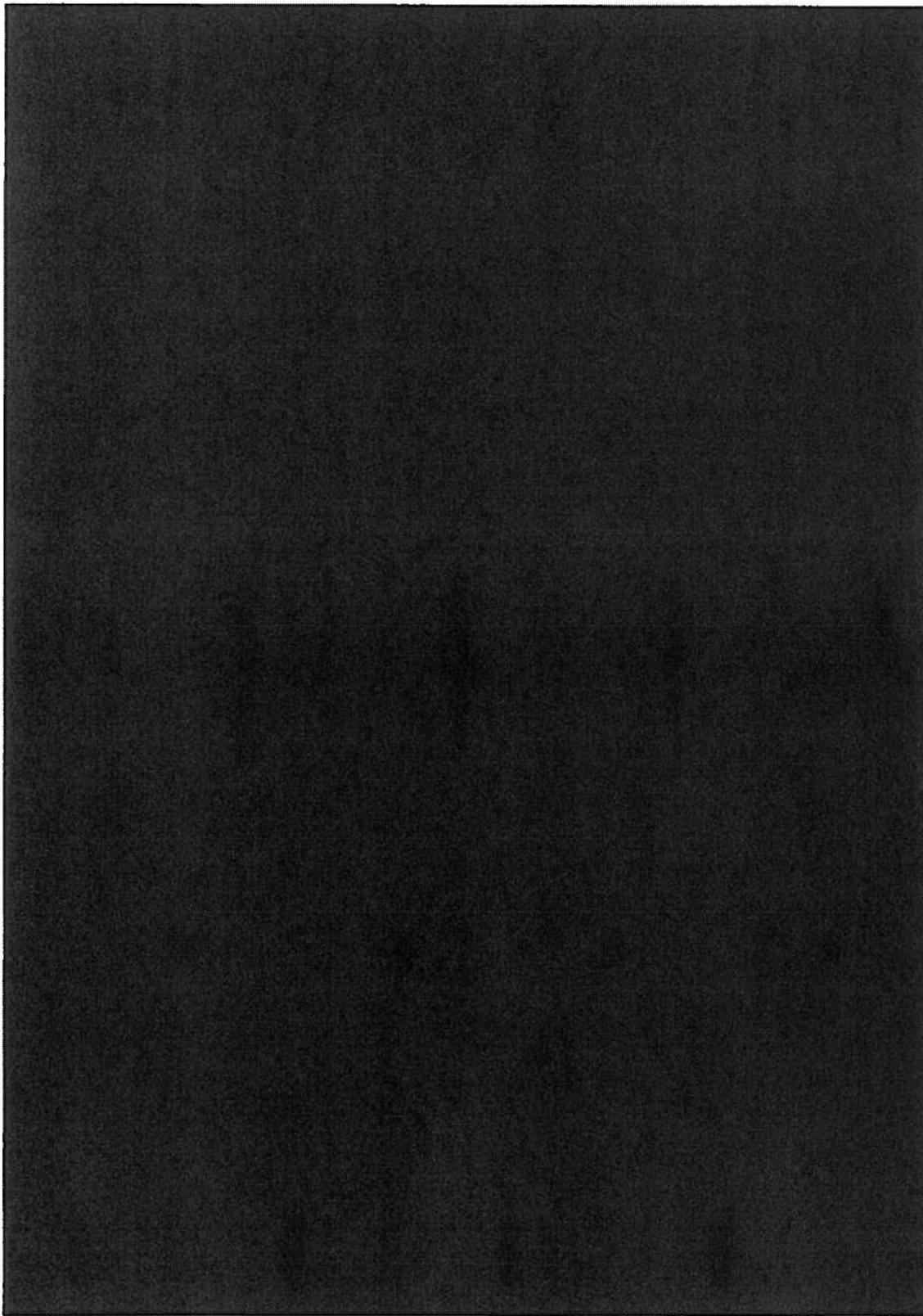
CP:  indicating an adequate risk profile that is consistent with credit ratings in the  range.

### Strengths (Fitch):

- Relatively short amortization schedule
- Sound industry fundamentals
- Management team & financial backers
- Progress achieved to date on commercialization Timeline
- Strong cashflow performance
- Product design and niche market potential
- Product attributes & performance
- Superior on-site coverage and lower installation cost

### Concerns (Fitch):

- Competitive pressure product pricing from new industry capacity
- Product obsolescence
- Achieving grid parity/dependence on favorable political and regulatory environment
- Exposure to foreign exchange risk



al  
g

## Solyndra FAB 2, LLC

## Security / Collateral

---

### **Pledged Collateral**

Includes 100% of the equity interests in the Solyndra FAB 2, LLC; first priority mortgage on all real property interests of the Borrower, including the project site and buildings and all related easements, rights-of-way, licenses; first priority security interests in contracts, licenses, insurance policies, etc.

### **Other Security Features/Considerations**

Project Sponsor is granting a license to Borrower covering all intellectual property.

### **Recovery Estimate will be Based on Liquidation**

Fitch estimated recoveries at 89% in its final private rating based on assumptions related to liquidating the assets.

Importantly, the Fitch recovery rating is based on a default scenario that occurs after \$212 million of principal has been repaid. Applying the Fitch liquidation assumptions to the LGPO recovery methodology results in a recovery percentage of 

# Solyndra FAB 2, LLC

# LGPO Recovery Rating Matrix

DEPARTMENT OF ENERGY LOAN GUARANTEE PROGRAM OFFICE Recovery Rate Notching Matrix	
Collateral Type	Asset Secured / Liquidation
Base Recovery Rate	<input type="text"/>
Recovery Rate Notches	
Pre-Completion	Post-Completion
1. Market Risk	1. Market Risk
2. Technology Risk	2. Technology Risk
3. Regulatory Risk	3. Regulatory Risk
4. Contractual Foundation	4. Contractual Foundation
5. Operational Risk	5. Operational Risk
6. Additional Pledge of Collateral or Other Security	6. Additional Pledge of Collateral or Other Security
7. Other	7. Other
Total	Total

## Solyndra FAB 2, LLC

## Credit Subsidy Cost

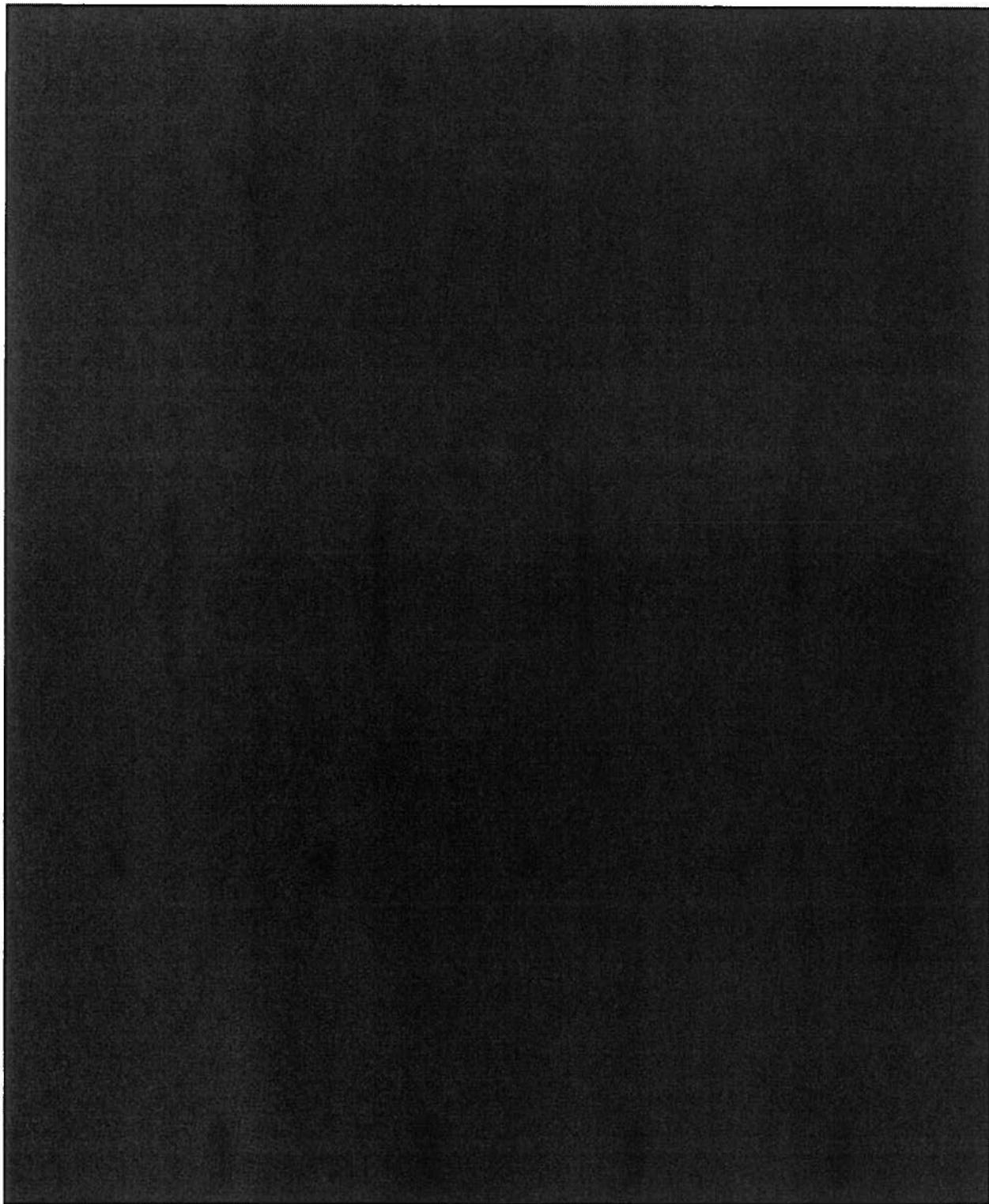
---

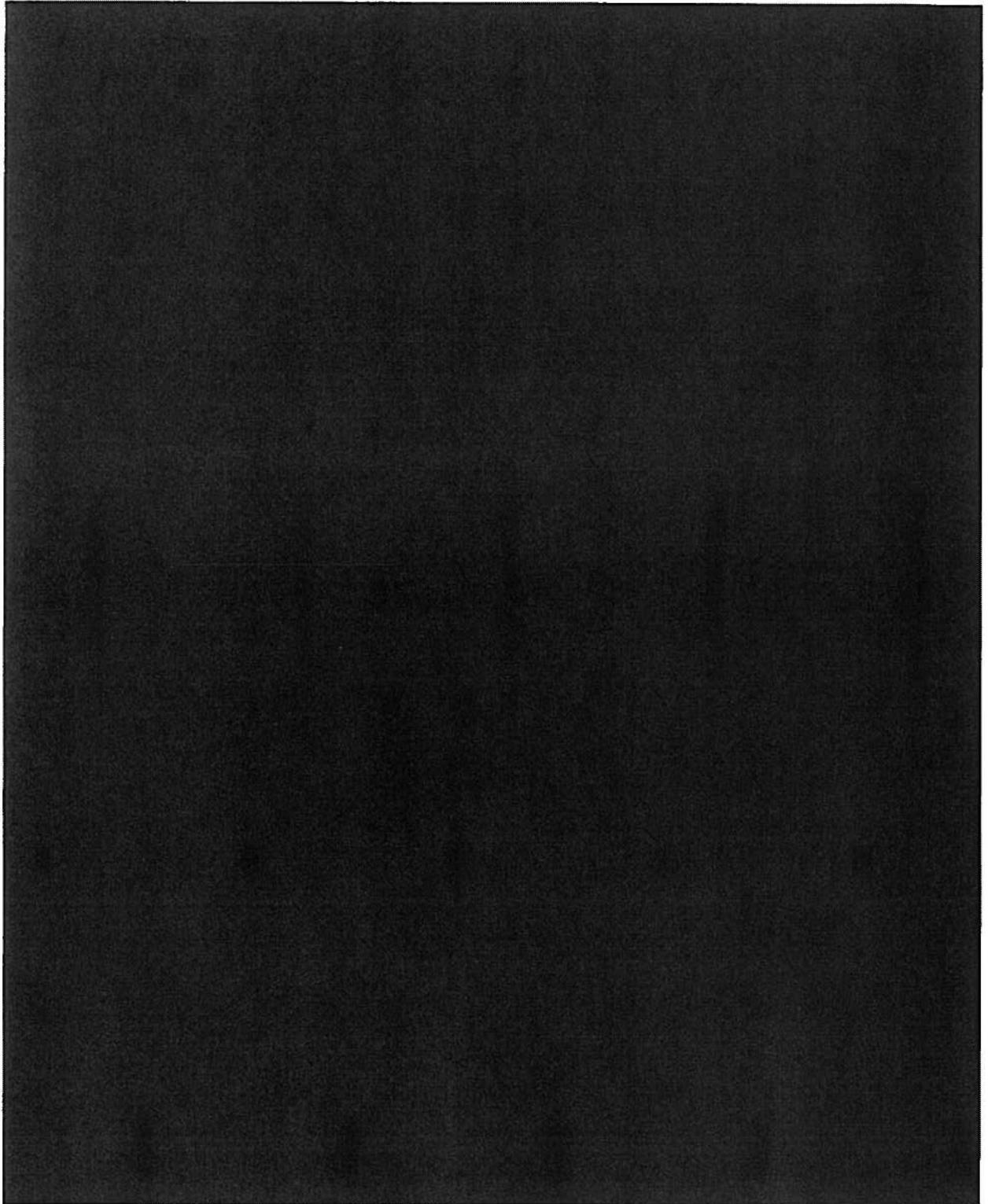
Using the Approved Credit Subsidy Model, the subsidy rate is as follows:

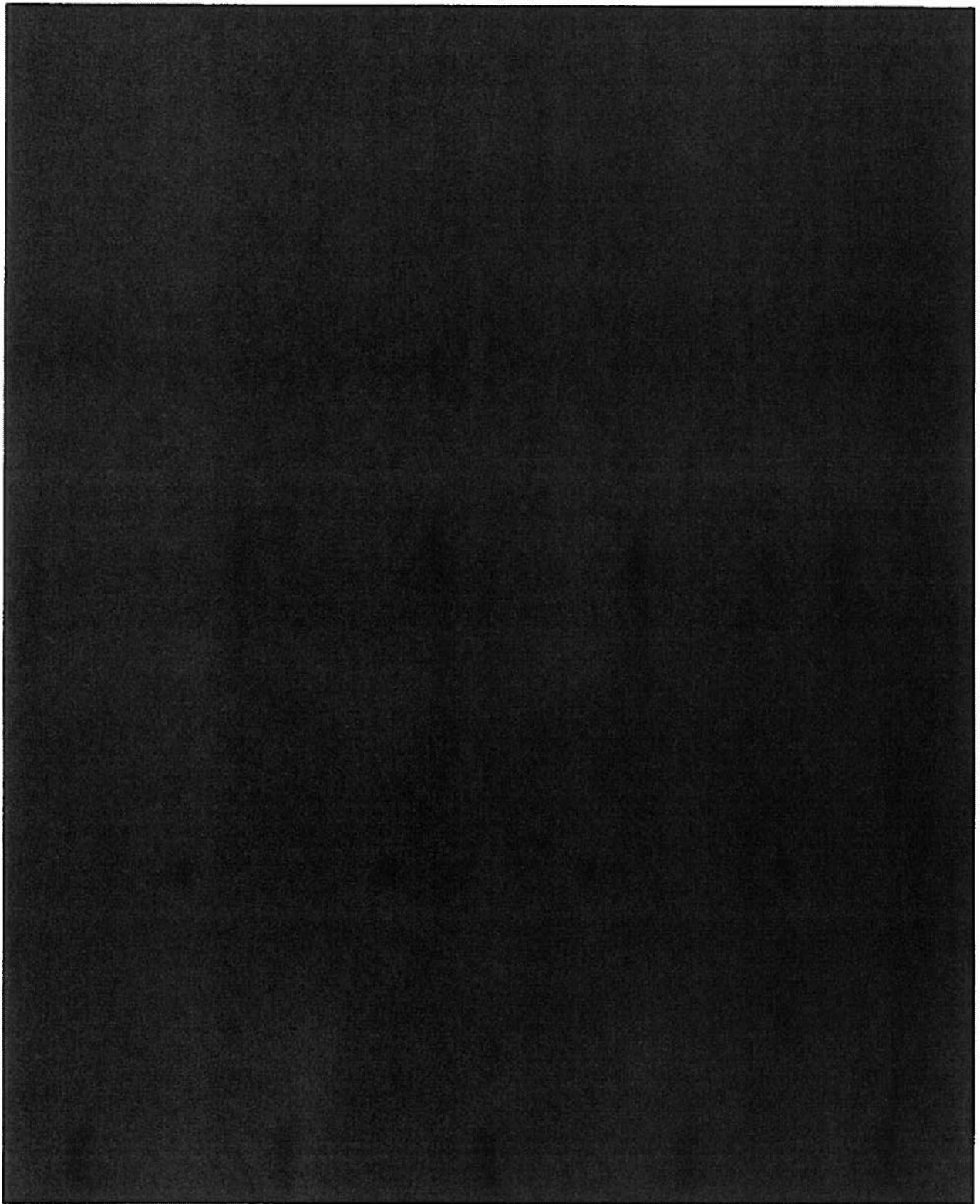
**Total Subsidy :**  
**Financing Subsidy:**  
**Default Subsidy:**  
**Subsidy Reduction for Fees:**  
**Single effective Discount rate:**

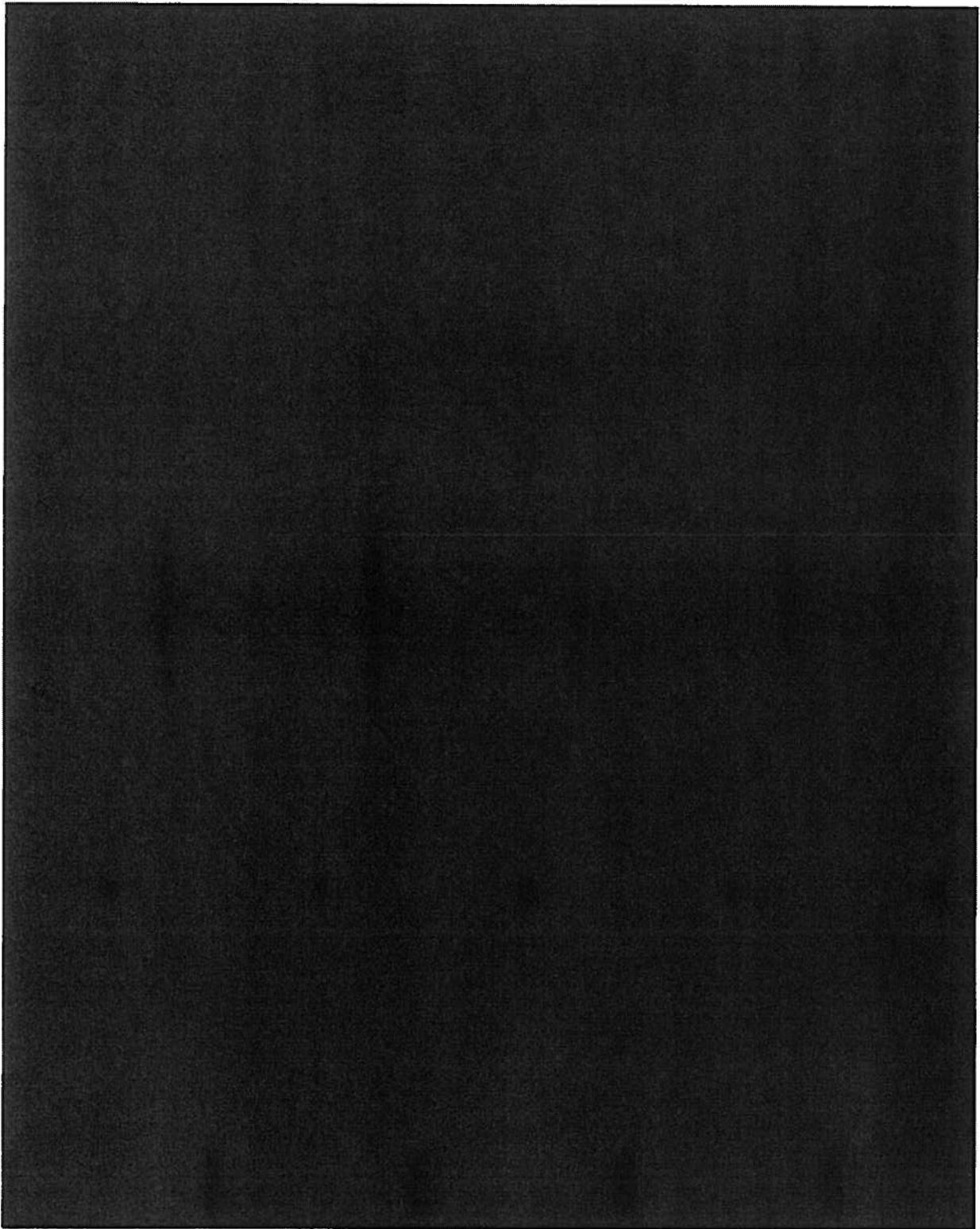


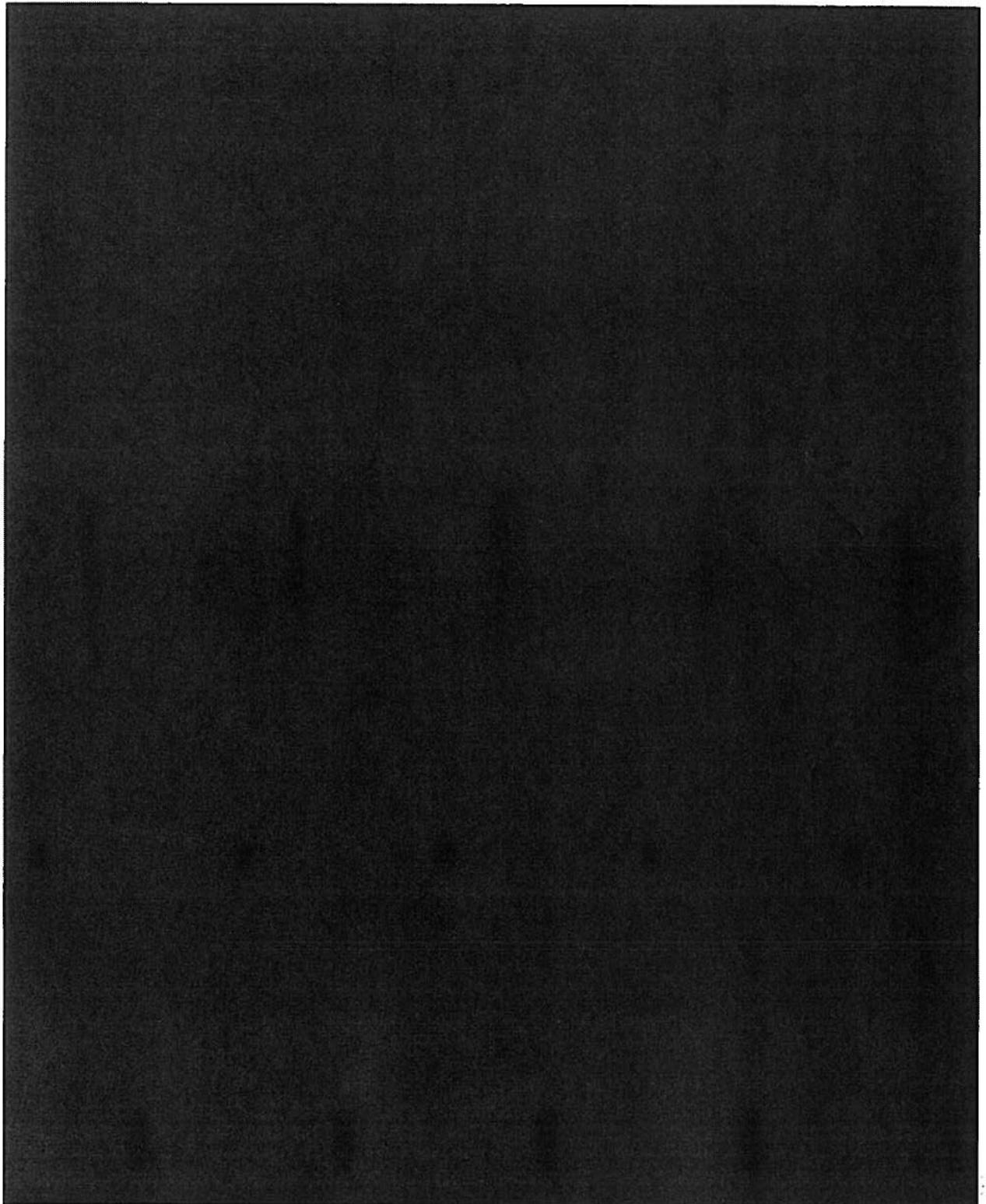
\*\* Based on an FFB spread of 37.5 bps per guidance received on August 21, 2009.











## **Solyndra FAB 2, LLC**

## **Summary**

---

- The project supports an innovative technology for use in PV solar panels and is well aligned with the policy objectives of the Title XVII program. The project sponsor has a plausible plan for commercialization that has been reviewed positively by a number of outside experts, including Fitch Ratings service.
- While the project faces a number of challenges ahead, contingency plans, including an equity-funded cost overrun facility, will provide some protection against construction period challenges. However, the inability to address such challenges could result in credit issues which may be material.

## Solyndra FAB 2, LLC

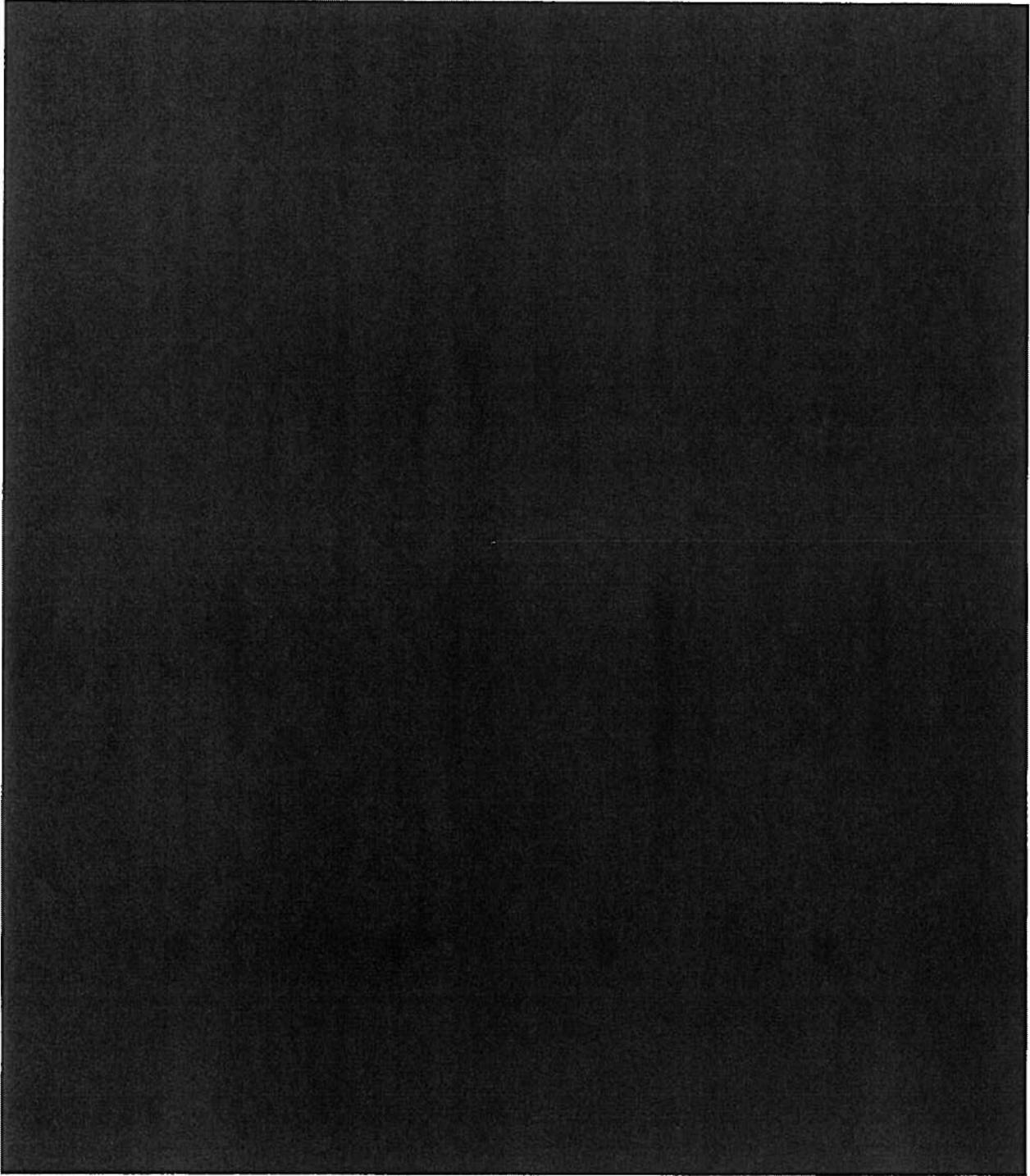
## Questions

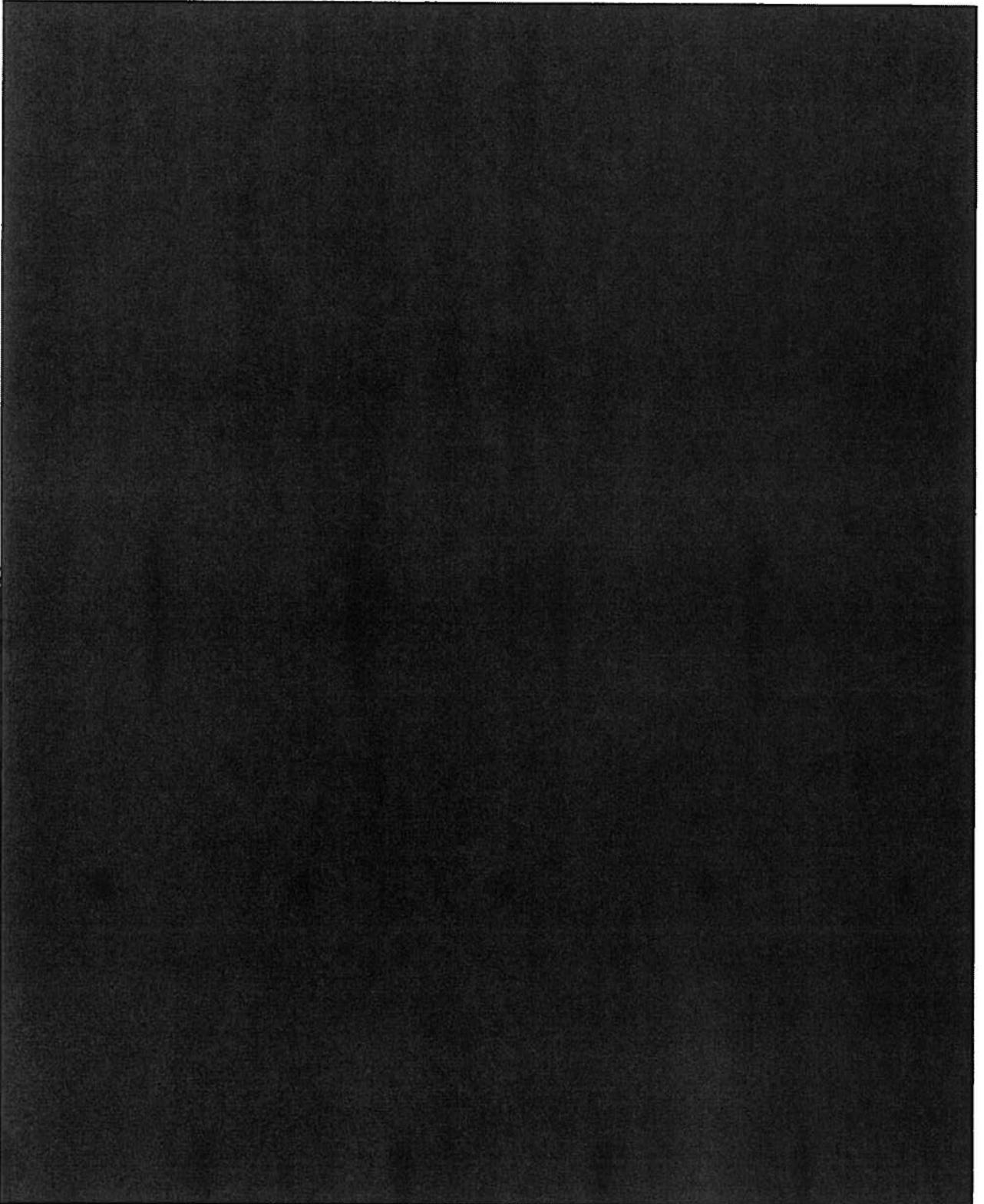
---

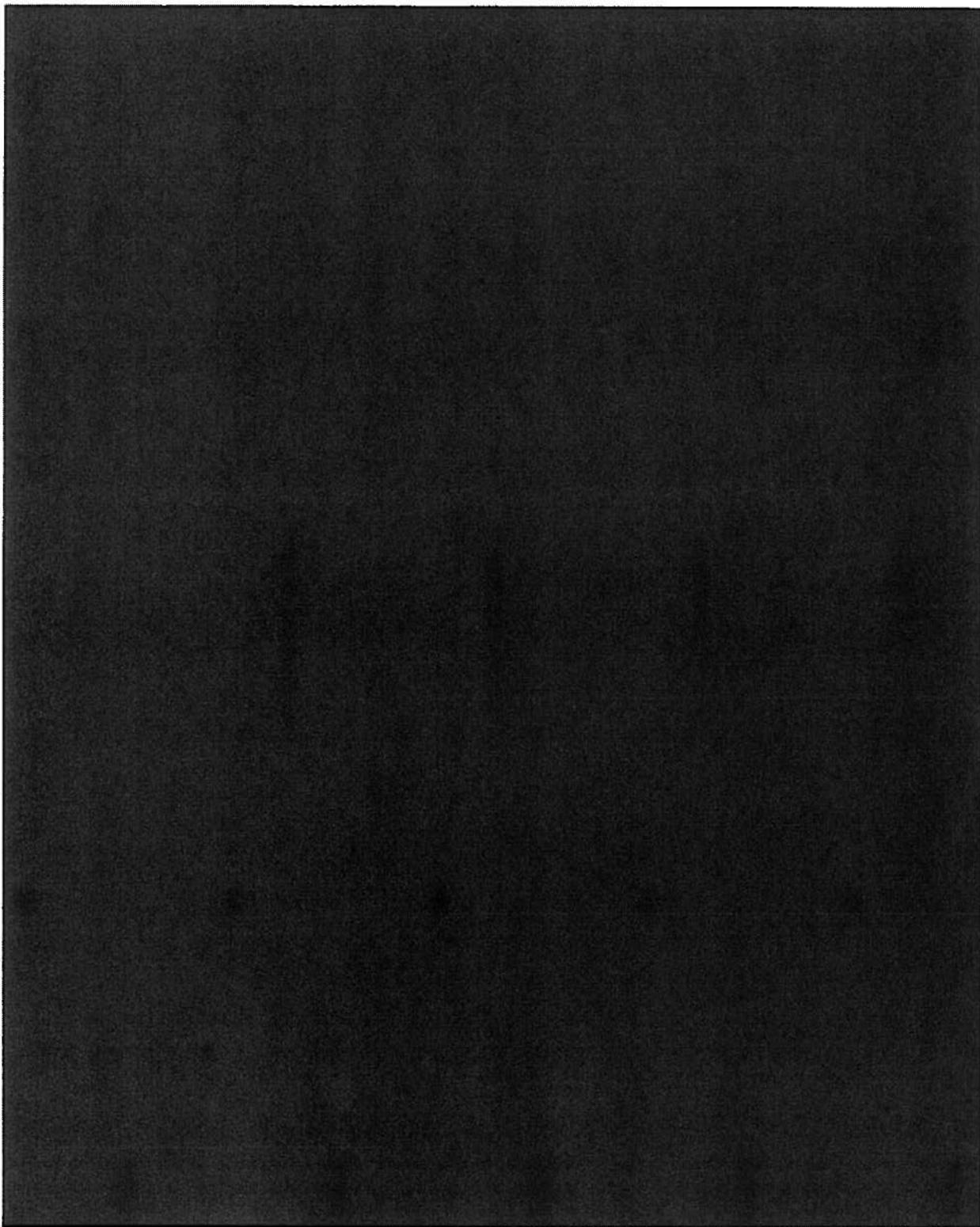
## **Solyndra FAB 2, LLC**

## **Appendix**

---







## **Footnote 255**

[REDACTED]

**From:** Colyar, Kelly [REDACTED]  
**Sent:** Tuesday, August 25, 2009 7:35 PM  
**To:** [REDACTED]  
**Subject:** Re: Follow Up on Solyndra

[REDACTED]

Lots of moving pieces the last few days. We went back and looked at the models again and noticed a couple of clean up items we need to make. I will resend to you--likely tomorrow. Mostly changes to DSCR from what's in the presentation--minor differences, but we should send the accurate models.

Thanks.

----- Original Message -----  
**From:** Colyar, Kelly  
**To:** [REDACTED]  
**Cc:** Frantz, David  
**Sent:** Tue Aug 25 16:11:30 2009  
**Subject:** Follow Up on Solyndra

[REDACTED] Carroll, Kevin [REDACTED]

[REDACTED]

Thanks for helping with the Solyndra briefing today. I believe we have a couple of immediate follow-up items:

1. Detail on the energy efficiency advantage for Solyndra vs, flat panel systems.
2. Breakout of capacity contracted through current sales agreements.

I believe OMB is looking into the 30 and 60 day requirements (threshold for deviating, process for deviating, etc.). We will continue to touch base on the 30 day issue as we get closer to closing. The 60 day issue may be more immediate as it affects the agreements we are finalizing with FFB (next conference call scheduled tomorrow).

Please let me know if you have any additional questions. We will follow up as quickly as possible.

Thanks.

---

**Footnote 256**

[REDACTED]  
From:  
Sent:  
To:  
Subject:

Colyar, Kelly [REDACTED]  
Thursday, August 27, 2009 10:31 AM  
[REDACTED]  
Solyndra Closing Date

[REDACTED]  
Could you confirm whether there are any issues regarding a closing on Sept. 3 for a Sept. 4 VP event on Solyndra? This implies we will need to wrap up our review/approval by Sept. 1 so we can get internal approval here for the loan/subsidy commitment and then execute the apportionment etc. I believe you were going to follow up with Kevin and [REDACTED]

Thanks.

CONFIDENTIAL

DO NOT COPY

## **Footnote 257**

[REDACTED]

---

**From:** Owens, Missy  
**Sent:** Friday, August 28, 2009 12:36 PM  
**To:** 'Elizabeth A. Oxhorn'; 'Aditya Kumar'; Spinner, Steve;  
**Cc:** Rogers, Matt; Brandon K. Hurlbut  
**Subject:** Re: Solyndra Update

1. They wanted to invite investors
2. MOCs will be notified on Monday that the Sec will be in state to make an announcement but not told what that announcement is. One issue outstanding and DOE is waiting to hear from leg affairs on.

----- Original Message -----

**From:** Oxhorn, Elizabeth A.  
**To:** Owens, Missy; Kumar, Aditya; Spinner, Steve;  
**Cc:** Rogers, Matt; Hurlbut, Brandon K.

**Sent:** Fri Aug 28 12:29:26 2009  
**Subject:** RE: Solyndra Update

Great - ironing out the press advising piece on our end.

Under the timeline below, when would:

1. Investors be invited to the event?
2. MOC/Electeds be notified of location of the event?

And coming in late to this one, but is there an actual Congressional notification process on the completion of the award that needs to take place? Or did that happen back in March?

Thanks

-----Original Message-----

**From:** [REDACTED]  
**Sent:** Friday, August 28, 2009 9:50 AM  
**To:** Oxhorn, Elizabeth A.; Owens, Missy; Kumar, Aditya; Spinner, Steve;  
**Cc:** Rogers, Matt; Hurlbut, Brandon K.;

**Subject:** RE: Solyndra Update

9:00 am PT timing should be fine for CA.

Defer to Steve on the OMB part.

Proposal for notifications is:

1. Yesterday the company was notified of the event date, but for planning purposes only and to ask their VIPs to hold time on their schedule (their investors already know the details because they have to sign paperwork as the deal goes forward). They will hold on broader invites until we notify electeds of details later next week.

2. On Monday DOE will call electeds to notify them that the Secretary will be in Northern California on Friday morning (no other info available then), then later in the week give more information.
3. On Thursday we will notify press.

Local press will of course be invited. Will defer to others about any national press coordination.

Questions?

-----Original Message-----

From: Oxhorn, Elizabeth A. [REDACTED]  
Sent: Thursday, August 27, 2009 4:39 PM  
To: Owens, Missy; Kumar, Aditya; Spinner, Steve; [REDACTED]  
Cc: Rogers, Matt; Hurlbut, Brandon K.; [REDACTED]  
Subject: RE: Solyndra Update

Hello folks -

Wrapping up some loose ends from our call today:

1. Timing - We've made some adjustments to our schedule and it now looks like the VP's window of availability is 12:00 PM ET - 12:45 PM ET. That would put us at a 9:00 AM PT event start with VP portion around 9:15 AM PT. Does that work on the CA end?
2. OMB Approval - Can someone provide a quick rundown of what final step this is that OMB would be clearing? We just want to make sure we can be as helpful as possible in ensuring this gets done for you on timeline. We were thinking all OMB clearance was to be finished this week (?) - but perhaps there is a final step we hadn't considered?
3. Browner/WH Attendee - Brandon, can you take a look at this part?
4. Notification Timeline - Team DOE will draft up a proposal for Congressional/elected, company/investor and press notification for discussion. Noting that I'm connecting [REDACTED] with Jonathan and [REDACTED] re: electeds.
5. VP Side/Satellite - VP will do this from the White House - TBD whether there is a press pool in there or we just make the feed available - but no audience. We'll go back to WHCA to let them know this is a go and connect with appropriate OVP and DOE folks to begin working through the cost and logistical details.

Anything I've missed?

Liz

From: Owens, Missy [REDACTED]  
Sent: Wednesday, August 26, 2009 8:01 PM  
To: Oxhorn, Elizabeth A.; Kumar, Aditya; Spinner, Steve; [REDACTED]  
Cc: Rogers, Matt; Hurlbut, Brandon K.; [REDACTED]  
Subject: Re: Solyndra Update

Sure. Including DOE press.

----- Original Message -----  
From: Oxhorn, Elizabeth A. [REDACTED]  
To: Kumar, Aditya [REDACTED]; Owens, Missy; Spinner, Steve; [REDACTED]  
Cc: Rogers, Matt; Hurlbut, Brandon K. [REDACTED]  
Sent: Wed Aug 26 18:49:36 2009  
Subject: RE: Solyndra Update

Alright, everyone - thanks for your patience as we nailed this down here.

It looks like this will definitely be a VPOTUS event after all - and it would need to be on the 4th in that case.

I hear [REDACTED] had a good visit out there and things look feasible from a logistical standpoint - but much more to discuss. Shall we hop on a call tomorrow to discuss further? How about 1:00 PM? If that works, will circulate number.

From: Kumar, Aditya  
Sent: Tuesday, August 25, 2009 11:54 AM  
To: Owens, Missy; Spinner, Steve; [REDACTED]  
Cc: Rogers, Matt; Oxhorn, Elizabeth A.  
Subject: RE: Solyndra Update

Sounds good. POTUS on the 8th was what we were going for, but that's looking unlikely. With POTUS unlikely, we wanted to give this to the VPOTUS, and 4th was looking best.

Glad to discuss tomorrow.

From: Owens, Missy [REDACTED]

Sent: Tuesday, August 25, 2009 11:51 AM  
To: Spinner, Steve; Kumar, Aditya; [REDACTED]  
Cc: Rogers, Matt; Oxhorn, Elizabeth A.  
Subject: RE: Solyndra Update

hey all - lets talk about this, as of last Friday the POTUS was set to satellite in and the event has been moved to the 8th.

Where did you see Solyndra was on the 4th? Worried about the dates you have Adi, want to make sure we're all on the same page. You, [REDACTED] and I should probably discuss when tomorrow's event is over.

---

From: Spinner, Steve  
Sent: Tuesday, August 25, 2009 11:48 AM  
To: 'Kumar, Aditya'; Owens, Missy  
Cc: Rogers, Matt; Oxhorn, Elizabeth A.  
Subject: RE: Solyndra Update

Adi, I am looping in Missy Owens. Thanks.

Steven J Spinner  
Small Business Loan Guarantee Program Advisor Recovery Act Team U.S.  
Department of Energy  
[REDACTED]

---

From: Kumar, Aditya [REDACTED]  
Sent: Tuesday, August 25, 2009 10:28 AM  
To: Spinner, Steve  
Cc: Rogers, Matt; Oxhorn, Elizabeth A.  
Subject: Solyndra Update

We are thinking (technical logistics allowing) that we would want the VP can satellite into the event on 9/4 (next Friday). It's the same day unemployment numbers come out, and we'd want to use this as an example where the Recovery Act is helping create new high tech jobs. Does that work for you guys? Were you guys going to send Sec. Chu or someone else to CA? We are discussing the possibility of sending someone from here (e.g. Carol) out there as well.

Let me know if 9/4 sounds ok. Let me know what DoE would be thinking of doing with the Secretary or otherwise. Don't need a formal event memo in a rush, but just want to start planning things if this sounds generally ok. Glad to do a quick call with whomever. Thanks,

Adi

**Footnote 258, 260**

[REDACTED]

---

**From:** Timberlake, Courtney B.  
**Sent:** Thursday, August 27, 2009 4:40 PM  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** RE: Final Solyndra Credit Subsidy Cost

As long as we make it crystal clear to DOE that this is only in the interest of time, and that there's no precedent set, then I'm okay with it. But we also need to make sure they don't jam us on later deals so there isn't time to negotiate those, too.

---

**From:** [REDACTED]  
**Sent:** Thursday, August 27, 2009 4:31 PM  
**To:** Timberlake, Courtney B.  
**Cc:** [REDACTED]  
**Subject:** RE: Final Solyndra Credit Subsidy Cost

We don't know. I would assume that usually one would assume liquidation. (And in fact the first credit assessment that Fitch did, coincidentally for Solyndra, stated that as a startup, Fitch would assume liquidation.) When we were working on the model DOE argued that if a project is project financed, then of course one assumes work out. We however, persisted in saying that that would be determined on a case-by-case basis as determined by project specifics. (We essentially kicked the can down the road, and then Fitch rode to our rescue by stating that as a startup Fitch assumes liquidation.)

**CONFIDENTIAL**

---

**From:** Timberlake, Courtney B.  
**Sent:** Thursday, August 27, 2009 4:20 PM  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** RE: Final Solyndra Credit Subsidy Cost

So we know what to say if asked, what are the arguments for assuming a workout vs. liquidation?

**DO NOT COPY**

---

**From:** [REDACTED]  
**Sent:** Thursday, August 27, 2009 3:10 PM  
**To:** Timberlake, Courtney B.  
**Cc:** [REDACTED]  
**Subject:** Final Solyndra Credit Subsidy Cost

I just wanted to check with you to make sure that you (in Sarah and Nora's absence) are ok with our proposal on Solyndra's credit subsidy cost. (I've been out for 2.5 weeks, and Uday has been covering this issue for me so will fill in with details.) The credit subsidy model that OMB approved last October for the Title XVII loan guarantee program assumed a workout scenario for recoveries. However, we made it clear to DOE that decisions as to whether work out or liquidation should be assumed in the model for specific cases, would be made on a case by case basis. Given the time pressure we are under to sign-off on Solyndra, we don't have time to change the model to assume liquidation.

DOE is proposing to use a recovery treatment that BRD and the Energy Branch have been pushing DOE to use on the auto loan program. Uday, can you fill Courtney in as to the exact nature of this methodology? Both Uday and I believe this is the best approach for this one case, given time constraints. Do you have any concerns?

## **Footnote 261**

From: Colyar, Kelly  
 Sent: Thursday, August 27, 2009 6:37 PM  
 To:  
 Cc:  
 Subject: Re: Solyndra Questions

Thanks. We are targeting all responses by mid day tomorrow. I will get back to you on these ASAP. Thanks.

From: Varadarajan, Uday  
 To: Colyar, Kelly  
 Cc:  
 Sent: Thu Aug 27 18:14:00 2009  
 Subject: Solyndra Questions

Hi Kelly,

The following are further follow-up questions from [redacted] and me. I expect that we may have further issues to discuss as you address these questions, particularly as we work through the liquidation recovery.

1. Recovery rate: We look forward to reviewing DOE's submission regarding the incorporation and application (on a tentative basis to Solyndra) of a liquidation recovery scenario to the Title XVII model, as discussed earlier this evening.
2. The risk rating for the project sponsor (Solyndra), 4 (second highest rating) seems high given that Solyndra is not supporting the debt service. Solyndra is responsible for ensuring the projects completed, but they are not a co-sponsor of the debt service and therefore do not ensure repayment. Their guarantee does offset project completion risk, but an "adequate" ranking of 3 seems more reasonable given they are not backing the debt service. Future sales are supporting the debt service and these panels are sold at a premium -- pricing pressure is the largest challenge. The parent company does nothing to offset that challenge and warrant a rating higher than adequate. (Note: this would bring DOE's internal rating from [redacted] to [redacted] or lower the internal credit rating [redacted])
3. Fitch argued that their most probable default path involves extreme competitive pressures leading to substantially lower market prices for competing silicon photovoltaic cells which would wipe out the advantage that Solyndra has in its niche market and lead to obsolescence. However, Fitch's recovery analysis may have been optimistic in its assessment of PV prices -- I've attached a clip from this morning's NYT article which references to projections of market prices for standard crystalline PV dipping well below Solyndra's assumed price point. Even with an advantage associated with geometry, this suggests that a lower price scenario than used by Fitch -- such as Scenario 3 in your presentation -- might be more appropriate for calculating recoveries.
4. Can DOE provide the results of an independent test which verifies Solyndra's claim regarding higher electricity generation per rooftop and lower balance of system costs? That is, have they provided results for any tests which compare the costs of two similar rooftops -- one with Solyndra and the other with conventional panels that demonstrate the greater generation and the lower costs?

Office of Management and Budget  
Executive Office of the President



CONFIDENTIAL

DO NOT COPY

## **Footnote 265**

[REDACTED]

---

**From:** Colyar, Kelly [REDACTED]  
**Sent:** Monday, August 31, 2009 10:04 PM  
**To:** Carroll, J. Kevin  
**Subject:** FW: Solyndra Questions  
**Attachments:** 2009-08-29 Solyndra Field Data vs Model Predictions.pdf; Fraunhofer Institut-Solyndra-Stuttgart Example.pdf; 12\_19\_09 200W Certificate.pdf; VDE Letter 11\_25\_08 (150-182 +-10%).pdf

one additional follow up to follow momentarily.

---

**From:** Colyar, Kelly  
**Sent:** Monday, August 31, 2009 12:30 PM  
**To:** [REDACTED]  
**Subject:** RE: Solyndra Questions

[REDACTED]

Please see the attached power point from Solyndra indicating their analysis of accuracy in predicting panel output. The file provides actual performance data from Solyndra systems installed worldwide.

As you are likely aware, the design of PV system installations is usually performed by trained personnel who use industry standard software, such as PV Syst, to model the optimum electricity performance for any given installation. These software systems normally take into consideration the geography, degree of tilt, amount and shading and shadowing, historical weather patterns, etc. to arrive at the optimal configuration. Since Solyndra's unique form factor cannot be modeled yet by these software systems due to its unique form fit, Solyndra relies on engineering firms to provide electricity yield certificates.

Solyndra has not commissioned a report for side-by-side analysis. Given the change in the industry, any such analysis would quickly become out-of-date. However, banks who finance PV installations have relied on engineering reports related to performance. A sample of those reports was previously provided and is also attached here.

Also attached are the UL and VDE certifications at 200w

Thanks.

---

**From:** [REDACTED]  
**Sent:** Friday, August 28, 2009 7:06 PM  
**To:** Colyar, Kelly  
**Subject:** RE: Solyndra Questions

Hi Kelly,

I've attached a powerpoint google found for me which includes some more details regarding Solyndra installations as well as some discussion of how they believe that they have validated their models using performance data from those installations.

However, I don't see actual data comparing optimized flat solar vs. Solyndra installations on similar rooftops that verify - not in theory, but in practice - the performance advantages advantage that Solyndra claims. It appears that they have the installations in place, and they have alluded to such tests in some of the documents that you've provided, but I can't see real-world results regarding such tests. Thanks!

[Redacted]

[Redacted]

Energy Branch  
Office of Management and Budget  
Executive Office of the President

[Redacted]

From: Colyar, Kelly [Redacted]  
Sent: Friday, August 28, 2009 4:42 PM  
To: [Redacted]  
Subject: RE: Solyndra Questions

I recognize it's late afternoon on Friday, but could you give me a sense of the timing we're working towards here? Just want to make sure we're ready to respond and execute given the timeline we've been given for the broader closing/event. Are we going to be in a position to wrap this up by Monday or Tuesday? Call me if you prefer. [Redacted] Thanks.

CONFIDENTIAL

From: Colyar, Kelly  
Sent: Friday, August 28, 2009 3:50 PM  
To: [Redacted]  
Cc: [Redacted]  
Carroll, Kevin; [Redacted]  
Subject: RE: Solyndra Questions

[Redacted]

Attached is a table illustrating the revised capacity sold to incorporate the contracts entered into since March. I believe that is the final deliverable from DOE.

Please let me know if you have any further questions.

Thanks.

CONFIDENTIAL

From: Colyar, Kelly  
Sent: Friday, August 28, 2009 2:36 PM  
To: [Redacted]  
Cc: [Redacted]  
Kevin; [Redacted]  
Subject: RE: Solyndra Questions

Carroll,

[Redacted]

Please see below the response to item 4. Revised contracted sales numbers to follow shortly.

Please let me know if you have any further questions.

Thanks.

From: [REDACTED]  
Sent: Thursday, August 27, 2009 6:14 PM  
To: Colyar, Kelly  
Cc: [REDACTED]  
Kevin  
Subject: Solyndra Questions

[REDACTED] Carroll,

Hi Kelly,

The following are further follow-up questions from Nora and me. I expect that we may have further issues to discuss as you address these questions, particularly as we work through the liquidation recovery.

1. Recovery rate: We look forward to reviewing DOE's submission regarding the incorporation and application (on a tentative basis to Solyndra) of a liquidation recovery scenario to the Title XVII model, as discussed earlier this evening.
2. The risk rating for the project sponsor (Solyndra), 4 (second highest rating) seems high given that Solyndra is not supporting the debt service. Solyndra is responsible for ensuring the project is completed, but they are not a sponsor of the debt service and therefore do not ensure repayment. Their guarantee does offset project completion risk, but an "adequate" ranking of 3 seems more reasonable given they are not backing the debt service. Future sales are supporting the debt service and these panels are sold at a premium— pricing pressure is the largest challenge. The parent company does nothing to offset that challenge and warrant a rating higher than adequate. (Note: this would bring DOE's internal rating from [REDACTED] to [REDACTED] or lower the internal credit rating [REDACTED].)
3. Fitch argued that their most probable default path involves extreme competitive pressures leading to substantially lower market prices for monocrystalline silicon photovoltaic cells which would wipe out the advantage that Solyndra has in its niche market and lead to obsolescence. However, Fitch's recovery analysis may have been optimistic in its assessment of PV prices – I've attached a clip from this morning's NYT article which references to projections of market prices for standard crystalline PV dipping well below Solyndra's assumed price point. Even with an advantage associated with geometry, this suggests that a lower price scenario than used by Fitch – such as Scenario 3 in your presentation – might be more appropriate for calculating recoveries.
4. Can DOE provide the results of an independent test which verifies Solyndra's claim regarding higher electricity generation per rooftop and lower balance of system cost? That is, have they provided results for any tests which compare the costs of two similar rooftops – one with Solyndra and the other with conventional panels that demonstrate the greater generation and the lower cost?

It is important to note that Solyndra provides a niche market product. It is not competing in the utility-scale land installation market. Therefore, the dollar per watt example is not a direct comparison. That said, DOE acknowledges that market risk is the primary risk with this particular deal and has incorporated that into its analysis.

The advantages for each roof top will depend on the specifications of each application. However, the fact that Solyndra has contracts for a significant amount of its production through 2013 indicates that customers are convinced of the advantage in those configurations. As a business decision, you would assume they have analyzed the options and determined there is an advantage. However, below are some relevant components that contribute to the advantages:

The independent market advisor (RW Beck) has stated that the CIGS material itself results in an approximate 20%-50% cell efficiency gain over other thin film technologies (Table 8). Table 19 of that report also illustrates the BOS cost advantage of the Solyndra technology. While it is true that the

[REDACTED]

assumptions originally came from Solyndra, the Independent Market Consultant "independently tested their veracity."

Solyndra has had independent third party engineering concerns validate the electricity yield of our panels. These firms now provide energy yield certifications to banking institutions that need independent verification that the PV systems will actually generate the amount of electricity that is modeled for the installation. A copy of a report from Fraunhofer is attached.

The Solyndra panel power ratings are verified by Underwriters Laboratories/CSA for sales in North America, and by VDE for sales in Europe. Solyndra is now certified up to 200 watt panels.

The attached excerpt from Solyndra's application further details the specific advantages of this product from their perspective.

[REDACTED]

[REDACTED]

Energy Branch  
Office of Management and Budget  
Executive Office of the President

[REDACTED]

CONFIDENTIAL

DO NOT COPY

## **Footnote 266**

[Redacted]

**From:** [Redacted]  
**Sent:** Tuesday, September 01, 2009 11:02 AM  
**To:** Carroll, J. Kevin; [Redacted]  
**Cc:** [Redacted]  
**Subject:** RE: Solyndra Questions

Hi Kevin,

They did submit some information that does provide some confidence that their modeling has been validated through real-life tests. However, according to DOE, Solyndra has not commissioned a test which I think is really the gold standard - comparison of the performance of Solyndra vs. regular panel installations at scale on similar roofs. This really should be possible, and I find it disturbing that only modeling results for such a comparison are available.

That being said, DOE's internal credit rating already assigns Solyndra a [Redacted] for both Technology and Market and Off-take, which are already quite low, and reflect this uncertainty to a good degree. We could ask DOE to reduce one of these further to reflect this lack of validation. If we do that, this would bring Solyndra down from a [Redacted] to a [Redacted] I would suggest this, but not push back too hard if DOE feels that it has already taken this into account in its ratings - however, we will want to note our lack of comfort with the technical data presented to validate Solyndra's claims.

[Redacted]

**From:** Carroll, J. Kevin  
**Sent:** Tuesday, September 01, 2009 9:29 AM  
**To:** [Redacted]  
**Subject:** RE: Solyndra Questions

Please check in with me before responding. Thanks

**From:** [Redacted]  
**Sent:** Monday, August 31, 2009 10:07 PM  
**To:** Kelly, Colyar; [Redacted]; Carroll, J. Kevin  
**Subject:** Re: Solyndra Questions

Sorry for the delay! I will look at this early in the AM and respond - could not view them on Monday.

[Redacted]

**From:** Colyar, Kelly  
**To:** [Redacted]  
**Sent:** Mon Aug 31 12:29:51 2009  
**Subject:** RE: Solyndra Questions

[Redacted]

Please see the attached power point from Solyndra indicating their analysis of accuracy in predicting panel output. The file provides actual performance data from Solyndra systems installed worldwide.

As you are likely aware, the design of PV system installations is usually performed by trained personnel who use industry standard software, such as PVSyst, to model the optimum electricity performance for

any given installation. These software systems normally take into consideration the geography, degree of tilt, amount and shading and shadowing, historical weather patterns, etc. to arrive at the optimal configuration. Since Solyndra's unique form factor cannot be modeled yet by these software systems due to its unique form fit, Solyndra relies on engineering firms to provide electricity yield certificates.

Solyndra has not commissioned a report for side-by-side analysis. Given the change in the industry, any such analysis would quickly become out-of-date. However, banks who finance PV installations have relied on engineering reports related to performance. A sample of those reports was previously provided and is also attached here.

Also attached are the UL and VDE certifications at 200w.

Thanks.

---

**From:** Varadarajan, Uday [REDACTED]  
**Sent:** Friday, August 28, 2009 7:06 PM  
**To:** Colyar, Kelly  
**Subject:** RE: Solyndra Questions

Hi Kelly,

I've attached a powerpoint google found for me which includes some more details regarding Solyndra installations as well as some discussion of how they believe that they have validated their models using performance data from those installations.

However, I don't see actual data comparing optimized flat solar vs. Solyndra installations on similar rooftops that verify - not in theory, but in practice - the performance advantages advantage that Solyndra claims. It appears that they have the installations in place, and they have alluded to such tests in some of the documents that you've provided, but I can't see real world results regarding such tests. Thanks!

[REDACTED]  
[REDACTED]  
Energy Branch  
Office of Management and Budget  
Executive Office of the President  
[REDACTED]

---

**From:** Colyar, Kelly [REDACTED]  
**Sent:** Friday, August 28, 2009 4:42 PM  
**To:** [REDACTED]  
**Subject:** RE: Solyndra Questions

I recognize it's late afternoon on Friday, but could you give me a sense of the timing we're working towards here? Just want to make sure we're ready to respond and execute given the timeline we've been given for the broader closing/event. Are we going to be in a position to wrap this up by Monday or Tuesday? Call me if you prefer.

[REDACTED] Thanks.

---

**From:** Colyar, Kelly  
**Sent:** Friday, August 28, 2009 3:50 PM

To: [redacted]  
Cc: [redacted]; Falkenheim, Michael C.; [redacted]; Carroll, Kevin; [redacted]  
Subject: RE: Solyndra Questions  
[redacted]

Attached is a table illustrating the revised capacity sold to incorporate the contracts entered into since March. I believe that is the final deliverable from DOE.

Please let me know if you have any further questions.

Thanks.

---

From: Colyar, Kelly  
Sent: Friday, August 28, 2009 2:36 PM  
To: [redacted]  
Cc: [redacted]; Falkenheim, Michael C.; [redacted]; Carroll, Kevin; [redacted]  
Subject: RE: Solyndra Questions  
[redacted]

Please see below the response to item 4. Revised contracted sales numbers to follow shortly.

Please let me know if you have any further questions.

Thanks.

---

From: [redacted]  
Sent: Thursday, August 27, 2009 6:14 PM  
To: Colyar, Kelly  
Cc: [redacted]; Falkenheim, Michael C.; [redacted]; Carroll, Kevin  
Subject: Solyndra Questions

Hi Kelly,

The following are further follow-up questions from [redacted] and me. I expect that we may have further issues to discuss as you address these questions, particularly as we work through the liquidation recovery.

1. Recovery rate: We look forward to reviewing DOE's submission regarding the incorporation and application (on a tentative basis to Solyndra) of a liquidation recovery scenario to the Title XVII model, as discussed earlier this evening.
2. The risk rating for the project sponsor (Solyndra), [redacted] seems high given that Solyndra is not supporting the debt service. Solyndra is responsible for ensuring the project is completed, but they are not a co-sponsor of the debt service and therefore do not ensure repayment. Their guarantee does offset project completion risk, but an "adequate" ranking of [redacted] seems more reasonable given they are not backing the debt service. Future sales are supporting the debt service and these panels are sold at a premium-- pricing pressure is the largest challenge. The parent company does nothing to offset that challenge and warrant a rating higher than adequate. (Note: this would bring DOE's internal rating from [redacted] to [redacted] or lower the internal credit rating from [redacted] to [redacted])

3. Fitch argued that their most probable default path involves extreme competitive pressures leading to substantially lower market prices for competing silicon photovoltaic cells which would wipe out the advantage that Solyndra has in its niche market and lead to obsolescence. However, Fitch's recovery analysis may have been optimistic in its assessment of PV prices – I've attached a clip from this morning's NYT article which references to projections of market prices for standard crystalline PV dipping well below Solyndra's assumed price point. Even with an advantage associated with geometry, this suggests that a lower price scenario than used by Fitch – such as Scenario 3 in your presentation – might be more appropriate for calculating recoveries.
4. Can DOE provide the results of an independent test which verifies Solyndra's claim regarding higher electricity generation per rooftop and lower balance of system costs? That is, have they provided results for any tests which compare the costs of two similar rooftops – one with Solyndra and the other with conventional panels that demonstrate the greater generation and the lower costs?

It is important to note that Solyndra provides a niche market product. It is not competing in the utility-scale land installation market. Therefore, the dollar per watt example is not a direct comparison. That said, DOE acknowledges that market risk is the primary risk with this particular deal and has incorporated that into its analysis.

**CONFIDENTIAL**  
The advantages for each rooftop will depend on the specifications of each application. However, the fact that Solyndra has contracts for a significant amount of its production through 2013 indicates that customers are convinced of the advantage in those configurations. As a business decision, you would assume they have analyzed the options and determined there is an advantage. However, below are some relevant components that contribute to the advantages:

The independent market advisor (RW Beck) has stated that the CIGS material itself results in an approximate 20%-50% cell efficiency gain over other thin film technologies (Table 8). Table 19 of that report also illustrates the BOS cost advantage of the Solyndra technology. While it is true that the assumptions originally came from Solyndra, the Independent Market Consultant 'independently tested their veracity.'

**DO NOT COPY**  
Solyndra has had independent third party engineering concerns validate the electricity yield of our panels. These firms now provide energy yield certifications to banking institutions that need independent verification that the PV systems will actually generate the amount of electricity that is modeled for the installation. A copy of a report from Fraunhofer is attached.

The Solyndra panel power ratings are verified by Underwriters Laboratories/CSA for sales in North America, and by VDE for sales in Europe. Solyndra is now certified up to 200 watt panels.

The attached excerpt from Solyndra's application further details the specific advantages of this product from their perspective.

██████████  
██  
Energy Branch  
Office of Management and Budget  
Executive Office of the President  
██



CONFIDENTIAL

DO NOT COPY

## **Footnote 267**

[Redacted]

**From:** [Redacted]  
**Sent:** Tuesday, September 01, 2009 11:02 AM  
**To:** Carroll, J. Kevin; [Redacted]  
**Cc:** [Redacted]  
**Subject:** RE: Solyndra Questions

Hi Kevin,

They did submit some information that does provide some confidence that their modeling has been validated through real-life tests. However, according to DOE, Solyndra has not commissioned a test which I think is really the gold standard - comparison of the performance of Solyndra vs. regular panel installations at scale on similar roofs. This really should be possible, and I find it disturbing that only modeling results for such a comparison are available.

That being said, DOE's internal credit rating already assigns Solyndra a [Redacted] for both Technology and Market and Off-take, which are already quite low, and reflect this uncertainty to a good degree. We could ask DOE to reduce one of these further to reflect this lack of validation. If we do that, this would bring Solyndra down from a [Redacted] to a [Redacted]. I would suggest this, but not push back too hard if DOE feels that it has already taken this into account in its ratings - however, we will want to note our lack of comfort with the technical data presented to validate Solyndra's claims.

[Redacted]

---

**From:** Carroll, J. Kevin  
**Sent:** Tuesday, September 01, 2009 9:29 AM  
**To:** [Redacted]  
**Subject:** RE: Solyndra Questions

Please check in with me before responding. Thanks

---

**From:** [Redacted]  
**Sent:** Monday, August 31, 2009 10:07 PM  
**To:** 'Kelly.Colyar'; [Redacted]; Carroll, J. Kevin  
**Subject:** Re: Solyndra Questions

Sorry for the delay! I will look at this early in the AM and respond - could not view them on Monday.

[Redacted]

---

**From:** Colyar, Kelly  
**To:** [Redacted]  
**Sent:** Mon Aug 31 12:29:51 2009  
**Subject:** RE: Solyndra Questions

[Redacted]

Please see the attached power point from Solyndra indicating their analysis of accuracy in predicting panel output. The file provides actual performance data from Solyndra systems installed worldwide.

As you are likely aware, the design of PV system installations is usually performed by trained personnel who use industry standard software, such as PVSyst, to model the optimum electricity performance for

any given installation. These software systems normally take into consideration the geography, degree of tilt, amount and shading and shadowing, historical weather patterns, etc. to arrive at the optimal configuration. Since Solyndra's unique form factor cannot be modeled yet by these software systems due to its unique form fit, Solyndra relies on engineering firms to provide electricity yield certificates.

Solyndra has not commissioned a report for side-by-side analysis. Given the change in the industry, any such analysis would quickly become out-of-date. However, banks who finance PV installations have relied on engineering reports related to performance. A sample of those reports was previously provided and is also attached here.

Also attached are the UL and VDE certifications at 200w.

Thanks.

---

**From:** [REDACTED]  
**Sent:** Friday, August 28, 2009 7:06 PM  
**To:** Colyar, Kelly  
**Subject:** RE: Solyndra Questions

Hi Kelly,

I've attached a powerpoint google found for me which includes some more details regarding Solyndra installations as well as some discussion of how they believe that they have validated their models using performance data from those installations.

However, I don't see actual data comparing optimized flat solar vs. Solyndra installations on similar rooftops that verify - not in theory, but in practice - the performance advantages advantage that Solyndra claims. It appears that they have the installations in place, and they have alluded to such tests in some of the documents that you've provided, but I can't see real world results regarding such tests. Thanks!

[REDACTED]  
[REDACTED]  
Energy Branch  
Office of Management and Budget  
Executive Office of the President  
[REDACTED]

---

**From:** Colyar, [REDACTED]  
**Sent:** Friday, August 28, 2009 4:42 PM  
**To:** [REDACTED]  
**Subject:** RE: Solyndra Questions

I recognize it's late afternoon on Friday, but could you give me a sense of the timing we're working towards here? Just want to make sure we're ready to respond and execute given the timeline we've been given for the broader closing/event. Are we going to be in a position to wrap this up by Monday or Tuesday? Call me if you prefer.  
[REDACTED] Thanks.

---

**From:** Colyar, Kelly  
**Sent:** Friday, August 28, 2009 3:50 PM

To: [REDACTED]  
Cc: [REDACTED]  
Carroll, Kevin; [REDACTED]  
Subject: RE: Solyndra Questions

[REDACTED]

Attached is a table illustrating the revised capacity sold to incorporate the contracts entered into since March. I believe that is the final deliverable from DOE.

Please let me know if you have any further questions.

Thanks.

---

From: Colyar, Kelly  
Sent: Friday, August 28, 2009 2:36 PM  
To: [REDACTED]  
Cc: [REDACTED]  
Carroll, Kevin; [REDACTED]  
Subject: RE: Solyndra Questions

[REDACTED]

Please see below the response to item 4. Revised contracted sales numbers to follow shortly.

Please let me know if you have any further questions.

Thanks.

---

From: [REDACTED]  
Sent: Thursday, August 27, 2009 6:14 PM  
To: Colyar, Kelly  
Cc: [REDACTED]  
Carroll, Kevin  
Subject: Solyndra Questions

Hi Kelly,

The following are further follow-up questions from [REDACTED] and me. I expect that we may have further issues to discuss as you address these questions, particularly as we work through the liquidation recovery.

1. Recovery rate: We look forward to reviewing DOE's submission regarding the Incorporation and application (on a tentative basis to Solyndra) of a liquidation recovery scenario to the Title XVII model, as discussed earlier this evening.
2. The risk rating for the project sponsor (Solyndra), [REDACTED] seems high given that Solyndra is not supporting the debt service. Solyndra is responsible for ensuring the project is completed, but they are not a co-sponsor of the debt service and therefore do not ensure repayment. Their guarantee does offset project completion risk, but an "adequate" ranking of [REDACTED] seems more reasonable given they are not backing the debt service. Future sales are supporting the debt service and these panels are sold at a premium-- pricing pressure is the largest challenge. The parent company does nothing to offset that challenge and warrant a rating higher than adequate. (Note: this would bring DOE's internal rating from [REDACTED] to [REDACTED] or lower the internal credit rating from [REDACTED] to [REDACTED])

3. Fitch argued that their most probable default path involves extreme competitive pressures leading to substantially lower market prices for competing silicon photovoltaic cells which would wipe out the advantage that Solyndra has in its niche market and lead to obsolescence. However, Fitch's recovery analysis may have been optimistic in its assessment of PV prices – I've attached a clip from this morning's NYT article which references to projections of market prices for standard crystalline PV dipping well below Solyndra's assumed price point. Even with an advantage associated with geometry, this suggests that a lower price scenario than used by Fitch – such as Scenario 3 in your presentation – might be more appropriate for calculating recoveries.
4. Can DOE provide the results of an independent test which verifies Solyndra's claim regarding higher electricity generation per rooftop and lower balance of system costs? That is, have they provided results for any tests which compare the costs of two similar rooftops – one with Solyndra and the other with conventional panels that demonstrate the greater generation and the lower costs?

It is important to note that Solyndra provides a niche market product. It is not competing in the utility-scale land installation market. Therefore, the dollar per watt example is not a direct comparison. That said, DOE acknowledges that market risk is the primary risk with this particular deal and has incorporated that into its analysis.

**CONFIDENTIAL**  
The advantages for each rooftop will depend on the specifications of each application. However, the fact that Solyndra has contracts for a significant amount of its production through 2013 indicates that customers are convinced of the advantage in those configurations. As a business decision, you would assume they have analyzed the options and determined there is an advantage. However, below are some relevant components that contribute to the advantages:

The independent market advisor (RW Beck) has stated that the CIGS material itself results in an approximate 20%-50% cell efficiency gain over other thin film technologies (Table 8). Table 19 of that report also illustrates the BOS cost advantage of the Solyndra technology. While it is true that the assumptions originally came from Solyndra, the Independent Market Consultant 'independently tested their veracity.'

**DO NOT COPY**  
Solyndra has had independent third party engineering concerns validate the electricity yield of our panels. These firms now provide energy yield certifications to banking institutions that need independent verification that the PV systems will actually generate the amount of electricity that is modeled for the installation. A copy of a report from Fraunhofer is attached.

The Solyndra panel power ratings are verified by Underwriters Laboratories/CSA for sales in North America, and by VDE for sales in Europe. Solyndra is now certified up to 200 watt panels.

The attached excerpt from Solyndra's application further details the specific advantages of this product from their perspective.

██████████  
██████████  
Energy Branch  
Office of Management and Budget  
Executive Office of the President  
██████████



CONFIDENTIAL

DO NOT COPY

## **Footnote 268**

[REDACTED]

---

**From:** Kumar, Aditya [REDACTED]  
**Sent:** Friday, August 28, 2009 12:45 PM  
**To:** Spinner, Steve  
**Cc:** O'horn, Elizabeth A.  
**Subject:** RE: Solyndra Update

If you are having any issues with OMB, let me know and I will help fix.  
Standing down unless I hear otherwise.

-----Original Message-----

**From:** Spinner, Steve [REDACTED]  
**Sent:** Friday, August 28, 2009 10:08 AM  
**To:** [REDACTED] O'horn, Elizabeth A.; Owens, Missy; Kumar, Aditya; [REDACTED]  
**Cc:** Rogers, Matt; Hurlbut, Brandon K.; [REDACTED]  
**Subject:** RE: Solyndra Update

On the OMB side, from our Credit Policy Director

"We still have one outstanding question from our initial meeting Tuesday (DOE has not responded--I need more information from [REDACTED] and Solyndra). We have also not received the final set of questions/issues from OMB to which DOE will need to respond. After OMB review, and any changes are made to the credit subsidy cash flows, OMB would essentially pre-approve that calculation (formal approval comes in the form of the apportionment which occurs after S2 or S1 approve commitment of the loan amount and subsidy rate)."

OMB is fully aware of the Friday timeline. The DOE team is hoping to receive the final OMB questions/issues today so that they can be quickly reviewed/responded in full so that we can complete the outstanding process requirements.

Steve

-----Original Message-----

**From:** [REDACTED]  
**Sent:** Friday, August 28, 2009 9:50 AM  
**To:** 'O'horn, Elizabeth A.'; Owens, Missy; Kumar, Aditya; Spinner, Steve; [REDACTED]  
**Cc:** Rogers, Matt; Hurlbut, Brandon K.; [REDACTED]  
**Subject:** RE: Solyndra Update

9:00 am PT timing should be fine for CA.

Defer to Steve on the OMB part.

Proposal for notifications is:

1. Yesterday the company was notified of the event date, but for planning purposes only and to ask their VIPs to hold time on their schedule (their investors already know the details because they have to sign paperwork as the deal goes forward). They will hold on broader invites until we notify electeds of details later next week.
2. On Monday DOE will call electeds to notify them that the Secretary will be in Northern California on Friday morning (no other info available then), then later in the week give more information.
3. On Thursday we will notify press.

Local press will of course be invited. Will defer to others about any national press coordination.

Questions?

-----Original Message-----

From: Oxhorn, Elizabeth A. [REDACTED]  
Sent: Thursday, August 27, 2009 4:39 PM  
To: Owens, Missy; Kumar, Aditya; Spinner, Steve; [REDACTED]  
Cc: Rogers, Matt; Hurlbut, Brandon K.; [REDACTED]

Subject: RE: Solyndra Update

Hello folks -

Wrapping up some loose ends from our call today:

1. Timing - We've made some adjustments to our schedule and it now looks like the VP's window of availability is 12:00 PM ET - 12:45 PM ET. That would put us at a 9:00 AM PT event start with VP portion around 9:15 AM PT. Does that work on the CA end?
2. OMB Approval - Can someone provide a quick rundown of what final step this is that OMB would be clearing? We just want to make sure we can be as helpful as possible in ensuring this gets done for you on timeline. We were thinking all OMB clearance was to be finished this week (?) - but perhaps there is a final step we hadn't considered?
3. Browner/WH Attendee - Brandon, can you take a look at this part?
4. Notification Timeline - Team DOE will draft up a proposal for Congressional/elected, company/investor and press notification for discussion. Noting that I'm connecting [REDACTED] with [REDACTED] re: electeds.
5. VP Side/Satellite - VP will do this from the White House - TBD whether there is a press pool in there or we just make the feed available - but no audience. We'll go back to WHCA to let them know this is a go and connect with appropriate OVP and DOE folks to begin working through the cost and logistical details.

Anything I've missed?

Liz

From: Owens, Missy [REDACTED]  
Sent: Wednesday, August 26, 2009 8:01 PM  
To: Oxhorn, Elizabeth A.; Kumar, Aditya; Spinner, Steve; [REDACTED]  
Cc: Rogers, Matt; Hurlbut, Brandon K.; [REDACTED]  
Subject: Re: Solyndra Update

Sure. Including DOE press.

----- Original Message -----

From: Oxhorn, Elizabeth A. [REDACTED]  
To: Kumar, Aditya [REDACTED]; Owens, Missy; Spinner, Steve; [REDACTED]  
Cc: Rogers, Matt; Hurlbut, Brandon K. [REDACTED]  
Sent: Wed Aug 26 18:49:36 2009  
Subject: RE: Solyndra Update

Alright, everyone - thanks for your patience as we nailed this down here.

It looks like this will definitely be a VPOTUS event after all - and it would need to be on the 4th in that case.

I hear [REDACTED] had a good visit out there and things look feasible from a logistical standpoint - but much more to discuss. Shall we hop on a call tomorrow to discuss further? How about 1:00 PM? If that works, will circulate number.

---

From: Kumar, Aditya  
Sent: Tuesday, August 25, 2009 11:54 AM  
To: Owens, Missy; Spinner, Steve; [REDACTED]  
Cc: Rogers, Matt; Oxhorn, Elizabeth A.  
Subject: RE: Solyndra Update

Sounds good. POTUS on the 8th was what we were going for, but that's looking unlikely. With POTUS unlikely, we wanted to give this to the VPOTUS, and 4th was looking best.

Glad to discuss tomorrow.

From: Owens, Missy [REDACTED]  
Sent: Tuesday, August 25, 2009 11:51 AM  
To: Spinner, Steve; Kumar, Aditya; [REDACTED]  
Cc: Rogers, Matt; Oxhorn, Elizabeth A.  
Subject: RE: Solyndra Update

hey all - lets talk about this, as of last Friday the POTUS was set to satellite in and the event has been moved to the 8th.

Where did you see Solyndra was on the 4th? Worried about the dates you have Adi, want to make sure we're all on the same page. You, [REDACTED] and I should probably discuss when tomorrow's event is over.

---

From: Spinner, Steve  
Sent: Tuesday, August 25, 2009 11:48 AM  
To: 'Kumar, Aditya'; Owens, Missy  
Cc: Rogers, Matt; Oxhorn, Elizabeth A.  
Subject: RE: Solyndra Update

Adi, I am looping in Missy Owens. Thanks.

Steven J Spinner  
Small Business Loan Guarantee Program Advisor Recovery Act Team U.S.  
Department of Energy  
[REDACTED]

---

From: Kumar, Aditya [REDACTED]  
Sent: Tuesday, August 25, 2009 10:28 AM  
To: Spinner, Steve  
Cc: Rogers, Matt; Oxhorn, Elizabeth A.  
Subject: Solyndra Update

We are thinking (technical logistics allowing) that we would want the VP can satellite into the event on 9/4 (next Friday). It's the same day unemployment numbers come out, and we'd want to use this as an example where the Recovery Act is helping create new high tech jobs. Does that work for you guys? Were you guys going to send Sec. Chu or someone else to CA? We are discussing the possibility of sending someone from here (e.g. Carol) out there as well.

Let me know if 9/4 sounds ok. Let me know what DoE would be thinking of doing with the Secretary or otherwise. Don't need a formal event memo in a rush, but just want to start planning things if this sounds generally ok. Glad to do a quick call with whomever. Thanks,

## **Footnote 269**

[REDACTED]

---

**From:** Colyar, Kelly  
**Sent:** Friday, August 28, 2009 12:53 PM  
**To:** Spinner, Steve  
**Subject:** RE: Solyndra Action Memo

we got their questions last night. we've followed up on most, but the ball is still in our court. bill has sent me some things, but it's not exactly what i need. i've requested more...

---

**From:** Spinner, Steve  
**Sent:** Friday, August 28, 2009 12:51 PM  
**To:** Colyar, Kelly  
**Subject:** Fw: Solyndra Action Memo

Any word from OMB? I have the OVP and WH breathing down my neck on this...just want to make sure we get their questions. They are getting itchy to get involved if needed. I don't want that...

Steve

---

**From:** Spinner, Steve  
**To:** [REDACTED]; Rogers, Matt; Isakowitz, Steve  
**Cc:** Frantz, David  
**Sent:** Fri Aug 28 12:48:44 2009  
**Subject:** Re: Solyndra Action Memo

[REDACTED] I have had numerous daily conversations with the co-Founder [REDACTED] who's taking point on the event. As of yesterday, [REDACTED] definitively confirmed with me that Solyndra DOES have access to the land (and will begin leveling on Saturday) although it will not own it until the closing (they got cleared to start doing this by the inv. company). The 3 day delay in FFB funding will not affect this as the title transfer is tied to the closing of the loan agreement and thereby releasing of the equity funding currently escrow.

Again, let me be clear, Solyndra has access to the land and is already fully preparing it for next Friday's event.

Steve

---

**From:** [REDACTED]  
**To:** Rogers, Matt; Isakowitz, Steve; Spinner, Steve  
**Cc:** Frantz, David  
**Sent:** Fri Aug 28 12:40:23 2009  
**Subject:** FW: Solyndra Action Memo

Matt, Steve, Steve --

See message below, about the possible issue re available of the site for the new Fab2 facility. In short, there is an issue as to whether the project will have taken title to the site if there has yet to be a funds transfer by then (and this is the likely scenario as of now).

For planning purposes (or as a backup plan), I suggest that you consider holding the event at the existing facility, which is also the company's headquarters (and just a mile or less down the road).

[REDACTED]  
Loan Guarantee Program

Department of Energy  
[REDACTED]

---

**From:** [REDACTED]  
**Sent:** Friday, August 28, 2009 11:51 AM  
**To:** Frantz, David  
**Cc:** Richardson, Susan; [REDACTED]  
**Subject:** RE: Solyndra Action Memo

Dave – there may be an issue with this. Per discussion with [REDACTED], given the S1's unavailability to sign off until Wed the 2nd, coupled with the notice time FFB needs for the money flow, while we could possibly/likely do a dry close in time for this schedule, it is unlikely/impossible to have a funds-flow by then.

As the closing on the land cannot happen until the funds flow (technically, it will happen a micro-second before the DOE funds), the Solyndra Fab2 site itself may not be available for the "event."

An alternative may be to stage the show at the existing plant (which I'm sure S1 will be touring in any case).

[REDACTED]  
[REDACTED]  
Loan Guarantee Program  
Department of Energy  
[REDACTED]

---

**From:** Rogers, Matt  
**Sent:** Friday, August 28, 2009 8:15 AM  
**To:** Frantz, David; Spinner, Steve; Isakowitz, Steve  
**Cc:** [REDACTED]  
**Subject:** RE: Solyndra Action Memo

we are announcing on friday 9/4 with s-1 at the solyndra site. so, if we are clear with omb earlier, we should be able to work 7th floor faster. regards, mr

Matt Rogers  
Senior Advisor to the Secretary of Energy for Recovery Act Implementation  
US Department of Energy  
1000 Independence Avenue, 7th Floor  
Washington, DC 20585  
[REDACTED]

---

**From:** Frantz, David  
**Sent:** Friday, August 28, 2009 8:10 AM  
**To:** Rogers, Matt; Spinner, Steve; Isakowitz, Steve  
**Cc:** [REDACTED]  
**Subject:** FW: Solyndra Action Memo

FYI-looks like earliest close will be Thursday.

**David G. Frantz**

US Department of Energy

Director, Loan Guarantee Office, CF-1.3

---

**From:** [REDACTED]  
**Sent:** Thursday, August 27, 2009 11:01 PM  
**To:** [REDACTED]  
**Cc:** Frantz, David; Richardson, Susan; [REDACTED]  
**Subject:** Re: Solyndra Action Memo

The Secretary will be on travel Monday and Tuesday, so lets have as our goal to get all the concurrences in place and have it on his desk when he returns Wednesday morning. Thanks.

---

**From:** [REDACTED]  
**To:** [REDACTED]  
**Cc:** Frantz, David; Richardson, Susan; [REDACTED]  
**Sent:** Thu Aug 27 14:06:57 2009  
**Subject:** RE: Solyndra Action Memo

[REDACTED] – thank you so much for the quick turnaround on this. Your assistance is greatly appreciated. Also appreciated is your offer of follow-on assistance, which we will take advantage of.

For Susan/Dave – I will await your possible changes/updates, and the OMB score, and will then finalize and forward to Eric.

Best regards,

[REDACTED]  
[REDACTED]  
Loan Guarantee Program  
Department of Energy  
[REDACTED]

---

**From:** [REDACTED]  
**Sent:** Thursday, August 27, 2009 2:00 PM  
**To:** [REDACTED]  
**Cc:** Frantz, David; Richardson, Susan; [REDACTED]  
**Subject:** RE: Solyndra Action Memo

Attached is a revised action memo with our recommended changes in track changes. I moved the footnote into the #1 bullet, since we don't normally have footnotes in an action memo.

Once you have finalized it, you can send it to us and we will prepare formal packages and can collect the signatures for you.

---

**From:** [REDACTED]  
**Sent:** Thursday, August 27, 2009 10:59 AM  
**To:** [REDACTED]  
**Cc:** Frantz, David; Richardson, Susan  
**Subject:** Solyndra Action Memo

[REDACTED]

Thanks so much for your assistance.

Attached are the latest drafts of the documents Dave and I just gave you. As we discussed, there are some gaps to fill in, and we may be getting a new additional paragraph or two.

Please let me know if you need any additional support from us.

Best regards,

[REDACTED]

[REDACTED]  
Loan Guarantee Program  
Department of Energy

[REDACTED]

## **Footnote 270**



---

**From:** Isakowitz, Steve [REDACTED]  
**Sent:** Monday, August 31, 2009 7:20 PM  
**To:** Mertens, Richard A.  
**Cc:** Ericsson, Sally C.; Rogers, Matt  
**Subject:** Solyndra

Rick - any word on finalizing credit subsidy? Tomorrow (Tues) is key day. We didn't hear from anybody today with comments or questions so wasn't sure if that was good news or not in terms of progress.

Thanks  
Steve

CONFIDENTIAL

DO NOT COPY

**From:** Isakowitz, Steve  
**To:** [REDACTED] Frantz, David; Rogers, Matt; Richardson, Susan; Spinner, Steve; Colyar, Kelly  
**Cc:** [REDACTED]  
**Subject:** Re: OMB Flash!!  
**Date:** Tuesday, September 01, 2009 6:02:37 PM

---

Spoke to Mertens. They've finished their deliberations and will be talking to Kelly momentarily to rerun the CSC. Then they will run thru their final signoff. Mertens assumed mid-day completion tomorrow. Sally Ericsson is on jury duty but signed off on the proposed change.

I pressed for a quicker turnaround but he said its an issue of reaching key people for final signoff.

I spoke to Kelly (who ironically is out tomorrow on jury duty) and she will proactively call Kevin so we can quickly rerun the numbers.

Steve

---

**From:** [REDACTED]  
**To:** Frantz, David; Isakowitz, Steve; Rogers, Matt; Richardson, Susan; Spinner, Steve  
**Cc:** [REDACTED]  
**Sent:** Tue Sep 01 16:15:37 2009  
**Subject:** RE: OMB Flash!!

All - this information may make my previous message OBE.

The extra delays noted here may be too much for the lawyers to work around. There may be serious implications, especially as regards closing in time to accommodate the planned "event."

[REDACTED]  
Loan Guarantee Program  
Department of Energy  
[REDACTED]

---

**From:** Frantz, David  
**Sent:** Tuesday, September 01, 2009 4:08 PM  
**To:** Isakowitz, Steve; Rogers, Matt; Richardson, Susan; [REDACTED] Spinner, Steve; Colyar, Kelly  
**Cc:** [REDACTED]  
**Subject:** OMB Flash!!

In meeting with Kevin and [REDACTED] today we learned the following:

**Solyndra:** Still calculating the number, subsidy likely to go up. Won't have number earliest until tomorrow AM. No closing tomorrow and Thursday now will be a hard push. We need to clear here once we get it and then go back to OMB for the apportionment before we can close. Need approx. 24-36 hrs for that evolution as Kelly has indicated.

**FIPP:** [REDACTED] is still reviewing and needs to socialize it before OMB then calls [REDACTED] and company to answer specific questions. It will not clear this week for sure.

**NOPR:** Kevin had concerns about its closing on Sept. 8 just as Congress is returning, w/o staff opportunity for comment. I indicated as previously agreed, we are holding to the deadline with no extensions.

Sage: Kevin, [REDACTED] offered good questions. I did not detect any predisposition against the project in general.

Dave

**David G. Frantz**  
US Department of Energy  
Director, Loan Guarantee Office, CF-1.3

[REDACTED]

**Footnote 271, 272**

[REDACTED]

---

**From:** Kumar, Aditya  
**Sent:** Monday, August 31, 2009 3:17 PM  
**To:** Oxhorn, Elizabeth A.; [REDACTED]  
**Subject:** RE: Solyndra Update

I'm checking with OMB...

-----Original Message-----

**From:** Oxhorn, Elizabeth A.  
**Sent:** Monday, August 31, 2009 3:05 PM  
**To:** Kumar, Aditya; [REDACTED]  
**Subject:** FW: Solyndra Update

See below

We are walking a fine line with Solyndra needing to begin notifying investors to fly in for the Friday event, but this OMB piece not being final.

Our concern on the press end is that this leaks out before the OMB portion is cooked - if there is any way to accelerate, would give a lot of peace of mind/flexibility on that front.

The final step will be the loan closing which will happen on Thursday regardless - but my understanding is that that's pretty much a given & it's the leaking out before OMB is finished that could leave us in an awkward place.

-----Original Message-----

**From:** Spinner, Steve [REDACTED]  
**Sent:** Friday, August 28, 2009 10:08 AM  
**To:** [REDACTED] Oxhorn, Elizabeth A.; Owens, Missy; Kumar, Aditya; [REDACTED]  
**Cc:** Rogers, Matt; Hurlbut, Brandon K.; [REDACTED]  
**Subject:** RE: Solyndra Update

On the OMB side, from our Credit Policy Director

"We still have one outstanding question from our initial meeting Tuesday (DOE has not responded--I need more information from [REDACTED] and Solyndra). We have also not received the final set of questions/issues from OMB to which DOE will need to respond. After OMB review, and any changes are made to the credit subsidy cash flows, OMB would essentially pre-approve that calculation (formal approval comes in the form of the apportionment which occurs after S2 or S1 approve commitment of the loan amount and subsidy rate)."

OMB is fully aware of the Friday timeline. The DOE team is hoping to receive the final OMB questions/issues today so that they can be quickly reviewed/responded in full so that we can complete the outstanding process requirements.

Steve

-----Original Message-----

**From:** [REDACTED]  
**Sent:** Friday, August 28, 2009 9:50 AM  
**To:** 'Oxhorn, Elizabeth A.'; Owens, Missy; Kumar, Aditya; Spinner, Steve; [REDACTED]

Cc: Rogers, Matt; Hurlbut, Brandon K.; [REDACTED]

Subject: RE: Solyndra Update

9:00 am PT timing should be fine for CA.

Defer to Steve on the OMB part.

Proposal for notifications is:

1. Yesterday the company was notified of the event date, but for planning purposes only and to ask their VIPs to hold time on their schedule (their investors already know the details because they have to sign paperwork as the deal goes forward). They will hold on broader invites until we notify electeds of details later next week.
2. On Monday DOE will call electeds to notify them that the Secretary will be in Northern California on Friday morning (no other info available then), then later in the week give more information.
3. On Thursday we will notify press.

Local press will of course be invited. Will defer to others about any national press coordination.

Questions?

-----Original Message-----

From: Oxhorn, Elizabeth A. [REDACTED]  
Sent: Thursday, August 27, 2009 4:59 PM  
To: Owens, Missy; Kumar, Aditya; Spinner, Steve; [REDACTED]  
Cc: Rogers, Matt; Hurlbut, Brandon K.; [REDACTED]

Subject: RE: Solyndra Update

Hello folks -

Wrapping up some loose ends from our call today:

1. Timing - We've made some adjustments to our schedule and it now looks like the VP's window of availability is 12:00 PM ET - 12:45 PM ET. That would put us at a 9:00 AM PT event start with VP portion around 9:15 AM PT. Does that work on the CA end?
2. OMB Approval - Can someone provide a quick rundown of what final step this is that OMB would be clearing? We just want to make sure we can be as helpful as possible in ensuring this gets done for you on timeline. We were thinking all OMB clearance was to be finished this week (?) - but perhaps there is a final step we hadn't considered?
3. Browner/WH Attendee - Brandon, can you take a look at this part?
4. Notification Timeline - Team DOE will draft up a proposal for Congressional/elected, company/investor and press notification for discussion. Noting that I'm connecting [REDACTED] with [REDACTED] re: electeds.

5. VP Side/Satellite - VP will do this from the White House - TBD whether there is a press pool in there or we just make the feed available - but no audience. We'll go back to WHCA to let them know this is a go and connect with appropriate OVP and DOE folks to begin working through the cost and logistical details.

Anything I've missed?

Liz

From: Owens, Missy [REDACTED]  
Sent: Wednesday, August 26, 2009 8:01 PM  
To: Oxhorn, Elizabeth A.; Kumar, Aditya; Spinner, Steve; [REDACTED]  
Cc: Rogers, Matt; Hurlbut, Brandon K.; [REDACTED]  
Subject: Re: Solyndra Update

**CONFIDENTIAL**

Sure. Including DOE press.

----- Original Message -----

From: Oxhorn, Elizabeth A. [REDACTED]  
To: Kumar, Aditya [REDACTED]; Owens, Missy; Spinner, Steve; [REDACTED]  
Cc: Rogers, Matt; Hurlbut, Brandon K. [REDACTED]  
Sent: Wed Aug 26 18:49:36 2009  
Subject: RE: Solyndra Update

**CONFIDENTIAL**

Alright, everyone - thanks for your patience as we nailed this down here.

It looks like this will definitely be a VPOTUS event after all - and it would need to be on the 4th in that case.

I hear [REDACTED] had a good visit out there and things look feasible from a logistical standpoint - but much more to discuss. Shall we hop on a call tomorrow to discuss further? How about 1:00 PM? If that works, will circulate number.

From: Kumar, Aditya  
Sent: Tuesday, August 25, 2009 11:54 AM  
To: Owens, Missy; Spinner, Steve; [REDACTED]  
Cc: Rogers, Matt; Oxhorn, Elizabeth A.  
Subject: RE: Solyndra Update

Sounds good. POTUS on the 8th was what we were going for, but that's looking unlikely. With POTUS unlikely, we wanted to give this to the VPOTUS, and 4th was looking best.

Glad to discuss tomorrow.

From: Owens, Missy [REDACTED]  
Sent: Tuesday, August 25, 2009 11:51 AM  
To: Spinner, Steve; Kumar, Aditya; [REDACTED]  
Cc: Rogers, Matt; Oxhorn, Elizabeth A.  
Subject: RE: Solyndra Update

hey all - lets talk about this as of last Friday the POTUS was set to satellite in and the event has been moved to the 8th.

**CONFIDENTIAL**

Where did you see Solyndra was on the 4th? Worried about the dates you have Adi, want to make sure we're all on the same page. You, Zach and I should probably discuss when tomorrow's event is over.

From: Spinner, Steve  
Sent: Tuesday, August 25, 2009 11:48 AM  
To: 'Kumar, Aditya'; Owens, Missy  
Cc: Rogers, Matt; Oxhorn, Elizabeth A.  
Subject: RE: Solyndra Update

**DO NOT COPY**

Adi, I am looping in Missy Owens. Thanks.

Steven J Spinner  
Small Business Loan Guarantee Program Advisor Recovery Act Team U.S.  
Department of Energy  
[REDACTED]

From: Kumar, Aditya [REDACTED]  
Sent: Tuesday, August 25, 2009 10:28 AM  
To: Spinner, Steve

Cc: Rogers, Matt; Oxhorn, Elizabeth A.  
Subject: Solyndra Update

We are thinking (technical logistics allowing) that we would want the VP can satellite into the event on 9/4 (next Friday). It's the same day unemployment numbers come out, and we'd want to use this as an example where the Recovery Act is helping create new high tech jobs. Does that work for you guys? Were you guys going to send Sec. Chu or someone else to CA? We are discussing the possibility of sending someone from here (e.g. Carol) out there as well.

Let me know if 9/4 sounds ok. Let me know what DoE would be thinking of doing with the Secretary or otherwise. Don't need a formal event memo in a rush, but just want to start planning things if this sounds generally ok. Glad to do a quick call with whomever. Thanks,

Adi

CONFIDENTIAL

DO NOT COPY

---

**Footnote 273, 274**

**From:** Mertens, Richard A.  
**Sent:** Monday, August 31, 2009 4:50 PM  
**To:** Ericsson, Sally C.  
**Cc:** [REDACTED] Carroll, J. Kevin  
**Subject:** FW: Solyndra Update

Sally: we should discuss this with you early tomorrow morning.

**From:** Carroll, J. Kevin  
**Sent:** Monday, August 31, 2009 4:27 PM  
**To:** Mertens, Richard A.  
**Cc:** [REDACTED]  
**Subject:** RE: Solyndra Update

I would prefer that the announcement be postponed. The BRD credit crew is out on leave this week, as is Uday. This is the first loan guarantee and we should have a full review with all hands on deck to make sure we get it right. Furthermore, the announcement this week would require us to have a waiver to the requirement in the rule that 30 days elapse from when the final credit rating was submitted, setting a bad precedent.

That said, we have only one item left that I am aware of, but it is not clear how the information would impact the credit subsidy calculation (CSC).

Our outstanding request to DOE is for field performance data to back up engineering claims made in the proposal documents.

Solyndra claims to have a pricing advantage based on performance and lower costs of installation (sometimes referred to as balance of plant). Recent developments in the solar market, in particular, pricing pressure from China from silicon wafer plants scheduled to come on line (and that also may or may not be due to dumping; see articles below), raise concerns about how strong Solyndra's position will be in the face of rising competition. If the engineering claims can be backed up with field data that is consistent with claims, I think we would accept DOE's CSC; but a lot of times field performance is not quite up to the engineering claims, in which case we might want to notch the credit rating down (or viewed conversely, increase our estimate of risk).

See:

**China Racing Ahead of U.S. in the Drive to Go Solar**  
<http://www.nytimes.com/2009/08/25/business/energy-environment/25solar.html?scp=1&sq=solar%20china&st=cse>

And

**Chinese Solar Firm Revises Price Remark**  
<http://www.nytimes.com/2009/08/27/business/energy-environment/27panel.html?scp=3&sq=solar%20china&st=cse>

and

**As Prices Slump, Solar Industry Suffers**  
<http://greeninc.blogs.nytimes.com/2009/08/13/as-prices-slump-solar-industry-suffers/?scp=6&sq=solar%20china&st=cse>

**More Sun for Less: Solar Panels Drop in Price**  
<http://www.nytimes.com/2009/08/27/business/energy-environment/27solar.html?scp=6&sq=solar%20energy&st=cse>

-----Original Message-----

From: Mertens, Richard A.  
Sent: Monday, August 31, 2009 3:59 PM  
To: Carroll, J. Kevin  
Subject: FW: Solyndra Update

What should we tell Sally on our review status?

-----Original Message-----

From: Kumar, Aditya  
Sent: Monday, August 31, 2009 3:23 PM  
To: [REDACTED]; Ericsson, Sally C.; Mertens, Richard A.  
Cc: [REDACTED]  
Subject: FW: Solyndra Update

[REDACTED] Sally, Richard:

As you guys may know, the VP is set to make a Solyndra announcement on Friday. We know that OMB and DoE are still working on finalizing credit issues, and wanted to see where that was in the process (if there is anything we need to push DoE in speeding along, or conversely if there is anything we can help speed along on the OMB side). Below is an email from DoE on their latest thoughts about where things stand, and I think they are still waiting on the final list of questions / issues from OMB to which they will need to respond.

Can you let us know where things currently stand, and ETA on completion of the credit review process?

Adi

-----Original Message-----

From: Oxhorn, Elizabeth A.  
Sent: Monday, August 31, 2009 3:05 PM  
To: Kumar, Aditya; [REDACTED]  
Subject: FW: Solyndra Update

See below

We are walking a fine line with Solyndra needing to begin notifying investors to fly in for the Friday event, but this OMB piece not being final.

Our concern on the press end is that this leaks out before the OMB portion is cooked - if there is any way to accelerate, would give a lot of peace of mind/flexibility on that front.

The final step will be the loan closing which will happen on Thursday regardless - but my understanding is that that's pretty much a given - it's the leaking out before OMB is finished that could leave us in an awkward place.

-----Original Message-----

From: Spinner, Steve [REDACTED]  
Sent: Friday, August 28, 2009 10:08 AM  
To: [REDACTED] Oxhorn, Elizabeth A.; Owens, Missy; Kumar, Aditya; [REDACTED]  
Cc: Rogers, Matt; Hurlbut, Brandon K.; [REDACTED]

Subject: RE: Solyndra Update

On the OMB side, from our Credit Policy Director

"We still have one outstanding question from our initial meeting Tuesday (DOE has not responded--I need more information from [REDACTED] and Solyndra). We have also not received the final set of questions/issues from OMB to which DOE will need to respond. After OMB review, and any changes are made to the credit subsidy cash flows, OMB would essentially pre-approve that calculation (formal approval comes in the form of the apportionment which occurs after S2 or S1 approve commitment of the loan amount and subsidy rate)."

OMB is fully aware of the Friday timeline. The DOE team is hoping to receive the final OMB questions/issues today so that they can be quickly reviewed/responded in full so that we can complete the outstanding process requirements.

Steve

CONFIDENTIAL

DO NOT COPY

## **Footnote 276**

**From:** Carroll, J. Kevin  
**Sent:** Monday, August 31, 2009 12:48 PM  
**To:** McSweeney, Terrell P.  
**Subject:** DOE announcement

Hi Terrell,

I was wondering if you could tell me who schedules announcements and events with the Department of Energy that you folks are participating in? We have ended up in the situation of having to do rushed approvals on a couple of occasions (and we are worried about Solyndra at the end of this week). We would prefer to have sufficient time to do our due diligence reviews and have the approval set the date for the announcement rather than the other way around.

Is there some person I can speak with to work on coordinating these announcements?

Kevin Carroll  
Office of Management and Budget  
Energy Branch Chief  
[REDACTED]

CONFIDENTIAL

DO NOT COPY

## **Footnote 277**

**From:** McSweeney, Terrell P.  
**Sent:** Monday, August 31, 2009 7:39 PM  
**To:** Ericsson, Sally C.  
**Subject:** Re: VP Solyndra Announcement

We appreciate that - and want to make this work better for you all if we can

---

**From:** Ericsson, Sally C.  
**To:** McSweeney, Terrell P.  
**Sent:** Mon Aug 31 19:28:44 2009  
**Subject:** Re: VP Solyndra Announcement

DOE jams us every week (on purpose).. But most of their money is already out the door cuz the Branch really pushes!

Sally

---

**From:** McSweeney, Terrell P.  
**To:** Ericsson, Sally C.  
**Sent:** Mon Aug 31 19:26:10 2009  
**Subject:** RE: VP Solyndra Announcement

Ok. I'd love to chat with you about what process we need to put in place to make ARRA event scheduling work more smoothly from the OMB perspective.

---

**From:** Ericsson, Sally C.  
**Sent:** Monday, August 31, 2009 7:25 PM  
**To:** McSweeney, Terrell P.  
**Subject:** Re: VP Solyndra Announcement

I've talked to the Branch about it -- they have some issues but I think they're resolvable. The precedent won't be good (this is the first renewable loan guarantee and it would be nice to get it right) but I don't understand all of the details yet.

Sally

---

**From:** McSweeney, Terrell P.  
**To:** Ericsson, Sally C.  
**Cc:** Kumar, Aditya  
**Sent:** Mon Aug 31 19:19:00 2009  
**Subject:** VP Solyndra Announcement

Sally:

Can we check in tomorrow about the status of the proposed VP Solyndra announcement for Friday?

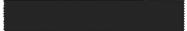
Thanks,

Terrell

---

**Terrell McSweeney**  
Deputy Assistant to the President

Domestic Policy Advisor to the Vice President



CONFIDENTIAL

DO NOT COPY

## **Footnote 278**

**Microsoft Outlook**

---

**From:** Kumar, Aditya  
**Sent:** Monday, August 31, 2009 7:27 PM  
**To:** McSweeney, Terrell P.  
**Subject:** RE: VP Solyndra Announcement

cool

---

**From:** McSweeney, Terrell P.  
**Sent:** Monday, August 31, 2009 7:26 PM  
**To:** Kumar, Aditya  
**Subject:** FW: VP Solyndra Announcement

Good sign

---

**From:** Ericsson, Sally C.  
**Sent:** Monday, August 31, 2009 7:25 PM  
**To:** McSweeney, Terrell P.  
**Subject:** Re: VP Solyndra Announcement

I've talked to the Branch about it -- they have some issues but I think they're resolvable. The precedent won't be good (this is the first renewable loan guarantee and it would be nice to get it right) but I don't understand all of the details yet.

Sally

---

**From:** McSweeney, Terrell P.  
**To:** Ericsson, Sally C.  
**Cc:** Kumar, Aditya  
**Sent:** Mon Aug 31 19:19:00 2009  
**Subject:** VP Solyndra Announcement  
Sally:

Can we check in tomorrow about the status of the proposed VP Solyndra announcement for Friday?

Thanks,

Terrell

---

Terrell McSweeney  
Deputy Assistant to the President  
Domestic Policy Advisor to the Vice President



## **Footnote 280**

[Redacted]

**From:** [Redacted]  
**Sent:** Tuesday, September 01, 2009 11:02 AM  
**To:** Carroll, J. Kevin; [Redacted]  
**Cc:** [Redacted]  
**Subject:** RE: Solyndra Questions

Hi Kevin,

They did submit some information that does provide some confidence that their modeling has been validated through real-life tests. However, according to DOE, Solyndra has not commissioned a test which I think is really the gold standard - comparison of the performance of Solyndra vs. regular panel installations at scale on similar roofs. This really should be possible, and I find it disturbing that only modeling results for such a comparison are available.

That being said, DOE's internal credit rating already assigns Solyndra a [ ] for both Technology and Market and Off-take, which are already quite low, and reflect this uncertainty to a good degree. We could ask DOE to reduce one of these further to reflect this lack of validation. If we do that, this would bring Solyndra down from a [ ] to a [ ]. I would suggest this, but not push back too hard if DOE feels that it has already taken this into account in its ratings - however, we will want to note our lack of comfort with the technical data presented to validate Solyndra's claims.

[Redacted]

---

**From:** Carroll, J. Kevin  
**Sent:** Tuesday, September 01, 2009 9:29 AM  
**To:** [Redacted]  
**Subject:** RE: Solyndra Questions

Please check in with me before responding. Thanks

---

**From:** [Redacted]  
**Sent:** Monday, August 31, 2009 10:07 PM  
**To:** 'Kelly.Colyar'; [Redacted]; Carroll, J. Kevin  
**Subject:** Re: Solyndra Questions

Sorry for the delay! I will look at this early in the AM and respond - could not view them on Monday.

[Redacted]

---

**From:** Colyar, Kelly  
**To:** [Redacted]  
**Sent:** Mon Aug 31 12:29:51 2009  
**Subject:** RE: Solyndra Questions

Please see the attached power point from Solyndra indicating their analysis of accuracy in predicting panel output. The file provides actual performance data from Solyndra systems installed worldwide.

As you are likely aware, the design of PV system installations is usually performed by trained personnel who use industry standard software, such as PVSyst, to model the optimum electricity performance for

any given installation. These software systems normally take into consideration the geography, degree of tilt, amount and shading and shadowing, historical weather patterns, etc. to arrive at the optimal configuration. Since Solyndra's unique form factor cannot be modeled yet by these software systems due to its unique form fit, Solyndra relies on engineering firms to provide electricity yield certificates.

Solyndra has not commissioned a report for side-by-side analysis. Given the change in the industry, any such analysis would quickly become out-of-date. However, banks who finance PV installations have relied on engineering reports related to performance. A sample of those reports was previously provided and is also attached here.

Also attached are the UL and VDE certifications at 200w.

Thanks.

---

**From:** [REDACTED]  
**Sent:** Friday, August 28, 2009 7:06 PM  
**To:** Colyar, Kelly  
**Subject:** RE: Solyndra Questions

Hi Kelly,

I've attached a power plant google found for me which includes some more details regarding Solyndra installations as well as some discussion of how they believe that they have validated their models using performance data from those installations.

However, I don't see actual data comparing optimized flat solar vs. Solyndra installations on similar rooftops that verify - not in theory, but in practice - the performance advantages advantage that Solyndra claims. It appears that they have the installations in place, and they have alluded to such tests in some of the documents that you've provided, but I can't see real world results regarding such tests. Thanks!

[REDACTED]  
[REDACTED]  
Energy Branch  
Office of Management and Budget  
Executive Office of the President  
[REDACTED]

---

**From:** Colyar, [REDACTED]  
**Sent:** Friday, August 28, 2009 4:42 PM  
**To:** [REDACTED]  
**Subject:** RE: Solyndra Questions

I recognize it's late afternoon on Friday, but could you give me a sense of the timing we're working towards here? Just want to make sure we're ready to respond and execute given the timeline we've been given for the broader closing/event. Are we going to be in a position to wrap this up by Monday or Tuesday? Call me if you prefer.  
[REDACTED] Thanks.

---

**From:** Colyar, Kelly  
**Sent:** Friday, August 28, 2009 3:50 PM

To: [REDACTED]  
Cc: [REDACTED]  
Carroll, Kevin;  
Subject: RE: Solyndra Questions

[REDACTED]  
Attached is a table illustrating the revised capacity sold to incorporate the contracts entered into since March. I believe that is the final deliverable from DOE.

Please let me know if you have any further questions.

Thanks.

---

From: Colyar, Kelly  
Sent: Friday, August 28, 2009 2:36 PM  
To: [REDACTED]  
Cc: [REDACTED]  
Carroll, Kevin;  
Subject: RE: Solyndra Questions

[REDACTED]  
Please see below the response to item 4. Revised contracted sales numbers to follow shortly.

Please let me know if you have any further questions.

Thanks.

---

From: [REDACTED]  
Sent: Thursday, August 27, 2009 6:14 PM  
To: Colyar, Kelly  
Cc: [REDACTED]  
Carroll, Kevin  
Subject: Solyndra Questions

Hi Kelly,

The following are further follow-up questions from [REDACTED] and me. I expect that we may have further issues to discuss as you address these questions, particularly as we work through the liquidation recovery.

1. Recovery rate: We look forward to reviewing DOE's submission regarding the Incorporation and application (on a tentative basis to Solyndra) of a liquidation recovery scenario to the Title XVII model, as discussed earlier this evening.
2. The risk rating for the project sponsor (Solyndra), [REDACTED] seems high given that Solyndra is not supporting the debt service. Solyndra is responsible for ensuring the project is completed, but they are not a co-sponsor of the debt service and therefore do not ensure repayment. Their guarantee does offset project completion risk, but an "adequate" ranking of [REDACTED] seems more reasonable given they are not backing the debt service. Future sales are supporting the debt service and these panels are sold at a premium-- pricing pressure is the largest challenge. The parent company does nothing to offset that challenge and warrant a rating higher than adequate. (Note: this would bring DOE's internal rating from [REDACTED] to [REDACTED] or lower the internal credit rating from [REDACTED] to [REDACTED].)

3. Fitch argued that their most probable default path involves extreme competitive pressures leading to substantially lower market prices for competing silicon photovoltaic cells which would wipe out the advantage that Solyndra has in its niche market and lead to obsolescence. However, Fitch's recovery analysis may have been optimistic in its assessment of PV prices – I've attached a clip from this morning's NYT article which references to projections of market prices for standard crystalline PV dipping well below Solyndra's assumed price point. Even with an advantage associated with geometry, this suggests that a lower price scenario than used by Fitch – such as Scenario 3 in your presentation – might be more appropriate for calculating recoveries.
4. Can DOE provide the results of an independent test which verifies Solyndra's claim regarding higher electricity generation per rooftop and lower balance of system costs? That is, have they provided results for any tests which compare the costs of two similar rooftops – one with Solyndra and the other with conventional panels that demonstrate the greater generation and the lower costs?

It is important to note that Solyndra provides a niche market product. It is not competing in the utility-scale land installation market. Therefore, the dollar per watt example is not a direct comparison. That said, DOE acknowledges that market risk is the primary risk with this particular deal and has incorporated that into its analysis.

**CONFIDENTIAL**  
The advantages for each rooftop will depend on the specifications of each application. However, the fact that Solyndra has contracts for a significant amount of its production through 2013 indicates that customers are convinced of the advantage in those configurations. As a business decision, you would assume they have analyzed the options and determined there is an advantage. However, below are some relevant components that contribute to the advantages:

The independent market advisor (RW Beck) has stated that the CIGS material itself results in an approximate 20%-50% cell efficiency gain over other thin film technologies (Table 8). Table 19 of that report also illustrates the BOS cost advantage of the Solyndra technology. While it is true that the assumptions originally came from Solyndra, the Independent Market Consultant 'independently tested their veracity.'

**DO NOT COPY**  
Solyndra has had independent third party engineering concerns validate the electricity yield of our panels. These firms now provide energy yield certifications to banking institutions that need independent verification that the PV systems will actually generate the amount of electricity that is modeled for the installation. A copy of a report from Fraunhofer is attached.

The Solyndra panel power ratings are verified by Underwriters Laboratories/CSA for sales in North America, and by VDE for sales in Europe. Solyndra is now certified up to 200 watt panels.

The attached excerpt from Solyndra's application further details the specific advantages of this product from their perspective.

██████████  
██████████  
Energy Branch  
Office of Management and Budget  
Executive Office of the President  
██████████



CONFIDENTIAL

DO NOT COPY

## **Footnote 282**



**From:** Ericsson, Sally C.  
**Sent:** Tuesday, September 01, 2009 2:37 PM  
**To:** Mertens, Richard A.; Carroll, J. Kevin  
**Subject:** Re: Solyndra

Got it. Let me think about it.

----- Original Message -----

**From:** Mertens, Richard A.  
**To:** Ericsson, Sally C.; Carroll, J. Kevin  
**Sent:** Tue Sep 01 14:34:37 2009  
**Subject:** RE: Solyndra

The 30-day requirement is in the rule rather than the statute, and I believe we confirmed with our attorneys (and DOE's) that we have the ability to waive this regulatory requirement if desired. (DOE had asked for a rule change to remove this requirement, which they backed off of after concluding there was the flexibility to waive it.)

If we waive the 30 days for Solyndra, we should definitely make clear to DOE and the White House that it truly is a rare exception to the rule. We could say that we would not expect to waive it in the future except for extraordinary (emergency?) circumstances. The problem is that no such extraordinary circumstances exist for Solyndra, and DOE and others could conclude that if we can do it now, why can't we do it in the future. Therefore, holding to such a position might be difficult, but we should try, but I would see this probably as more of a policy call (Rob Nabors?) than a legal one.

-----Original Message-----

**From:** Ericsson, Sally C.  
**Sent:** Tuesday, September 01, 2009 1:51 PM  
**To:** Mertens, Richard A.; Carroll, J. Kevin  
**Subject:** Solyndra

Since there is statutory language re 30 day review, can/should we have [redacted] et al deal with Scott Harris, [redacted] the VP's office to make it absolutely clear this will not happen again. I am assuming there is no legal jeopardy.

I should also raise this tonight or tomorrow with Rob.

Sally

**Footnote 286, 288**

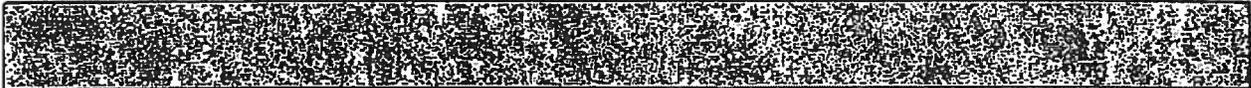
**From:** Nabors, Robert L.  
**Sent:** Tuesday, September 01, 2009 5:55 PM  
**To:** OConnor, Rod  
**Cc:** Hurlbut, Brandon K.  
**Subject:** RE: Solyndra

Let me work on it.

**From:** OConnor, Rod  
**Sent:** Tuesday, September 01, 2009 4:47 PM  
**To:** Nabors, Robert L.  
**Cc:** Hurlbut, Brandon K.  
**Subject:** FW: Solyndra

Rob-

Need some help on a couple of items. As you are likely aware, Chu is flying to California on Friday, and Biden will satellite into an event there marking the close of the first Title XVII loan. The loan will go to Solyndra, a thin film solar manufacturer. We offered Solyndra a conditional guarantee in the spring, and they have used that leverage to raise the private funds needed to close the loan. The date was moved back from the 8th to the 4th (Friday) at the request of the WH. I need to find a way to keep this on track for Friday, and I believe our folks have provided all the info the team there needs. How can we move it forward?



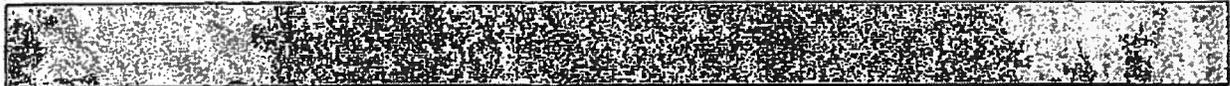
Call me anytime

Rod

**From:** Frantz, David  
**Sent:** Tuesday, September 01, 2009 4:08 PM  
**To:** Isakowitz, Steve; Rogers, Matt; Richardson, Susan; ; Spinner, Steve; Colyar, Kelly  
**Cc:**   
**Subject:** OMB Flash!!

In meeting with Kevin and today we learned the following:

Solyndra: Still calculating the number, subsidy likely to go up. Won't have number earliest until tomorrow AM. No closing tomorrow and Thursday now will be a hard push. We need to clear here once we get it and then go back to OMB for the apportionment before we can close. Need approx. 24-36 hrs for that evolution as Kelly has indicated



Dave

## **Footnote 289**

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** Tuesday, September 01, 2009 10:54 PM  
**To:** Carroll, J. Kevin; [REDACTED] Timberlake, Courtney B.; [REDACTED]  
 Falkenheim, Michael C.  
**Subject:** Re: One notch down on Solyndra

Hi Kevin,

My understanding regarding the agreement for the financing subsidy was that the financing subsidy should be zero in the case that the interest rate is equal to the yield of a treasury of comparable yield. However, in this case, the FFB is charging the borrower a 37.5 bp spread above the treasury rate. The agreement was that this would be modeled by first determining the interest rate needed to get to zero financing subsidy and then adding the spread to that rate to calculate the final subsidy rate. This leads to a negative financing subsidy component.

[REDACTED]

----- Original Message -----

**From:** Carroll, J. Kevin  
**To:** 'Kelly.Colyan'; [REDACTED]  
**Cc:** Timberlake, Courtney B.; [REDACTED] Mertens, Richard A.; [REDACTED]  
 Falkenheim, Michael C.; [REDACTED]  
 'Matt.Rogers'; [REDACTED]  
**Sent:** Tue Sep 01 22:06:49 2009  
**Subject:** One notch down on Solyndra

After discussion over here, we are comfortable with offering DOE the go ahead on the basis of a one notch reduction in the credit rating [REDACTED] on the Solyndra deal.

This would be based on the lack of firm performance data on balance of plant and other claimed advantages of Solyndra, as well as the weakening world market prices for solar generally. These uncertainties, which we might be able to reduce with additional time to do analysis, justify the notching.

Finally, is it right to back out the financing subsidy? I thought that we agreed that we would treat the financing subsidy as zero in all cases.

I spoke to Courtney and I believe that is her understanding also.

## **Footnote 291**

[REDACTED]

---

**From:** Colyar, Kelly [REDACTED]  
**Sent:** Monday, August 31, 2009 2:31 PM  
**To:** [REDACTED]  
**Subject:** RE: Solyndra

and quite frankly, I'm not surprised on the concern with the score...we couldn't answer basic questions.

---

**From:** [REDACTED]  
**Sent:** Monday, August 31, 2009 2:13 PM  
**To:** Colyar, Kelly  
**Subject:** RE: Solyndra

Not that I'm aware of.

Regarding other issues, I believe Kevin has communicated a concern with the credit subsidy estimate to [REDACTED]. It's not clear to me that this is going to be resolved in time for Wednesday closing, but that's above me.....

---

**From:** Colyar, Kelly [REDACTED]  
**Sent:** Monday, August 31, 2009 2:05 PM  
**To:** [REDACTED]  
**Subject:** FW: Solyndra

and one additional question: was the A-129 waiver for granting 100% guarantees documented other than in the Final Rule?

---

**From:** Colyar, Kelly  
**Sent:** Monday, August 31, 2009 2:05 PM  
**To:** [REDACTED]  
**Subject:** Solyndra

[REDACTED]

DOE plans to close Solyndra Wednesday. I believe outstanding issues/questions are:

1. 'FFB/OMB' issue—I understand there is agreement between FFB and OMB to close Solyndra as is and to continue discussion on the topic afterwards. The DOE/FFB agreement can be amended later if required to comply with FFB/OMB agreement.
2. 60 Day Rule—DOE/FFB agreement indicates DOE will pay out upon default (not wait the 60 days). Is any documentation required for this deviation? Kevin indicated he was checking. DOE believes it has consulted OMB on this matter.
3. 30 Day Rule—we are closing before the 30 day period. Is any documentation required for this deviation? Kevin indicated he was checking.
4. Credit Subsidy Score. Are we prepared to wrap this up today? That would provide time for DOE approvals and apportionment etc. of funds tomorrow.

Please let me know if there are any potential issues.

Thanks.

## **Footnote 292**

**From:** Timberlake, Courtney B.  
**Sent:** Wednesday, September 02, 2009 10:11 AM  
**To:** Carroll, J. Kevin  
**Subject:** RE: One notch down on Solyndra

That's helpful, thanks.

**From:** Carroll, J. Kevin  
**Sent:** Wednesday, September 02, 2009 10:10 AM  
**To:** Timberlake, Courtney B.  
**Subject:** RE: One notch down on Solyndra

Both. It's based on pressure from the VP's office. Rob checked on it last night. DOE would like to schedule the closing for tomorrow, and Chu will be in CA and VP by video link for Friday announcement.

**From:** Timberlake, Courtney B.  
**Sent:** Wednesday, September 02, 2009 10:01 AM  
**To:** Carroll, J. Kevin  
**Subject:** RE: One notch down on Solyndra

Is the pressure being communicated through Sally, or perhaps through Rob Nabors? (I ask so that I can ask Rob about my priorities for the day, since he's asked me to draft something for him.)

**From:** Carroll, J. Kevin  
**Sent:** Wednesday, September 02, 2009 9:57 AM  
**To:** Timberlake, Courtney B.  
**Subject:** RE: One notch down on Solyndra

Ok, but expect pressure to get it done faster.

**From:** Timberlake, Courtney B.  
**Sent:** Wednesday, September 02, 2009 9:56 AM  
**To:** Carroll, J. Kevin  
**Subject:** RE: One notch down on Solyndra

Just talked to [REDACTED] [REDACTED] should be able to take a look today, and we'll see if we can complete the review by the end of the day.

**From:** Carroll, J. Kevin  
**Sent:** Wednesday, September 02, 2009 9:41 AM  
**To:** Timberlake, Courtney B.; [REDACTED]  
**Cc:** [REDACTED]; Mertens, Richard A.  
**Subject:** RE: One notch down on Solyndra

Sorry, I think I had it upside down. That's why rushing this stuff is so painful. I was thinking that, to the degree that paying the 3/8ths to treasury over the life of the loan rather than at the beginning of the loan have we in effect amortized some of the subsidy. But actually, it just means that there is less subsidy.

Viewed this way, I think [redacted] (and Kelly) are right – you subtract it from the cost. Right?

And if that's so, [redacted] can ignore all this folderol.

**From:** Timberlake, Courtney B.  
**Sent:** Wednesday, September 02, 2009 9:34 AM  
**To:** Carroll, J. Kevin; [redacted]  
**Cc:** [redacted]; Mertens, Richard A.  
**Subject:** RE: One notch down on Solyndra

I'm confused – what's the legal issue here? What [redacted] was discussing is a technical issue for purposes of calculating the costs and thus what the borrower pays. Once that's calculated, after factoring in the spread over the single effective rate, then the borrower pays that cost.

**From:** Carroll, J. Kevin  
**Sent:** Wednesday, September 02, 2009 9:27 AM  
**To:** [redacted]  
**Cc:** [redacted]; Mertens, Richard A.  
Timberlake, Courtney B.  
**Subject:** RE: One notch down on Solyndra

The question then is whether the statutory requirement of payment in full at the time the loan guarantee is made. (note is "has received", not will have received or will receive)

(b) SPECIFIC APPROPRIATION OR CONTRIBUTION.—No guarantee shall be made unless—  
(1) an appropriation for the cost has been made; or  
(2) the Secretary has received from the borrower a payment in full for the cost of the obligation and deposited the payment into the Treasury.

[redacted] Sorry to drag you in at this late date, but we may need your help on this. See the messages below to follow the bouncing ball on this.

-----Original Message-----

**From:** [redacted]  
**Sent:** Wednesday, September 02, 2009 12:13 AM  
**To:** [redacted]; Carroll, J. Kevin; [redacted]; Timberlake, Courtney B.  
**Cc:** [redacted]  
**Subject:** Re: One notch down on Solyndra

[redacted] comments mirror mine-DOE would have to do a two step subsidy cost estimate to determine the appropriate amount of financing subsidy (reduction in cost due to the spread).

----- Original Message -----

**From:** [redacted]  
**To:** Carroll, J. Kevin; [redacted]; Timberlake, Courtney B.; [redacted]  
**Sent:** Tue Sep 01 22:53:43 2009  
**Subject:** Re: One notch down on Solyndra

Hi Kevin,

My understanding regarding the agreement for the financing subsidy was that the financing subsidy should be zero in the case that the interest rate is equal to the yield of a treasury of comparable yield. However, in this case, the FFB is charging the borrower a [redacted] spread above the treasury rate. The agreement was that this would be modeled by first determining the interest rate needed to get to zero financing subsidy and then adding the spread to that rate to calculate the final subsidy rate. This leads to a negative financing subsidy component.

[redacted]

----- Original Message -----

From: Carroll, J. Kevin

To: 'Kelly.Colyar'

Cc: Timberlake, Courtney B.;

Mertens, Richard A.;

[redacted] Matt.Rogers [redacted]

Sent: Tue Sep 01 22:06:49 2009

Subject: One notch down on Solyndra

After discussion over here, we are comfortable with offering DOE the go ahead on the basis of a one notch reduction in the credit rating [redacted] on the Solyndra deal.

This would be based on the lack of firm performance data on balance of plant and other claimed advantages of Solyndra, as well as the weakening world market prices for solar generally. These uncertainties, which we might be able to reduce with additional time to do analysis, justify the notching.

**DO NOT COPY**

Finally, is it right to back out the financing subsidy? I thought that we agreed that we would treat the financing subsidy as zero in all cases.

I spoke to Courtney and I believe that is her understanding also.

## **Footnote 293**

BRIEFING MEMO

THE WHITE HOUSE  
Washington

October 25, 2010

MEMORANDUM FOR THE PRESIDENT

FROM: CAROL BROWNER  
RON KLAIN  
LARRY SUMMERS

SUBJECT: Renewable Energy Loan Guarantees and Grants

Your advisors seek your direction on implementing the energy loan guarantee program. Three near-term risks characterize this program: rescission of non-obligated funds; criticism from Hill supporters and stakeholders for slow implementation; and making commitments to projects that would have happened anyway and thus fail to advance your clean energy agenda. In considering these risks, the Department of Energy supports a process that would limit OMB and Treasury review. OMB and Treasury support the establishment of clear policy principles for project review, recognizing that this may pose a risk that some program funds may not be obligated by the program's September 30, 2011 sunset date. We also believe you should consider working with Congress to reprogram loan guarantee funds for an extension of the Recovery Act's renewable grant program during the lame duck tax extenders debate. An expanded EDB, including Secretary Chu, will provide an opportunity to discuss the options described below with you tomorrow.

DISCUSSION

Background

The Recovery Act created two new programs to promote deployment of renewable power: the 1705 energy loan guarantee program and the 1603 grant in lieu of tax credit program.

*1705 Energy Loan Guarantee Program:* The Recovery Act appropriated about \$6 billion to enable the government to pay for the credit subsidies associated with loan guarantees for renewable energy (and related) projects. The credit subsidy can be thought of as the premium that must be paid for the insurance the government provides in guaranteeing the loan for a project. This program was intended to address concerns about tightening credit markets for renewable projects. It represents a modification of the existing 1703 loan guarantee program, which supports innovative technologies and covers renewables, nuclear, and advanced fossil. To date, the 1703 program has not received appropriations for credit

subsidies, thus requiring project developers to pay the government for the credit subsidy and thereby limiting the interest in the 1703 program among small renewable developers.<sup>1</sup>

*1603 Grant Program:* Renewables developers may opt to convert the existing renewable investment tax credit, equal to 30 percent of a project's investment cost, into a grant. Before the financial crisis, renewable developers often partnered with large financials that had sizable taxable income and could use tax credits, i.e., provide "tax equity." This program addresses concerns about the capacity of the tax equity market for renewables through 2010.

*Doubling Renewable Power Goal:* Based on these Recovery Act programs, the Administration set a goal to double renewable power generation within three years. In 2009, the wind industry enjoyed its best year ever with nearly 10,000 megawatts of new installed capacity. Lawrence Berkley National Lab estimated that nearly one-quarter of this capacity would not have been built in the absence of the 1603 grant program. The 1705 loan guarantee program did not close any deals on renewable generation in 2009.

Summary of 1705 Loan Guarantee Program and 1603 Grant Program (through October 25)

	1705 Loan Guarantee	1603 Grant
Staff	100-200 FTE DOE staff and contractors	5 Treasury FTEs and 15 DOE FTEs
Determination of Receipt	Discretionary, reflecting deal characteristics and negotiations with sponsor	Standardized, subject to eligible technology entering into service
Typical length of review	6+ months	4-6 weeks
Program sunset date	September 30, 2011	December 31, 2010
Total number of projects (closed/conditional for 1705)	4 / 8	3,851
Number of wind power projects	1 / 1	203
Number of solar power projects	0 / 2	3,571
Number of geothermal power projects	1 / 1	23
Number of biomass power projects	0 / 0	25
Number of other technology projects	2 / 4	29
Number of states with supported projects	4 / 6	48 plus DC and PR
Total capacity installed (MW)	~80 / ~1,600	~8,600
Total investment supported	\$1.2 billion / \$7.6 billion	~\$18.2 billion

Note: Project sponsors for all power generation projects under the 1705 program have indicated that they intend to claim a 1603 grant once they enter into service.

<sup>1</sup> The 1703 program has made conditional commitments for the Southern Company's Vogtle nuclear power plant in Georgia and AREVA's Eagle Rock Enrichment Facility in Idaho.

*Estimated Benefits of 1705 and 1603 to Renewables Developers:* The combined effect of 1603 and 1705 lowers the cost of a new wind farm by about 55% and solar technologies by about half relative to a no-subsidy case (see appendix table 1). Renewables' intermittency problem limits the deployment of these technologies, which could be remedied by installing back-up capacity (likely increases the cost by 2 to 4¢/kWh). Past experience with the wind tax credit suggests that the 1603 grant and the associated tax credits could have a significant impact on new wind capacity. Appendix figure 1 shows (in shaded regions) the halt to new investment during the three times the wind tax credit expired since 1999.

*Loan Guarantee Pipeline and Process:* After receiving an application, DOE conducts extensive due diligence work on the technological, financial, credit, legal, contractual, environmental, and operational aspects of each project. This due diligence can take months to complete and often results in significant changes to the original transaction structure to mitigate identified risks. In addition to negotiating with the project sponsors, DOE also engages in a back-and-forth with OMB and Treasury, in particular after the deal package has been submitted for review. OMB review of DOE projects has averaged 28 calendar days since September 2009, and 17-business days for the 1 closing and 3 conditional commitments DOE has transmitted between August 1 and October 15 of this year. DOE notes that the back and forth consumes a significant amount of staff time, thereby making it challenging to move several transactions forward simultaneously. Policy review by Treasury and the White House has occasionally extended the amount of time a project is under review beyond the time taken by OMB to score a credit subsidy. Last week, DOE conducted an interagency preview of five projects, with the expectation that most of these could reach the conditional commitment stage within the next 4-8 weeks under the current review system. DOE currently has 35 projects in due diligence, and expects a significant number of new applications when two project solicitations close in the next few weeks. Since loan guarantee funds can only be obligated at closing, conditional commitments will need to occur in the first quarter of 2011 in order to close by September 30, 2011.

### **Legislative Implications**

The Administration's approach to the renewable loan guarantee program and grants has implications for legislative activity, including the FY2011 appropriations (House mark is \$0, Senate mark is \$380 million for energy loan guarantee credit subsidies); the tax extenders bill in which some Members would like to extend the 1603 grant; and the FY2012 budget.

### **Risks Characterizing the Loan Guarantee Program**

*Rescission Risk:* The 1705 loan guarantee program has been scaled back to about \$2.5 billion after reprogramming for Cash-for-Clunkers (May 2009) and the state aid package (August 2010). There has been recent interest in rescinding unobligated Recovery Act balances to pay for other programs. DOE has obligated about 2.5% of the \$2.5 billion in the 1705 program appropriations. An additional 9 projects have received 1705 conditional commitments, and if DOE closes these deals, the total obligations would be about \$500 - \$900 million.

*Congressional Risk:* Failing to make progress on renewables loan guarantees could upset the Hill (Sen. Bingaman, Speaker Pelosi), as well as renewables stakeholders, and draw criticism of the White House, which has been singled out as a roadblock on past loan guarantees.

*Economic Risk:* OMB and Treasury, which have statutory obligations to review 1705 loan guarantees, have raised implementation questions, including: “double dipping” – the total government subsidy for loan guarantee recipients, which have exceeded 60%; “skin in the game” – the relatively small private equity (as low as 10%) developers put into projects; and non-incremental investment – some loan guarantee projects would appear likely to move forward without the credit support offered by 1705 (including those projects that already exist and for which the loan guarantee simply provides a means for refinancing). See the appendix for an illustration of these issues with the Shepherds Flat project.

### **Energy Loan Guarantee Program Options**

#### **Option 1: Limit OMB and Treasury Oversight Role**

In the current review process, after working with project sponsors for 6 to 18 months, DOE submits projects for review of the credit subsidy for conditional commitments and policy review by OMB and Treasury. DOE would prefer to eliminate the deal-by-deal review and instead have OMB and Treasury play roles akin to what they do for other credit programs, such as OPIC and Ex-Im Bank. It should be noted, however, that OPIC and Ex-Im credit programs have a long track record; OMB was more involved in the review of these programs in their early years; and they have boards with representation by other Federal agencies, including Treasury, that review and approve all major projects. DOE would make initial credit subsidy estimates at the conditional commitment stage, and OMB would only review and approve of the credit subsidy used at the time of closing on a deal.

#### **Pros**

- Some Members of Congress may applaud this effort, *if* it results in a meaningful increase in the rate of granting conditional commitments to energy projects.

#### **Cons**

- Still exposes 1705 program to rescission risk until DOE can move through its pipeline a lot more conditional commitments – up to twice as many in the next few months as have been made in first 20 months of the program.
- OMB believes that this approach will not remedy the challenge of an insufficient number of financially and technically viable projects in the 1705 pipeline.
- The economic risks will not likely be addressed.

#### **Option 2: Make the Process Work Better by Establishing Clear Policy Principles**

Treasury and OMB believe that clear policy principles – and associated metrics for evaluation – should be developed for the energy loan guarantee program. These principles would be applied to all projects and address issues like doubling dipping, skin in the game, and incrementality of investment (including refinancing). Those proposed loan guarantee projects that have satisfactory measures under each of the key policy principles would then be expedited through review. Those that do not would require more extensive policy review.

and possible rejection. It is important to recognize that under such an approach, there is a risk that not all of the 1705 appropriation of \$2.5 billion will be obligated by the program's sunset of September 30, 2011.

Pros

- Ensures the economic integrity of government support for renewables.

Cons

- Exposes the program to rescission risk through September 30, 2011.
- Some Members of Congress may criticize this effort to limit the application of the loan guarantee program. The White House will bear this criticism.

Option 3: Reprogram 1705 Funds for an Extension of 1603 Grant Program

The 1603 grant program expires on December 31, although the associated tax credits that could be converted into grants under this program do not sunset until December 31, 2012. A 2-year extension of the 1603 grant program through the sunset of the associated tax credits has a \$2.5 billion tax score. The Administration could work with Congress during the lame duck on the tax extenders bill to reprogram the 1705 funds to pay for the 1603 extension. As a variant of this option, the funds could be reprogrammed to support other clean energy priorities, such as the 48C clean energy manufacturing tax credit.

Pros

- Moves funds to the 1603 program that has been much more effective in promoting renewable energy, and likely to have a more significant impact on renewable energy investment in 2011 and 2012.
- Reduces economic risks and the rescission risks identified above.

Cons

- Sen. Bingaman, who views 1705 as "his program," would strongly oppose.
- Could signal the failure of a Recovery Act program that has been featured prominently by the Administration.
- The reprogramming effort entails the risk that Congress accepts the 1705 rescission but fails to deliver the 1603 extension.

Option 4: Streamline and Accelerate OMB / Treasury Reviews with Project Prioritization

OVP supports an option that falls in possible middle ground between options 1 and 2. This approach would create an expedited deal review process, while not doing away with Treasury and OMB reviews altogether. One option to be explored would be to assign higher credit subsidy scores in order to reach faster agreement on the government's risk tolerance and to more quickly utilize the \$2.5 billion in appropriated funds. In addition, this approach could prioritize deals with more favorable policy characteristics (e.g., deals with lower total government subsidies). This option would prevent the holding of the loan guarantee program to a more rigorous policy standard in awarding stimulus funds than other Recovery Act programs. The focus would be on spending all remaining funds while maintaining the necessary risk avoidance and *prioritizing* policy issues where possible.

Pros:

- Parties with equities, including Hill members and industry groups, would view the Administration as supporting a program that they have spent political capital defending.
- This would be an attempt to fix a broken process, as opposed to a complete and unexpected overhaul which could engender criticism.

Cons:

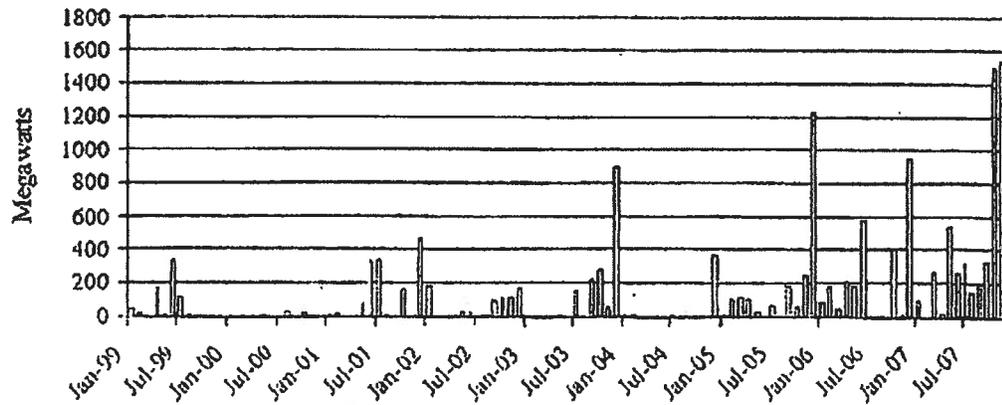
- DOE, OMB, and Treasury have tried to reach common ground on which to execute the program to date, and success has been limited.
- In order to spend the remaining budget authority, the policy principles may be so lax that this option may resemble Option 1 in practice.

**Appendix Table 1: Cost of Generating Power from New Capacity Investment by Technology Type, ¢/kWh**

	Natural Gas	Wind	Solar Thermal
No Subsidy Cost	7.3	8.8	23.2
Cost with 1603	7.3	6.7	16.0
Cost with 1603 and 1705	7.3	4.0	12.6

Source: DOE Energy Information Administration 2010.

**Appendix Figure 1: U.S. Wind Capacity Additions and Periods of No Wind Tax Credit (shaded), 1999-2007**



Source: Metcalf 2009 using DOE Energy Information Administration data.

**Appendix: Shepherds Flat Loan Guarantee**

The Shepherds Flat loan guarantee illustrates some of the economic and public policy issues raised by OMB and Treasury. Shepherds Flat is an 845-megawatt wind farm proposed for Oregon. This \$1.9 billion project would consist of 338 GE wind turbines manufactured in South Carolina and Florida and, upon completion; it would represent the largest wind farm in the country. The sponsor's equity is about 11% of the project costs, and would generate an estimated return on equity of 30%.

- Double dipping: The total government subsidies are about \$1.2 billion.

Subsidy Type	Approximate Amount (millions)
Federal 1603 grant (equal to 30% investment tax credit)	\$500
State tax credits	\$18
Accelerated depreciation on Federal and State taxes	\$200
Value of loan guarantee	\$300
Premium paid for power from state renewable electricity standard	\$220
<b>Total</b>	<b>\$1,238</b>

- Skin in the game: The government would provide a significant subsidy (65+%), while the sponsor would provide little skin in the game (equity about 10%).
- Non-incremental investment: This project would likely move without the loan guarantee. The economics are favorable for wind investment given tax credits and state renewable energy standards. GE signaled through Hill staff that it considered going to the private market for financing out of frustration with the review process. The return on equity is high (30%) because of tax credits, grants, and selling power at above-market rates, which suggests that the alternative of private financing would not make the project financially non-viable.
- Carbon reduction benefits: If this wind power displaced power generated from sources with the average California carbon intensity, it would result in about 18 million fewer tons of CO2 emissions through 2033. Carbon reductions would have to be valued at nearly \$130 per ton CO2 for the climate benefits to equal the subsidies (more than 6 times the primary estimate used by the government in evaluating rules).

## **Footnote 295**

---

**From:** Chris Gronet [REDACTED]  
**Sent:** Friday, October 02, 2009 4:31 AM  
**To:** Steve Mitchell  
**Attachments:** image001.jpg; image002.jpg; image003.jpg; image004.jpg; image005.jpg;  
image006.jpg; image007.jpg; image008.jpg; image009.jpg; image010.jpg;  
~WRD000.jpg; image011.jpg

Hi Steve,

Attached FYI.

The Bank of Washington continues to help us!

[REDACTED] and I talked about the following for Fab 3 in the U.S. (the "Tulsa" package):

1. State and local incentives (grants, subsidies, land, taxes, labor, training, utilities, fee and permit waivers, etc.)
2. 1705 DOE Loan (or bank guarantee)
3. DOE 30% manufacturing equipment tax credits
4. Continue to leverage Exlm for foreign projects because of high U.S.-content (this is a huge advantage for us...we will be the largest U.S.-content solar panel manufacturer in the world very soon)

We think it makes sense to do a study, put together a book, and present it as part of the 1705 application. 1705 implementation is on hold for now as they figure out some issues, but it is coming soon.

Target is to have LOI or framework documents complete by mid-2010.

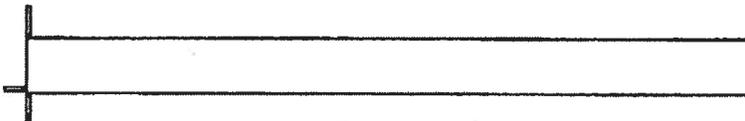
[REDACTED] are visiting after the board meeting on Oct. 22 to discuss the Fab 3 option in Abu-Dhabi.

Appreciate your thoughts/feedback.

Chris Gronet  
CEO  
Solyndra, Inc.  
47700 Kato Road  
Fremont, CA 94538 USA  
[REDACTED]

---

**From:** [REDACTED]  
**Sent:** Thursday, October 01, 2009 9:12 PM  
**To:** Chris Gronet  
**Subject:** NYTimes.com: Solar Panel Tariff May Further Strain U.S.-China Trade



This page was sent to you by: [REDACTED]

**Message from sender:**

Chinese panels imported into the U.S. now need to pay a 2.5% duty... John Scott

**BUSINESS / GLOBAL BUSINESS** | October 01, 2009

**Solar Panel Tariff May Further Strain U.S.-China Trade**

By KEITH BRADSHER

New tariffs on solar panels imported to the United States come as panel manufacturers are losing money, in part because of fierce competition from China.

Advertisement

Adam The story of two strangers, one a little stranger than the other. Starring Hugh Dancy and Rose Byrne. Now Playing in select theaters.

[Click here to view trailer](#)



Copyright 2009, The New York Times Company | [Privacy Policy](#)



This e-mail and any accompanying attachments contain information that is confidential to Solyndra, Inc. The information is intended solely for the use of the individual to whom it is addressed. Any review, disclosure, copying, distribution, or use of this e-mail communication by others is strictly prohibited. If you are not the intended recipient, please notify us immediately by returning this message to the sender and delete all copies. Thank you for your cooperation.

**Footnote 297, 298**

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** Friday, April 09, 2010 11:58 PM  
**To:** Isakowitz, Steve  
**Cc:** Barwell, Owen; [REDACTED]  
**Subject:** Re: LGPO: Solyndra at risk of remaining a going concern per independent audit

Ok. I am going to be sending you our analysis in the morning(although we did not have these more aggressive assumptions).

Based on our detailed analysis this past week, it is not clear how these results will be achievable. Further, conditional commitments cannot be counted as obligated.

With regards to Solyndra, I researched this further today, and it is simply not accurate that every startup receives a going concern letter. I will send you additional market analyst info shortly that raises several serious questions regarding viability in the current market.

Most important, it is clear that LGPO does not have an adequate monitoring plan yet. This will certainly be a focus for any upcoming GAO and IG audits.

In anticipation of this, we have developed a draft monitoring plan that I can share with Jonathan based on industry best practices and loan programs at other federal agencies.

I need to work with Jonathan in real-time to make sure that we have good info on that program. Would appreciate you dropping him a note, since he did not respond to my previous one.

Thanks,  
[REDACTED]

----- Original Message -----

**From:** Isakowitz, Steve  
**To:** [REDACTED]  
**Cc:** Barwell, Owen; [REDACTED]  
**Sent:** Fri Apr 09 23:39:41 2010  
**Subject:** RE: LGPO: Solyndra at risk of remaining a going concern per independent audit

[REDACTED]

Saw your note on my chair re: LGPO.

Matt and I met with Jonathan earlier today. He had a revised plan for loan closings (I will share with you) that get him to \$3.9B of credit subsidy by end of FY11. It's based on a number of aggressive assumptions including getting to 10-15 conditional commitments a month starting this fall through March 2011 and a willingness to take more risk (credit subsidy of 15-30%). He plans to present this plan to the CRB on April 23rd.

[REDACTED] -- He also proposed extending the statutory expiration date of \$500m of the \$4b in credit subsidy. In exchange, he would be willing to drop the \$500m FY11 request. There some logic to this that we should discuss.

I brought up the Solyndra issue. Like Matt, he said that's expected. However, he admitted that his monitoring is currently inadequate so he wouldn't know if things were indeed deteriorating.

Steve

-----Original Message-----

From: [REDACTED]  
Sent: Thursday, April 08, 2010 2:59 PM  
To: Rogers, Matt; Isakowitz, Steve  
Cc: Barwell, Owen  
Subject: LGPO: Solyndra at risk of remaining a going concern per independent audit

Matt/Steve,

FYI re: Solyndra loan.

ISSUE: According to an independent audit by Price Waterhouse Coopers (PWC), Solyndra is at risk of failing.

PWC points out that

- Company is heavily in debt
- Has incurred significant net losses from operations
- Negative cash flows since inception
- Has a net stockholders' deficit

CONCLUSION: Per PWC's Independent Audit, Solyndra's future as a going concern is at risk.

Please see the below articles on the issues:

<http://www.solarplaza.com/news/the-perils-of-innovation-solyndra-solars-most-f>

[http://news.cnet.com/8301-11128\\_3-20001652-54.html](http://news.cnet.com/8301-11128_3-20001652-54.html)

Link to Statement in Response to PWC Audit by Solyndra CEO, Chris Gonet:

<http://www.solyndra.com/News/Customer-Supplier-Letter-040310>

## **Footnote 299**

[REDACTED]

---

**From:** Colyar, Kelly T.  
**Sent:** Friday, April 08, 2010 8:18 AM  
**To:** [REDACTED]  
**Subject:** Re: LAST CALL: Pls send your Weekly Report 4/5-4/9 ASAP

[REDACTED]

[REDACTED]

We have requested information from DOE on their monitoring of Solyndra in light of the recent audit going concern statement in their amended S-1.

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** Fri Apr 09 08:32:35 2010  
**Subject:** LAST CALL: Pls send your Weekly Report 4/5-4/9 ASAP

I understand that we now will submit weekly reports on Friday mornings, so please send me your weekly before you leave tonight.

Thanks

[REDACTED]  
Energy Branch  
Office of Management and Budget  
Executive Office of the President  
[REDACTED]

DO NOT COPY

## **Footnote 300**

**From:** Mas, Alex  
**Sent:** Wednesday, April 14, 2010 3:31 PM  
**To:** [Redacted]  
**Subject:** FW: Proposed agenda for NEC meeting re: DOE Loan Guarantee Program  
**Attachments:** LGP Policy Meeting Agenda (4-15-2010) v2.doc

Let me know how/if I can help out with this. I am pretty much up to speed on the core set of issues.

Alex

**From:** Carroll, J. Kevin  
**Sent:** Wednesday, April 14, 2010 11:32 AM  
**To:** Mas, Alex  
**Subject:** FW: Proposed agenda for NEC meeting re: DOE Loan Guarantee Program

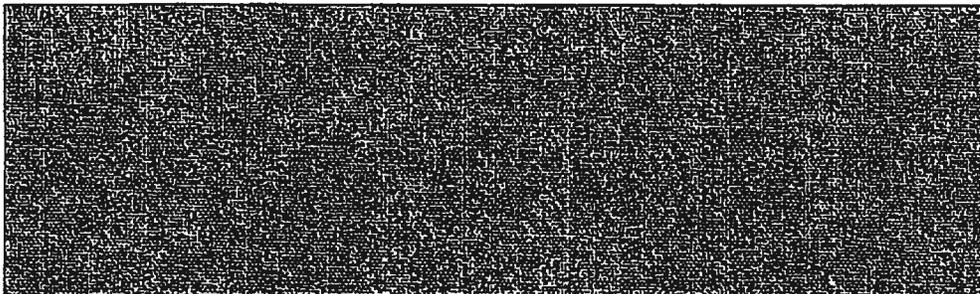
**From:** Saad, Fouad P.  
**Sent:** Wednesday, April 14, 2010 11:27 AM  
**To:** [Redacted]; Ericsson, Sally C.; Timberlake, Courtney B.  
**Cc:** Colyar, Kelly T.; Carroll, J. Kevin; Hedens, Richard A.; [Redacted]; Falkenheim, Michael C.  
**Subject:** Proposed agenda for NEC meeting re: DOE Loan Guarantee Program

Following up on our coordination meeting with Treasury last Friday, we've had a chance to meet with Treasury on a three occasions this week (regarding ARVA questions, sent to DOE policy questions for the NEC meeting, and - this morning - process coordination). We've had some fruitful discussions.

As a first product of those discussions, please find attached (and below) a few agenda items that we suggest for the OECC/NEC policy meeting Thursday. If you need anything further on this, or if we know of any additional items on the OECC/NEC agenda that we can prepare for, please let us know.

Regards,  
Fouad

**DOE Loan Guarantee Program - Proposed Policy Meeting Agenda (4/15/2010)**





**Solyndra Audit Concerns / DOE Loan Program Monitoring**

- Pre-IPO audit raised concerns about Solyndra cash situation
- Unclear still if current conditions are outside those originally expected by DOE
- Concerns re: limited DOE resources, systems, processes in place re: loan monitoring thus far
- Solyndra and 3 ATVM loans [redacted] represent over [redacted] in obligated loans
- Monitoring metrics (milestones, amounts disbursed, issues, etc.)



Fouad Saad  
Energy Branch  
Office of Management & Budget

Tel: [redacted]  
Email: [redacted]

CONFIDENTIAL

DO NOT COPY

## **Footnote 301**

From: [REDACTED]  
 Sent: Monday, April 19, 2010 5:37 PM  
 To: [REDACTED]  
 Subject: RE: Solyndra

I reviewed the documents DOE sent, which state that the project continues to be successful and in accordance with the business plan, despite the parent's recent financial audit. DOE seems to separate the parent from the project in terms of risk monitoring, but I think the deal is structured in a way that does not support that view.

1. The parent is the prime equipment supplier and sole purchaser for the project's output.
2. Although the parent has pledged full construction completion support, the cash account is to be funded during construction. The deteriorating financial status of the parent could impact the ability to fund the construction completion account and increase completion risk for the project.

Policy Analyst  
 Office of Management and Budget

**CONFIDENTIAL**

-----Original Message-----

From: [REDACTED]  
 Sent: Monday, April 19, 2010 4:31 PM  
 To: [REDACTED]  
 Subject: FW: Solyndra

Could you please send me your thoughts on this?

-----Original Message-----

From: Colyar, Kelly T.  
 Sent: Monday, April 19, 2010 8:56 AM  
 To: [REDACTED]; Falkenberg, Michael C.; Carroll, J. Kevin; Mertens, Richard A.  
 Cc: Saad, Fouad P.; [REDACTED]  
 Subject: Fw: Solyndra

**DO NOT COPY**

Please see DOE's monitoring report on Solyndra.

I'll read this afternoon. Perhaps we can share thoughts later today/tomorrow morning after we have a chance to read.

----- Original Message -----

From: Frantz, David [REDACTED]  
 To: Colyar, Kelly T.; Saad, Fouad P.  
 Sent: Mon Apr 19 08:39:07 2010  
 Subject: FW: Solyndra

FYI per your request.

David G. Frantz  
 US Department of Energy

## **Footnote 304**

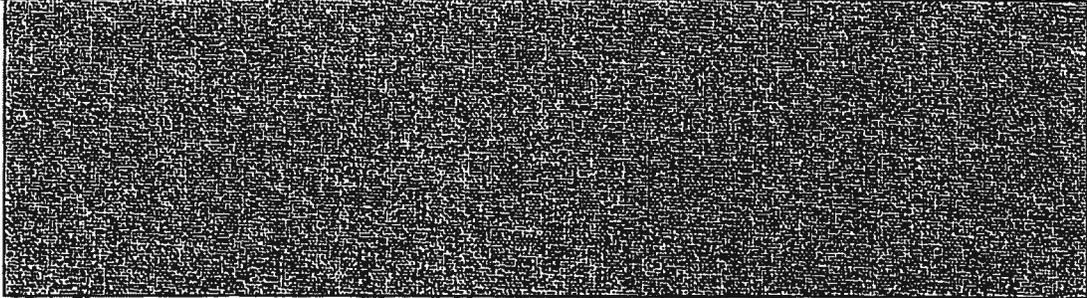
**From:** Saad, Fouad P.  
**Sent:** Wednesday, June 23, 2010 11:44 AM  
**To:** Ericsson, Sally C.; Mas, Alex  
**Cc:** Mertens, Richard A.; Carroll, J. Kevin; Colyar, Kelly T.; [REDACTED]  
**Subject:** RE: DOE Loan Guarantees status update

Below are some updates on the DOE Loan Guarantee Program, reflecting our weekly call this past Monday, as well as various developments over the course of the last week:

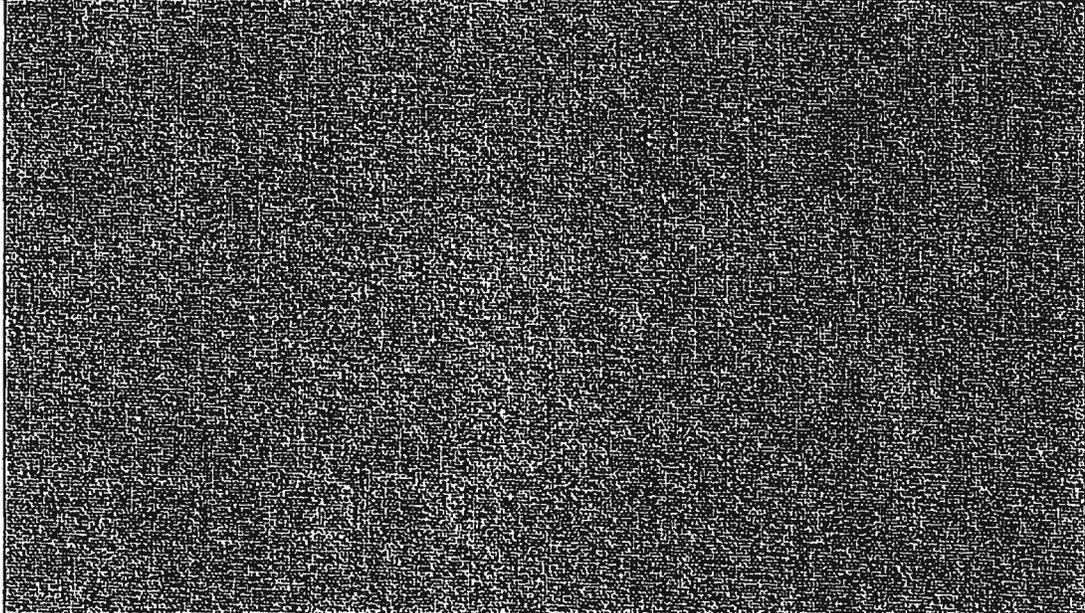
**Current Loans:**

Solyndra: has canceled its much anticipated \$300m IPO, and has instead raised less capital from its existing shareholders, in the form of debt. Although it has been explained as a function of market conditions, it is something of a black eye for the company. It does however temporarily alleviate some of the cash burn concerns we've raised in the past. The challenges Solyndra is having should be used to insist that DOE ramp up its monitoring function immediately; if DOE does not stay on top of this project, it risks becoming embarrassing given the high profile S-1, POTUS and VPOTUS events over the past year.

**Closings (Gate 3):**



**Pending Gate 2's**



## **Footnote 305**

## Microsoft Outlook

---

**From:** Colyar, Kelly T.  
**Sent:** Monday, July 26, 2010 5:13 PM  
**To:** Frantz, David  
**Cc:** [REDACTED]; Saad, Fouad P.  
**Subject:** RE: Solyndra Follow Up

Dave,

Thanks again for the conversation last week regarding the status of Solyndra and DOE's monitoring plan. Given the critical importance of monitoring and recent accounts of the Solyndra project, we appreciate your time in providing an overview of the steps DOE is taking on this front and an update on Solyndra specifically. Given information recently reported in the media, I'm sure you can understand our interest in understanding the current status of this project and associated taxpayer risk. We look forward to following up with the new director of monitoring now that she is onboard to get a better understanding of the organization, systems, processes, etc. DOE will use in monitoring and analyzing loans going forward.

Per our conversation, we have pulled together the items requested July 16, items DOE indicated they planned to provide on Wednesday's call, and follow up items from our discussion so that we have a common list of items. Please let me know if you have any questions.

Thanks.

### Summary of Follow Up Items

1. Follow-up items per the July 16 email, including updated parent financial statements and financial model for the project and parent, as well as the latest IE report.
2. Please provide the latest tear sheet summary for the project.
3. Actual performance against the loan covenants, including *pro forma* impact (if any) as a result of the recent sale of the \$175mm of secured convertible promissory notes
4. Monthly variance reports: As we discussed this may serve as a proxy for the type of information we are looking for until DOE develops a more standard and systematic way of collecting and reporting key data. For the Sponsor: Variance analysis against Sponsor's 2010 plan. For the Borrower: Variance analysis per the construction schedule (timing) and budget (cost).
5. Current market price, production, productivity (e.g., watts / panel), and cost data vs. the pro forma projections at closing. This may include:
  - a. Monthly production and sales figures since financial close in 2009.
  - b. An update to the chart on page 22 of the Credit Committee Paper (March 2009) regarding the cumulative yield for Fab1. Also an updated analysis of the increase in conversion efficiency per panel (175 watts per module in March 2009).
  - c. Please provide additional information around the comment that the manufacturing "cost" was approximately \$1.50 (assuming this means per watt). How has this performance compared to the base case

Please let me know if you have any questions.

Thanks.

---

**From:** Frantz, David [REDACTED]  
**Sent:** Monday, July 19, 2010 4:35 PM  
**To:** Colyar, Kelly T.; [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** RE: Solyndra Follow Up

We can make this work but let's please plan on a tel-conference. It is much more efficient as we can't afford the time away from the office. Just send us a number for dial in for 3:30.

Many thanks,

Dave

**David G. Frantz**  
US Department of Energy  
*Director, Loan Guarantee Office, GE-1.3*

---

**From:** Colyar, Kelly T. [REDACTED]  
**Sent:** Monday, July 19, 2010 4:27 PM  
**To:** Frantz, David; [REDACTED]  
**Subject:** Solyndra Follow Up

Dave and [REDACTED]

In follow up to our discussion earlier regarding Solyndra, any time Wednesday afternoon from 3:30 on works for us. Let me know what time works for you. If you send clearance information to me or Jennifer by Wednesday morning, that would be great.

Thanks.

## **Footnote 307**

**Microsoft Outlook**

**From:** Saad, Fouad P.  
**Sent:** Tuesday, August 24, 2010 10:02 AM  
**To:** Carroll, J. Kevin; Mertens, Richard A.  
**Cc:** Colyar, Kelly T.  
**Subject:** FW: Solyndra Follow Up

FYI. I may suggest we still get together informally when Kelly's back about the "developing a framework for portfolio management" bit of her response.

---

**From:** Nwachuku, Frances [mailto:frances.nwachuku@eod.doe.gov]  
**Sent:** Tuesday, August 24, 2010 9:55 AM  
**To:** Saad, Fouad P.  
**Cc:** Colyar, Kelly T.; Frantz, David  
**Subject:** FW: Solyndra Follow Up

Fouad,

As you may be aware, I recently joined the Loan Programs Office to head up the Portfolio Management effort. In that capacity, I will be focusing on developing broad monitoring/compliance and control policies/procedures. Given that I have been on the job a few short weeks, I would appreciate your indulgence as I work towards building familiarity with the operative projects, including Solyndra, and developing a framework for portfolio management.

While Solyndra is a priority for me, I am just getting up to speed on the issues and would rather delay the exchange of documents until I have a much better grip on the project and any challenges faced by the company.

Regards,

Frances

Frances I. Nwachuku  
Director  
Portfolio Management  
Loan Guarantee Program Office  
US Department of Energy  
1000 Independence Avenue SW  
Washington, DC 20585

---

**From:** Frantz, David  
**Sent:** Tuesday, August 24, 2010 8:45 AM  
**To:** Nwachuku, Frances  
**Cc:** [redacted]  
**Subject:** FW: Solyndra Follow Up

Please advise.

Thanks,

Dave

**David G. Frantz**  
US Department of Energy

[REDACTED]  
[REDACTED]  
**From:** Saad, Fouad P. [mailto:saad.fouad@eere.doe.gov]  
**Sent:** Monday, August 23, 2010 3:43 PM  
**To:** Frantz, David  
**Cc:** Colyar, Kelly T.  
**Subject:** RE: Solyndra Follow Up

Dave,

Lach and Susan weren't able to update us on the status of the Solyndra questions on our call today. Could you let us know where things stand on the questions below?

Thank you,  
Fouad

---

**From:** Colyar, Kelly T.  
**Sent:** Monday, July 26, 2010 5:13 PM  
**To:** Frantz, David; Saad, Fouad P.  
**Subject:** RE: Solyndra Follow Up

Dave,

Thanks again for the conversation last week regarding the status of Solyndra and DOE's monitoring plan. Given the critical importance of monitoring and recent accounts of the Solyndra project, we appreciate your time in providing an overview of the steps DOE is taking on this front and an update on Solyndra specifically. Given information recently reported in the media, I'm sure you can understand our interest in understanding the current status of this project and associated taxpayer risk. We look forward to following up with the new director of monitoring now that she is onboard to get a better understanding of the organization, systems, processes, etc. DOE will use in monitoring and analyzing loans going forward.

Per our conversation, we have pulled together the items requested July 16, items DOE indicated they planned to provide on Wednesday's call, and follow up items from our discussion so that we have a common list of items. Please let me know if you have any questions.

Thanks.

Summary of Follow Up Items

1. Follow-up items per the July 16 email, including updated parent financial statements and financial model for the project and parent, as well as the latest IE report.
2. Please provide the latest tear sheet summary for the project.

3. Actual performance against the loan covenants, including *pro forma* impact (if any) as a result of the recent sale of the \$175mm of secured convertible promissory notes
4. Monthly variance reports: As we discussed this may serve as a proxy for the type of information we are looking for until DOE develops a more standard and systematic way of collecting and reporting key data. For the Sponsor: Variance analysis against Sponsor's 2010 plan. For the Borrower: Variance analysis per the construction schedule (timing) and budget (cost).
5. Current market price, production, productivity (e.g., watts / panel), and cost data vs. the *pro forma* projections at closing. This may include:
  - a. Monthly production and sales figures since financial close in 2009.
  - b. An update to the chart on page 22 of the Credit Committee Paper (March 2009) regarding the cumulative yield for Fab1. Also an updated analysis of the increase in conversion efficiency per panel (175 watts per module in March 2009).
  - c. Please provide additional information around the comment that the manufacturing "cost" was approximately \$1.50 (assuming this means per watt). How has this performance compared to the base case projections and why? Please describe how this compares to Solyndra's December 2009 S-1 filing which indicated 17.2MW sold and \$108,321K in cost of revenue (or an implied cost per watt of \$6.30) for the 9 months ended October 31.
  - d. Updates to Solyndra's sales contracts:
    - i. Page 12 of the Credit Committee Paper (March 2009) gave pricing and volume details for Solyndra's existing contracts. Please provide a current update to that table (including additional contracts signed) and any market color that explains why average selling price is now only \$2.50/watt. Please describe how this compares to Solyndra's December 2009 S-1 filing which indicated 17.2MW sold and \$58.814K in revenue (or an implied \$3.42 average price/watt) for the 9 months ended October 31.
6. Please provide a breakdown of the cost data by source (i.e. manufacturing overhead – including depreciation, materials, labor, etc.) and a crosswalk to cost data for other solar manufacturers as was provided in support of the Abound request, including estimated balance of plant costs.
7. Summary of terms of \$175mm secured convertible promissory notes, and description of how Solyndra's business plan and creditworthiness has been impacted by the decision to raise funds in this manner, instead of accessing the public equity markets (including any impact that the security interest has on the parent company's ability to meet its obligations).
8. Citation for the accounting standards governing going concern statements and any written response by Solyndra to the auditor's statement with specific financial information supporting their position.
9. Additional detail on the nature of the transaction being contemplated by the reference to the sale of 'excess production capacity' in the July 2010 Quarterly Portfolio Report.
10. What changes has Solyndra requested (per the July 16 email)? Please provide a summary of each request and any implications of these changes. Please also describe what these changes would mean in terms of taxpayer risk. Please also describe how the sub-lease and sale of 'excess capacity' would be booked by the parent and

project. Please describe the changes to the Common Agreement that Solyndra has requested (per June 2010 Quarterly Portfolio Report).

11. Please describe the 'changes to the construction line items' and any implications of these changes.
12. Prior to closing, OMB requested the following: *Can DOE provide the results of an independent test which verifies Solyndra's claim regarding higher electricity generation per rooftop and lower balance of system costs? That is, have they provided results for any tests which compare the costs of two similar rooftops -- one with Solyndra and the other with conventional panels that demonstrate the greater generation and the lower costs? Could DOE provide this information based on the current data available?*

Also, as we discussed, we should think about a systematic way to track the loan guarantees after they have closed. Particularly, it would be helpful to have advance notification of any issues that arise so that folks are not surprised by reports in the media. This would also help in collecting information we will ultimately need in the estimate process. We look forward to working with DOE to develop some way to track this information. We have made good progress on similar reports for tracking the pipeline of deals on the front end of the process. Now that we have some deals that are closing, we should think about similar reports for that stage as well.

Please let me know if you have any questions.

Thanks.

---

**From:** Frantz, David [mailto: [REDACTED]]  
**Sent:** Monday, July 19, 2010 4:35 PM  
**To:** Colyar, Kelly T.; [REDACTED]  
**Cc:** Westerhelm, Ove; Cho, Marlin  
**Subject:** RE: Solyndra Follow Up

We can make this work but let's please plan on a tel-conference. It is much more efficient as we can't afford the time away from the office. Just send us a number for dial in for 3:30.

Many thanks,

Dave

**David G. Frantz**  
US Department of Energy  
Director, Loan Guarantee Office, CF-1.3  
202 586 9264 Fax: [REDACTED]

---

**From:** Colyar, Kelly T. [mailto: [REDACTED]]  
**Sent:** Monday, July 19, 2010 4:27 PM  
**To:** Frantz, David; [REDACTED]  
**Subject:** Solyndra Follow Up

Dave and [REDACTED]

In follow up to our discussion earlier regarding Solyndra, any time Wednesday afternoon from 3:30 on works for us. Let me know what time works for you. If you send clearance information to me or Jennifer by Wednesday morning, that would be great.

Thanks.

## **Footnote 309-312**

---

**From:** George Kaiser [REDACTED]  
**Sent:** Thursday, December 17, 2009 4:02 PM  
**To:** Steve Mitchell; [REDACTED]  
**Cc:** Ken Levit; [REDACTED]  
**Subject:** RE: Solyndra & Goldman Sachs

But they need to be publicly invisible. I wouldn't disclose anything about the offering or the selection of underwriters until after the DOE has processed the application and Chu/Rahm have signed off on it. [REDACTED]

-----Original Message-----

**From:** Steve Mitchell  
**Sent:** Thursday, December 17, 2009 9:58 AM  
**To:** George Kaiser; [REDACTED]  
**Cc:** 'ken@[REDACTED]'; [REDACTED]  
**Subject:** Re: Solyndra & Goldman Sachs

And one of the key reasons for GS on the left was their very good work with the doe to date and going forward

----- Original Message -----

**From:** George Kaiser  
**To:** [REDACTED] Steve Mitchell  
**Cc:** 'ken@[REDACTED]'  
**Sent:** Thu Dec 17 09:42:17 2009  
**Subject:** RE: Solyndra & Goldman Sachs

I think there is significant risk to getting the second loan (because of the political concern about giving too much to one supplicant and one technology) even if recommended at the staff level. I'll suggest to [REDACTED] that he push the issue publicly with the argument that it is God's work.

-----Original Message-----

**From:** [REDACTED]  
**Sent:** Thursday, December 17, 2009 9:39 AM  
**To:** George Kaiser; Steve Mitchell  
**Cc:** 'ken@[REDACTED]'  
**Subject:** RE: Solyndra & Goldman Sachs

He won't opine on pricing right now -- way too far off, and a function of too many variables both company specific as well as overall market / economy, etc.

I don't think Steve and I disagree that a relatively modest valuation (but substantial step-up to the last round) in spring 2010 would be an OK outcome. The worst outcome, I think, would be the company overpromising and stumbling sometime in the first 6 months as a public company.

GS and we agree that a second DOE loan is a necessary condition for going public in spring 2010.

-----Original Message-----

From: George Kaiser  
Sent: Thursday, December 17, 2009 9:32 AM  
To: Steve Mitchell  
Cc: [REDACTED]; ken@[REDACTED]  
Subject: RE: Solyndra & Goldman Sachs

Are we primarily interested in his view of the salability and pricing?

Will it be a \$300MM issue? You probably won't agree with this logic, but I could make the case that we would be better served by lower pricing, preserving our ownership share through purchases beyond the greenshoe rights and thereby gaining the slightly later timing that we might prefer, while the company still gains the visibility enhancement through the public offering.

Let's work on a realistic projection of sales and earnings for a few years (when we have good data), make an assessment of market pricing shortly after the offering and three years later and then decide what our strategy should be. GKFF's decision and everyone else's could be different - the participation group could decide not to acquire more, while GKFF did.

-----Original Message-----

From: [REDACTED]  
Sent: Thursday, December 17, 2009 9:21 AM  
To: George Kaiser; Steve Mitchell  
Cc: [REDACTED]  
Subject: RE: Solyndra & Goldman Sachs

[REDACTED]

-----Original Message-----

From: George Kaiser  
Sent: Thursday, December 17, 2009 9:19 AM  
To: Steve Mitchell  
Cc: [REDACTED]  
Subject: RE: Solyndra & Goldman Sachs

Do you have the number (or [REDACTED] do you have his card)?

[REDACTED]

-----Original Message-----

From: Steve Mitchell  
Sent: Thursday, December 17, 2009 9:08 AM  
To: George Kaiser  
Cc: [REDACTED]  
Subject: Solyndra & Goldman Sachs

George,

Solyndra selected GS as the "banker on the left" for its S1 filing which will occur tmrw. Morgan Stanley is co-leading the IPO. The politics and pressure around this selection was nothing short of ridiculous at some level. Having said that, GS was selected on no small part as a result of our support of this decision. Madrone and Rockport were in favor of the selection as was management but at the end of the day we got a lot of credit with GS for weighing in in favor of them in light of our ownership stake. I recommend that you give [REDACTED] a call tmrw to congratulate them on the selection and get his take on the process (Goldman is in committee today discussing the deal). [REDACTED] is aware of our support and will probably thank you - I don't think you really need to bring up that we helped them as he knows it. But would be a great time to throw in the call and lay the groundwork at a high level that we are focused on the deal and excited for Goldman to get this done.

Steve

## **Footnote 313**

**From:** [REDACTED]  
**To:** jonathon.silver [REDACTED]; Frantz, David: [REDACTED]  
**Cc:** Chris Gronet; Bill Stover; [REDACTED]  
**Subject:** Solyndra News  
**Date:** Friday, December 18, 2009 5:26:34 PM

---

All:

I am pleased to inform you that today Solyndra filed its S-1 registration statement, positioning the company to raise the equity contribution required for its Fab 2-Phase 2 project. You can access the filing on the SEC's Edgar website by clicking the following link:  
<http://sec.gov/Archives/edgar/data/1443115/000119312509255919/ds1.htm>.

We believe that by demonstrating clear access to equity capital, we now have the final piece in place to ensure Solyndra's ability to commence construction of the Solyndra Phase 2 project immediately upon the close of a loan guarantee, if Solyndra's application is approved by DOE. We believe that the Solyndra Phase 2 story is compelling:

- \* 231MW capacity, same as Fab 2--Phase 1
- \* 2,500 construction jobs and 1,200 long-term jobs
- \* Proven technology-replicates Fab 1 production equipment
- \* Large, proven market-\$2 billion in customer framework agreements
- \* Proven facility design-essentially mirrors Phase 1
- \* Loan documentation mirrors Phase 1, essentially fully-negotiated
- \* NEPA review completed
- \* Equity funding: IPO filing in December 2009 to fund Solyndra Phase 2 equity contribution

We look forward to moving the process forward expeditiously. Thank you for your attention.

Regards,

[REDACTED]

\*\*\*\*\*

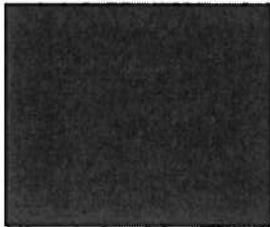


VP - Business Development

SOLYNDRA, INC.

47700 Kato Road

Fremont, CA 94538



This e-mail and any accompanying attachments contain information that is confidential to Solyndra, Inc. The information is intended solely for the use of the individual to whom it is addressed. Any review, disclosure, copying, distribution, or use of this e-mail communication by others is strictly prohibited. If you are not the intended recipient, please notify us immediately by returning this message to the sender and delete all copies. Thank you for your cooperation.

**Footnote 314, 315, 318**

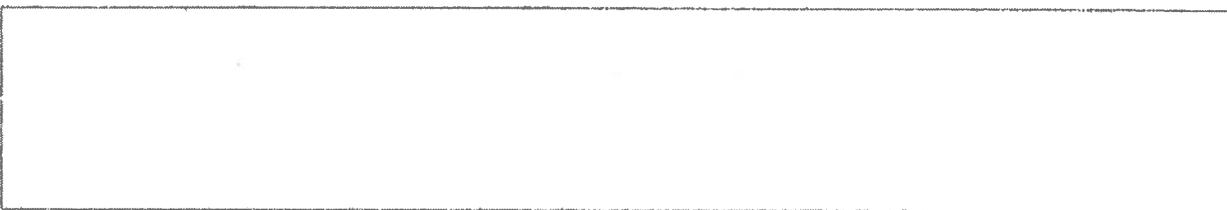
**Microsoft Outlook**

---

**From:** Summers, Lawrence  
**Sent:** Saturday, December 26, 2009 9:28 PM  
**To:** [Redacted]  
**Subject:** Re: Happy holidays

Thanks brad. This is very helpful and I relate to your points many of which I have made internally

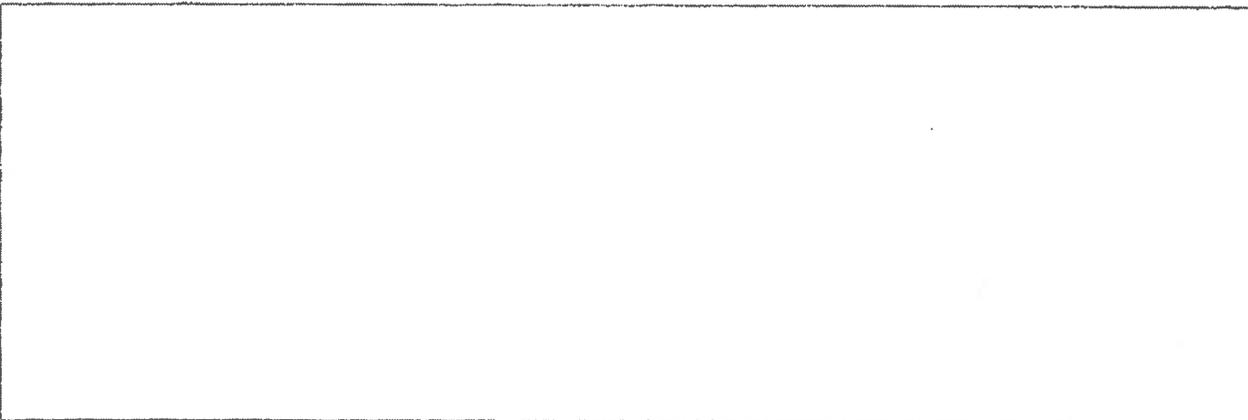
I relate well to your view that gov is a crappy vc and if u were closer to it you'd feel more strongly. But suppose we think there are all kinds of externalities to renewable investments. What should we do?



— Original Message —

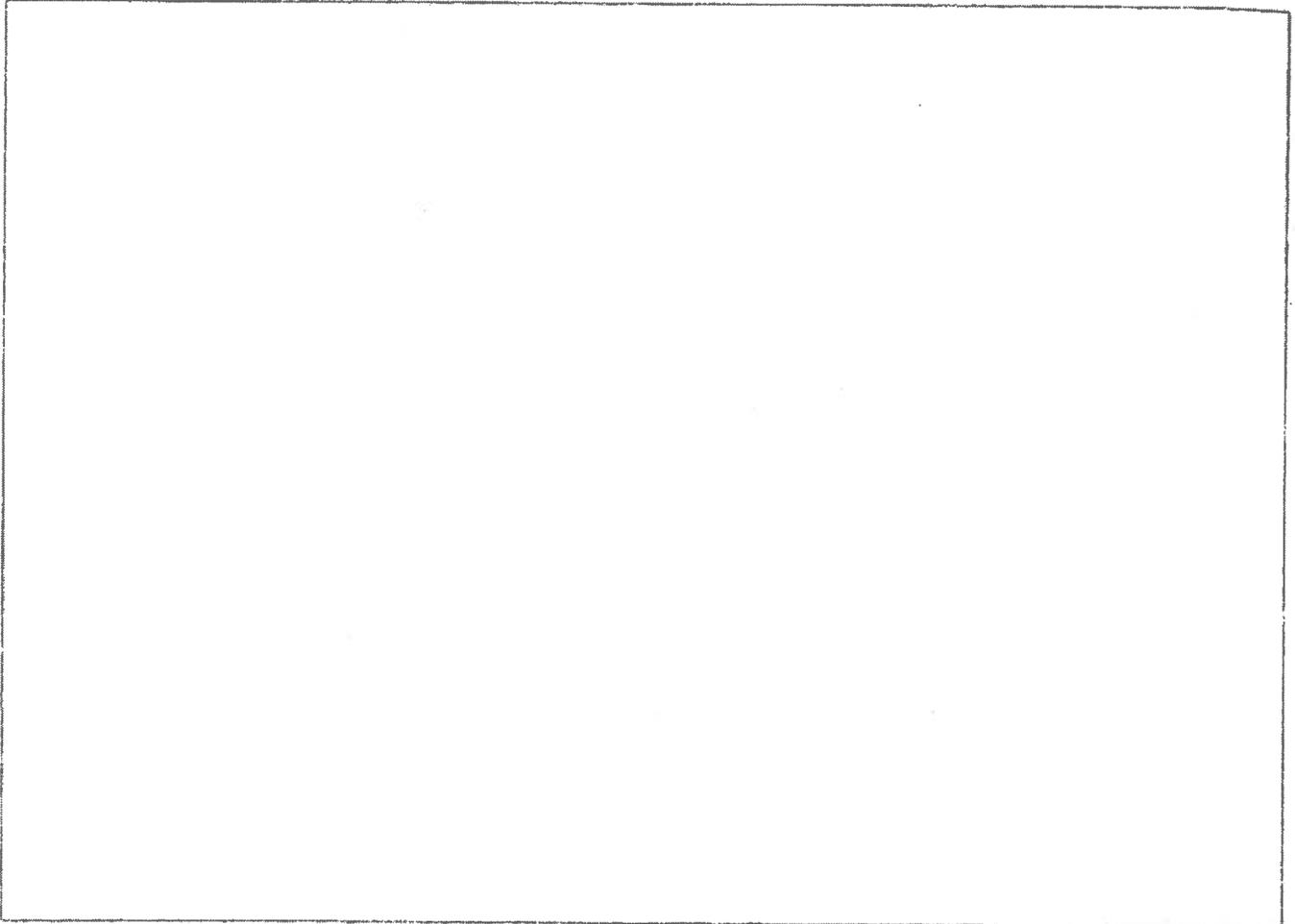
**From:** Brad Jones [Redacted]  
**To:** Summers, Lawrence  
**Sent:** Sat Dec 26 21:10:49 2009  
**Subject:** RE: Happy holidays

Hi Larry, good to hear from you.



As for policy, I am less enthusiastic about what the government has done. I certainly think a stimulus was needed, and extending unemployment benefits and providing temporary help to those in need was good both as a benevolent policy and as a way to put cash in the system that would be spent right away. But much of the other spending is generating little benefit and the long term debt of the US is troubling. The job creation has been mostly public sector, not great in terms of growing the economy. The allocation of spending to clean energy is haphazard; the government is just not well equipped to decide which companies should get the money and how much. That is, after all, what my industry does, and there are lots of mechanisms in place to see that it is done right. One of our solar companies with revenues of less than \$100 million (and not yet profitable) received a government loan of \$580 million; while that is good for us, I can't imagine it's a good way for the government to use taxpayer money (I'd prefer my opinion about that specific company

be between us). Every administration seems to feel like it knows better than the private markets how to allocate capital, and I've just never seen that be true.



I hope you find some of this useful. I'm happy to talk more if I can ever help. Have a great new year!

Brad



—Original Message—

From: Summers, Lawrence [redacted]  
Sent: Thursday, December 24, 2009 4:00 AM  
To: Brad Jones  
Subject: Happy holidays

Am collecting year end views. Interested in left coast perspectives on economy markets and econ policy and especially advice. Hope our paths cross. Best larry

**Footnote 319, 320**

---

**From:** Steve Mitchell [REDACTED]  
**Sent:** Monday, January 18, 2010 2:50 AM  
**To:** Ken Levit  
**Subject:** Re: Solyndra

Funny you say that. It is a little more front of mind in the 3 or 4 days then it ever has been. I pride myself in not over thinking these things but as this point it is hard not to wring my fingers. They hit the \$100 million for Q9 and first half of the year is sold out and second half looks good, fab 2 is two months ahead of schedule and on budget. So you start thinking where's the bad news. And you think doe loan!

----- Original Message -----

**From:** Ken Levit [REDACTED]  
**To:** Steve Mitchell  
**Sent:** Sun Jan 17 20:45:41 2010  
**Subject:** Re: Solyndra

Must be hard to sleep at night.

----- Original Message -----

**From:** Steve Mitchell [REDACTED]  
**To:** Ken Levit  
**Sent:** Sun Jan 17 20:46:26 2010  
**Subject:** Re: Solyndra

Whenever they decide to tell us. It is that unclear and random. We were the first group passed to the final level for this batch of loans and they have been talking with us as if we will get it. Let's just hope politics don't get in the way as the doe seems inclined to give it to us soon.

----- Original Message -----

**From:** Ken Levit [REDACTED]  
**To:** Steve Mitchell  
**Sent:** Sun Jan 17 20:43:02 2010  
**Subject:** Re: Solyndra

When do you hear on doe loan?

----- Original Message -----

**From:** Steve Mitchell [REDACTED]  
**To:** Ken Levit  
**Sent:** Sun Jan 17 20:43:34 2010  
**Subject:** Re: Solyndra

Ipo is filed so the option is there. Unless there is a radical change in the public markets then they will have the option to go public. They don't need the doe loan to go public but if the per share price isn't high enough (\$10 per share which is 2.5x are basis) then we have a block on the company's ability to go public. Without the loan they will have trouble getting that valuation (at least that's what I think) so if they don't get the loan and they want to go public it will be up to us. Since we own so much we won't have liquidity (or at least not much) so if they want us to waive the share price restriction we will probably ask for some goodies (think warrant coverage and some additional registration rights).

----- Original Message -----

From: Ken Levit [REDACTED]

To: Steve Mitchell

Sent: Sun Jan 17 20:20:34 2010

Subject: Solyndra

So...what r u thinking these days? Ipo this year? Does it depend entirely on the loan? When do we hear?

## **Footnote 321**

---

**From:** Steve Mitchell [REDACTED]  
**Sent:** Thursday, February 11, 2010 2:10 AM  
**To:** George Kaiser [REDACTED] Ken Levit; [REDACTED]  
**Cc:**  
**Subject:** Fw: Successful meeting with Jonathan Silver  
**Attachments:** 2010-02-09 Jonathan Silver - Solyndra Update.pdf

George,

This sounds as if the meeting with the DOE went as well as we could have hoped for.

Steve

**From:** Chris Gronet [REDACTED]  
**To:** [REDACTED]  
<rsilve@...>  
Tom Baruch [REDACTED] David Prend [REDACTED] Steve Mitchell; Jamie McJunkin [REDACTED]  
[REDACTED]  
**Sent:** Wed Feb 10 19:41:43 2010  
**Subject:** Successful meeting with Jonathan Silver

Hi All,

Please find below [REDACTED] report regarding our meeting with Jonathan Silver yesterday. It was successful; he received and processed our messages and played them back. But we don't have a firm answer on the Phase 2 application. The snow prevented Jonathan from meeting with his staff before our meeting (the DOE offices were closed, but he was there), so he could not provide any detailed updates. The next hurdle is to be accepted for the start of diligence. We all felt positive by the end of the meeting that we would cross this hurdle in the next two weeks, and there was discussion about using the same diligence partners to minimize time and overhead. After that, the challenge will be the calendar. There are a number of applications ahead of us that are scheduled for action by CRB and OMB.

Other notes:

1. Quote from Jonathan regarding our Fab 2 Phase 2 project: "A May groundbreaking is not out of the question." The context here is that groundbreaking means closure of the loan, implying that the guarantee could come much sooner.
2. He may seek our help in Congressional hearings to support his messages for the LGP (next hearing in two weeks).
3. He was impressed that we have developed a U.S. supply chain which not only creates more U.S. jobs and economic stimulus but also protects our IP.
4. I believe we now have an open line of communication. His last email: "Glad we could get together. I appreciated the update. You have made admirable progress. I look forward to staying in touch."
5. We are not the only company seeking a second loan guarantee.

Best regards,

Chris Gronet  
CEO  
Solyndra, Inc.  
47700 Kato Road  
Fremont, CA 94538 USA

From [REDACTED]

We (including [REDACTED]) had an encouraging meeting yesterday with Jonathan Silver. As you know, the snowy weather on the East Coast has effectively shut down the US Government, and our meeting scheduled for Wednesday at DOE was in jeopardy. Fortunately, we were able to reach Jonathan in his office, and he agreed to meet us yesterday at our hotel.

Jonathan is a smart, no-nonsense businessman with a clear mandate to execute successful loan guarantee transactions using a traditional project finance approach. That said, he is acutely sensitive to the political ramifications of any LGPO action, and this pressure colored all of his comments.

We were successful in establishing our key themes, and Jonathan was repeating them to us by the end of the session: strong management, great execution, significant market and market penetration, mature technology, capacity to close quickly on Phase 2, capacity to create jobs, one of DOE's winners. A copy of the presentation we used is attached. Not attached are a time-lapse video of the Fab 2 Front End construction and an aerial tour video of our manufacturing complex. These images had a powerful impact on Jonathan, and he acknowledged that Solyndra is frequently cited as a success story for DOE.

We had a lengthy discussion surrounding the issue of access to capital from sources other than DOE. He was particularly interested to hear why the debt markets are closed for companies of our type because that question is put to him with frequency by various constituents, some of whom apparently suggest that the capital markets have thawed.

Because DOE was closed today, Jonathan's staff did not have the opportunity to provide an advance briefing related to our Phase 2 application status. Nevertheless, Jonathan appeared to acknowledge that we will likely move to the due diligence stage when he directly engaged in a discussion of the potential political challenges that a second Solyndra loan guarantee would present. Rather than challenge the merits of our application, he moved on to think through the political implications of a second loan guarantee. Jonathan asked us for assistance in crafting the messages in response to four questions that he anticipated from his various constituents:

1. As a policy matter, why should DOE give additional loan guarantees to companies that had previously received them?
2. As a policy matter, why should DOE give additional loan guarantees to companies that have not yet achieved significant milestones of success with their first loan?
3. If a company that seeks a second loan guarantee has a compelling value creation story and substantially mitigated downside risk, why does it not have access to traditional forms of capital?
4. Why should DOE move quickly to approve a second loan guarantee application when many other applicants across technologies have yet to receive their first?

Jonathan was able to provide responses to each question based on the content of our presentation and our discussion; however, he asked us to repackage the content to expressly address these four questions. He is

clearly preparing his responses to DOE's CRB (Credit Review Board), Congress, OMB, the Treasury, and other entities that have influence. Jonathan is smart enough to know that he will succeed by getting ahead of any negative reaction. We think it as a positive sign that he's asking us to partner with him to help address those that would challenge the approval of a Phase 2 loan guarantee and any second loan guarantees offered to other applicants.

Jonathan did say that above all other political matters, the creation of jobs is currently of paramount importance to many of his constituents. He appreciated that we have the capability to immediately create thousands of jobs with Phase 2.

This e-mail and any accompanying attachments contain information that is confidential to Solyndra, Inc. The information is intended solely for the use of the individual to whom it is addressed. Any review, disclosure, copying, distribution, or use of this e-mail communication by others is strictly prohibited. If you are not the intended recipient, please notify us immediately by returning this message to the sender and delete all copies. Thank you for your cooperation.

## **Footnote 322, 323**

---

**From:** Steve Mitchell [REDACTED]  
**Sent:** Saturday, February 27, 2010 2:00 PM  
**To:** Ken Levit  
**Subject:** Re: [REDACTED]

That's awesome! Get us a doe loan

---

**From:** Ken Levit [REDACTED]  
**To:** Steve Mitchell  
**Sent:** Sat Feb 27 07:55:17 2010  
**Subject:** Re: [REDACTED]

They about had an orgasm in Biden's office when we mentioned Solyndra.

---

**From:** Steve Mitchell [REDACTED]  
**To:** Ken Levit  
**Sent:** Sat Feb 27 07:49:07 2010  
**Subject:** Re: [REDACTED]

We've been giving [REDACTED] updated numbers. They are working on some bill asking for money but I've just been getting them dollar numbers so I don't really know. That process is foreign to me

---

**From:** Ken Levit [REDACTED]  
**To:** Steve Mitchell  
**Sent:** Sat Feb 27 06:46:15 2010  
**Subject:** Fw: [REDACTED]

Is stuff going on? I got a report yesterday from a lobbyist at capital that was a bit screwy about quality jobs act changes. Curious.

---

**From:** [REDACTED]  
**To:** Ken Levit  
**Sent:** Sat Feb 27 06:44:04 2010  
**Subject:** Re: [REDACTED]

[REDACTED]

-----Original Message-----  
**From:** Ken Levit [REDACTED]  
**To:** [REDACTED]  
**Sent:** Sat, Feb 27, 2010 6:30 am  
**Subject:** Re: [REDACTED]

Thanks. We met with ARRA Recovery Team in Biden's office--they seemed to love our [REDACTED]--also all big fans of Solyndra.

**From:** [REDACTED]  
**To:** Ken Levit  
**Sent:** Sat Feb 27 05:43:45 2010  
**Subject:** Re: [REDACTED]

[REDACTED]

-----Original Message-----  
**From:** Ken Levit  
**To:** [REDACTED]  
**Sent:** Sat, Feb 20, 2010 2:26 pm  
**Subject:** RE: [REDACTED]

[REDACTED]

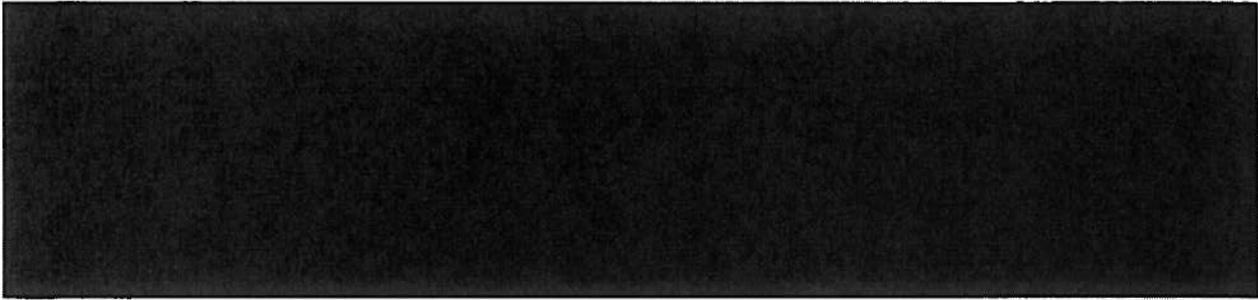
-----Original Message-----  
**From:** [REDACTED]  
**Sent:** Sat 2/20/2010 2:14 PM  
**To:** Ken Levit  
**Subject:** Re: [REDACTED]

[REDACTED]

-----Original Message-----  
**From:** Ken Levit  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Sent:** Sat, Feb 20, 2010 1:31 pm  
**Subject:** RE: [REDACTED]

[REDACTED]

-----Original Message-----  
**From:** [REDACTED]  
**Sent:** Sat 2/20/2010 6:25 AM  
**To:** Ken Levit  
**Subject:** [REDACTED]



**Footnote 327, 330**

---

**From:** Steve Mitchell [REDACTED]  
**Sent:** Saturday, March 06, 2010 3:00 PM  
**To:** George Kaiser  
**Cc:** [REDACTED] Ken Levit  
**Subject:** Re:

Ideally we would wait for the DOE loan to close. However, if the loan looks fairly certain we will need to have the equity raised so we can start phase 2 upon completion of phase 1. There will also be a lot of shareholder pressure to go public if the market is receptive once the DOE announcement is made. There is a general fear among the VC's that the public market opens in "windows" and you need to take advantage of a window if it is presented and you are ready - not sure I completely buy that. As it gets closer I will be reaching out to you and our group as to our thoughts on where we want this to go - we have quite a bit of say with app 40% of the vote. if we do approve an ipo earlier then we may like we may want to ask for some special registration rights in the future and coordinating selling on the part of the VC's so they don't cause turmoil in the market post lock-up

---

**From:** George Kaiser  
**To:** Steve Mitchell  
**Cc:** [REDACTED] 'Ken Levit' [REDACTED]  
**Sent:** Fri Mar 05 18:38:52 2010  
**Subject:** RE:

Sounds good. I assume that we would not move ahead with the offering until we have formal DOE approval or would you issue while you are under due diligence?

BTW, a couple of weeks ago when Ken and I were visiting with a group of Administration folks in DC who are in charge of the Stimulus process (White House, not DOE) and Solyndra came up, every one of them responded simultaneously about their thorough knowledge of the Solyndra story, suggesting it was one of their prime poster children.

---

**From:** Steve Mitchell  
**Sent:** Friday, March 05, 2010 3:39 PM  
**To:** George Kaiser  
**Cc:** [REDACTED] 'Ken Levit'  
**Subject:** FW:

George,

Chris Gronet had a good call with Jonathan Silver of the DOE today. Apparently our application has been caught up with several other groups who were also wanting a second bite at the DOE loan guaranty apple. This started a policy discussion as to whether a company should be able to get a second loan. Jonathan Silver championed the cause that they should and he has just this week apparently won that battle. He would not say that we are the first one that will be considered but he all but did - he conceded that we are the only company to have actually closed and funded on our loan and most of the other companies still have no revenues. He has asked for another call for next wed or thur but said he will not have an answer then but that he is hoping to release an answer with a couple of weeks. To be clear, then "answer" we are looking for is that the DOE will then proceed on formal due diligence and toward a term sheet - so not definitive that we get the loan guaranty but broadly (including Goldman, MS and others close to the DOE process) seen as a very positive sign as it is the same diligence that the DOE conducted on the front end of the fab (same engineering teams and the environmental - which was the single largest gating item last time - is already done on the entire

sight). So it appears things are headed in the right direction and Chu is apparently staying involved in Solyndra's application and continues to talk up the company as a success story.

Please let me know if you have any questions.

Steve

**From:** Chris Gronet [REDACTED]  
**Sent:** Friday, March 05, 2010 2:37 PM  
**To:** Steve Mitchell  
**Subject:**

Hi Steve,

Jonathan Silver was very positive but didn't have a definite answer on diligence yet. We will talk again next Thurs.

Chris Gronet  
CEO  
Solyndra, Inc.  
47700 Kato Road  
Fremont, CA 94538 USA  
[REDACTED]

This e-mail and any accompanying attachments contain information that is confidential to Solyndra, Inc.

The information is intended solely for the use of the individual to whom it is addressed. Any review, disclosure, copying, distribution, or use of this e-mail communication by others is strictly prohibited.

If you are not the intended recipient, please notify us immediately by returning this message to the sender and delete all copies.

Thank you for your cooperation.

## **Footnote 332**

---

**From:** Steve Mitchell [REDACTED]  
**Sent:** Thursday, March 11, 2010 4:58 PM  
**To:** George Kaiser  
**Cc:** [REDACTED] Ken Levit; [REDACTED]  
**Subject:** Fw: Good news from DOE!

Fyi, this is great news and a gating item to get the DOE loan guaranty completed. Timing is still being sorted out and the DOE needs to repeat the diligence from last time, but this gets us past the very large question of whether the department would be willing to give a company a second loan. This is very confidential at this point.

**From:** Chris Gronet [REDACTED]  
**To:** [REDACTED] Tom Baruch  
[REDACTED] David Prend [REDACTED]  
Steve Mitchell; [REDACTED]  
**Sent:** Thu Mar 11 09:42:28 2010  
**Subject:** Good news from DOE!

Hi All,

I just finished a very positive call with Jonathan Silver. He would like us to move forward with the diligence for Phase 2 of Fab 2 immediately. He anticipates that the diligence will be efficient and will likely use the same third parties as Phase 1.

Best regards,

Chris Gronet  
CEO  
Solyndra, Inc.  
47700 Kato Road  
Fremont, CA 94538 USA  
[REDACTED]

This e-mail and any accompanying attachments contain information that is confidential to Solyndra, Inc. The information is intended solely for the use of the individual to whom it is addressed. Any review, disclosure, copying, distribution, or use of this e-mail communication by others is strictly prohibited. If you are not the intended recipient, please notify us immediately by returning this message to the sender and delete all copies. Thank you for your cooperation.

## **Footnote 333**

**From:** [REDACTED]  
**To:** [REDACTED]  
**Subject:** RE: solar manufacturing projects - in-house technical advisor  
**Date:** Tuesday, March 23, 2010 4:18:41 PM

---

[REDACTED]

[REDACTED] has been assigned as the in-house resource for [REDACTED]. He should be working on the technical information packages. I am surprised he has not contacted you directly but will follow up.

With respect to the solar projects: [REDACTED] Solyndra, [REDACTED] I expect to have a new subcontractor [REDACTED] to be on board by April 1. [REDACTED] has letters of intent to hire four solar power industry specialists. Two will be on site support to us. I know you are concerned with the flood of projects that are coming to due diligence from the 2009 solicitation Round 1 reviews. I have been monitoring that inflow and have been actively seeking qualified in-house persons to support you and others.

I ask for your patience as I know it might be frustrating to you. But, I can assure you that we have been preparing for the added work and will provide support to you.

Let's talk later when we have a chance.

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** Tuesday, March 23, 2010 12:50 PM  
**To:** [REDACTED]  
**Subject:** solar manufacturing projects - in-house technical advisor  
**Importance:** High

[REDACTED]

As we previously discussed, I have 4 projects in need of an in-house technical advisor and/or independent engineering firm

- (1) [REDACTED] already in DD process. RW Beck has submitted its draft report and I would like input from your team - needs in-house technical advisor
- (2) [REDACTED] - needs independent engineering firm and in-house technical advisor

ROUND 1 PROJECTS TO ENTER DUE DILIGENCE -

3) Solyndra - Solar Manufacturing - needs independent engineering firm and in-house technical advisor. In this case, it would make sense to assign the same teams to the transaction. Let's discuss this issue when you have a few minutes since I am planning to suggest the same for the market and legal side.

4) [REDACTED] - needs independent engineering firm and in-house technical advisor

Let me know when we can chat about these assignments.

Regards,

[REDACTED]

Senior Investment Officer  
Loan Guarantee Program  
US Department of Energy

[REDACTED]

**From:** [REDACTED]  
**Sent:** Tuesday, March 23, 2010 10:32 AM  
**To:** Frantz, David; Silver, Jonathan  
**Cc:** [REDACTED] Richardson, Susan; [REDACTED]  
**Subject:** Projects Entering Due Diligence from Round 1  
**Importance:** High

Dave/Jonathan,

The following list includes projects entering due diligence from Round 1. The origination packages are complete and include each project's description and recommended areas to address during due diligence. I will prepare a short summary package for you detailing each project so you can use them as needed. The origination officers and NEPA staff have been briefed on all of their respective projects and each project sponsor has been notified of their acceptance into due diligence. The NEPA process can begin immediately and the RSCAP process can follow shortly thereafter once the origination officers hold their kick-off meetings and determine how to proceed.

**Outstanding Items**

- 1) We're still waiting to hear back from [REDACTED] regarding the [REDACTED] project and the status of the permit appeal.
- 2) Waiting to hear back on how to proceed with [REDACTED] project.
- 3) DOE will be notifying [REDACTED] that their project will officially need to come through the FIPP program. [REDACTED] has begun working with [REDACTED] on that specific deal.

**ROUND 1 PROJECTS TO ENTER DUE DILIGENCE - 3/17/2010**

- 1) Solyndra - Solar Manufacturing [REDACTED]
- [REDACTED]
- [REDACTED]

## **Footnote 334, 335**

[REDACTED]

---

**From:** Silver, Jonathan  
**Sent:** Tuesday, April 06, 2010 10:27 AM  
**To:** [REDACTED]; Rogers, Matt  
**Cc:** [REDACTED]; OConnor, Rod; Hurlbut, Brandon; Owens, Missy; Frantz, David; [REDACTED]  
**Subject:** RE: Solyndra

Jonathan Silver  
Executive Director  
Loan Programs  
US Department of Energy  
1000 Independence Avenue, S.W.  
Washington, DC 20585

[REDACTED]

While we do need to track Solyndra (and will), it is not uncommon for high growth, development stage companies to get what are called "going concern" letters from their auditors. This is simply recognition of the fact that these companies continue to need to raise capital to reach profitability (and, hence, one of the reasons they file IPO's). This information is not new; it's just new to the bloggers, who found it in the company's SEC filings. The majority of venture backed IPO candidates that have not yet reached profitability when they file to go public receive some variant on this language. The real test of how the company is doing is their revenue ramp rate (assuming their burn is under control). In 2008, Solyndra did 6 million in revenue; last year, they did 100 million. Their first quarter this year is very strong. This doesn't mean the company can't run into trouble and, if the effort to go public were shelved and they couldn't raise private capital, there could well be issues. But, the fact that they got a going concern letter is not, at the moment, material.

-----Original Message-----

**From:** [REDACTED]  
**Sent:** Tuesday, April 06, 2010 9:28 AM  
**To:** [REDACTED]; Rogers, Matt; Silver, Jonathan  
**Cc:** [REDACTED]; OConnor, Rod; Hurlbut, Brandon; Owens, Missy  
**Subject:** Solyndra

I hadn't seen this but [REDACTED] mentioned this morning. If you have seen already, mea culpa.

This piece ran on Saturday on the SF Chron. Not sure if we've gotten Qs about it yet. Might influence how we position Solyndra as our gold standard moving forward.

<http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2010/04/02/BU5K1CP7JA.DTL>

It says "an audit of Solyndra Inc., one of several green-tech startups planning an initial public stock offering, has raised questions about whether the Fremont company can survive its substantial losses.

The audit, by PricewaterhouseCoopers, was filed with the U.S. Securities and Exchange Commission in March as part of an amendment to Solyndra's IPO application. Auditors noted

Solyndra's sizable losses - \$518.7 million in the past three years - and its accumulated deficit of \$557.7 million.

Solyndra, the auditors wrote, "has suffered recurring losses from operations, negative cash flows since inception and has a net stockholders' deficit that, among other factors, raise substantial doubt about its ability to continue as a going concern."

## **Footnote 336**

**From:** [REDACTED]  
**To:** Frantz, David; [REDACTED]  
**Cc:** Richardson, Susan; [REDACTED]  
**Subject:** solyndra bullet points  
**Date:** Tuesday, April 06, 2010 10:55:03 AM  
**Attachments:** Solyndra - structure talking points (going concern).docx

---

Attached is a draft of some talking points on the latest Solyndra tempest.

Use for whatever.

William G. Miller  
Loan Guarantee Program  
Department of Energy  
[REDACTED]

## **Solyndra Talking Points**

### **Deal Structure**

- The Project covered by the DOE Loan Guarantee (“Fab2 Phase 1”) is structured as Limited Recourse Project Finance
- All of the required equity for the Project has been contributed and is held in escrow until used to cover construction expenses
- The budgeted Project costs provide for contingency costs higher than usual industry practice
- The Parent has provided full construction completion support, backed by a cash account to be funded during construction
- Parent company is a prime equipment supplier to the Project, will operate the facility and will be the purchaser/sales agent of the Project’s output
- There is no other reliance on or recourse to the Parent’s balance sheet
- None of the proceeds for the intended IPO are required for or will be used to support the existing DOE loan facility

### **Parent Company**

- Other than the DOE loan facility, the Parent company has no significant debt
- Parent shareholders have invested ~\$1 Billion in equity in the company to date (including the equity for DOE-guaranteed Project)
- Parent company fully paid the debt financing on its Fab1 line prior to closing the DOE loan facility
- Parent company has addressed the “going concern” issue in its “Open Letter”

### **Project Status**

- Seven months into the construction, the Project is ahead of schedule and under budget.
- The Project and the Parent have to date fully complied with all conditions of the Loan
- These conditions include specific reporting and certifications for each loan disbursement (essentially, monthly) and separate and more detailed reporting quarterly
- Submission and review of these reports and certificates are confirmed by lender independent engineer and DOE outside law firm

## **Footnote 339**

---

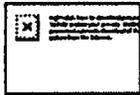
**From:** George Kaiser  
**Sent:** Wednesday, April 07, 2010 1:12 PM  
**To:** Steve Mitchell  
**Subject:** FW: FW: Google Alert - Solyndra

I wonder what impact this all has on the DOE. It's a very risky strategy but perhaps they need to emphasize how completion of Fab 2 is the critical variable in assuring the company's success. It's the old bad money after good argument.

---

**From:** Google Alerts [mailto:googlealerts-noreply@google.com]  
**Sent:** Wednesday, April 07, 2010 2:50 AM  
**To:** George Kaiser  
**Subject:** Google Alert - Solyndra

### Google News Alert for: **Solyndra**



Bizjournals.com  
(blog)

#### Solyndra responds to audit letter

Bizjournals.com (blog)

Solyndra CEO Chris Gronet responded to the media frenzy prompted by an auditor's letter that called into question the company's ability to continue "as a ...

[See all stories on this topic](#)



BNET

#### The Perils of Innovation: Solyndra, Solar's Most Financed Company, May

Fail

BNET

Solyndra, one of the solar industry's most feted, financed, and generally gawked-at companies is at risk of failing, according to an independent audit by ...

[See all stories on this topic](#)

#### Sun shines on Suniva as outlook darkens for Solyndra's IPO

Business Green

The news came as reports late last week suggested rival solar PV firm Solyndra is facing severe financial difficulties. The company, which plans to raise up ...

[See all stories on this topic](#)



PV Tech (blog)

#### Guest blog: Photovoltaics—The time is now for pragmatic leadership

PV Tech (blog)

Last week, Reuters and other news outlets reported that Solyndra's future was in doubt. With just short of \$1 billion in equity financing and more than \$500 ...

[See all stories on this topic](#)

#### EcoFactor makes thermostats smarter with new \$3.5M

VentureBeat

Cleantech investing may be on the rebound, but much of it will probably go toward companies like EcoFactor over Solyndra or Fisker Automotive. ...

[See all stories on this topic](#)

### Google Blogs Alert for: **Solyndra**

**Climateer Investing: "The Daily Start-Up: Auditor Questions ...**

By climateer

Solyndra has become the solar company to watch ever since it nabbed that \$535 million loan guarantee from the Energy Department. Filing for an IPO in late December was just the next step to claim its title as one of the most promising ...

Climateer Investing - <http://climateerinvest.blogspot.com/>

**Best Make Money » Solyndra's finances raise IPO questions**

By admin

An audit of Solyndra Inc., one of particular green-tech startups planning an initial public stock offering, has raised questions in regard to whether the Fremont company can survive its substantial losses. ...

Best Make Money - <http://best-make-money.com/>

**Sun shines on Suniva as outlook darkens for Solyndra's \$300m IPO**

By admin

US-based Suniva is to use a government-backed loan to help treble its export capacity over the next five years, according to a statement made by the solar panel.

EnviroLib - <http://envirolib.org/>

**The Perils of Innovation: Solyndra, Solar's Most Financed Company ...**

By from Syndicated News Feed

BNETThe Perils of Innovation: Solyndra, Solar's Most Financed Company, May FailBNETRather than a flat solar panel, Solyndra sells round tubes that contain a rolled solar cell — the shape of each tube is close to that of a commercial.

Home Solar Panels Blog - <http://www.solarpanelknowledge.com/blog/>

**The Perils of Innovation: Solyndra, Solar's Most Financed Company ...**

By "solar panel" - Google News

The Perils of Innovation: Solyndra, Solar's Most Financed Company, May Fail - BNET, Solar Power Panel Central - number one source of photovoltaic panels, PV, solar panel, solar energy cells on the Internet. Information on retail, DIY, ...

Solar Power Panel Central - <http://www.solar-power-panel.net/>

**Google Web Alert for: Solyndra**

**Roundup: Total Oil Spill, Solyndra Warned by Auditor ...**

Roundup: Total Oil Spill, Solyndra Warned by Auditor. Bookmark and Share ... Solyndra Gets Warning from Auditor and Admits its Solar is Costly. GreenTech ...

[www.environmentalleader.com/.../roundup-total-oil-spill-solyndra-warned-by-auditor/](http://www.environmentalleader.com/.../roundup-total-oil-spill-solyndra-warned-by-auditor/)

**Et tu, Solyndra? | Tri-City Beat**

With NUMMI closed, solar panel maker Solyndra has emerged as one of Fremont's highest profile companies. But with Solyndra preparing to go public, ...

[www.ibabuzz.com/tricitybeat/2010/04/06/et-tu-solyndra/](http://www.ibabuzz.com/tricitybeat/2010/04/06/et-tu-solyndra/)

**The Daily Start-Up: Auditor Questions Solyndra's Viability ...**

In this morning's Web roundup, Solyndra's auditors express doubts about the solar manufacturer's finances. Also, Venrock eyes a smaller fund, ...

[blogs.wsj.com/venturecapital/2010/04/02/the-daily-start-up-auditor.../article/](http://blogs.wsj.com/venturecapital/2010/04/02/the-daily-start-up-auditor.../article/)

---

Tip: Use a plus sign (+) to match a term in your query exactly as is. [Learn more.](#)

[Remove](#) this alert.

[Create](#) another alert.

[Manage](#) your alerts.

**Footnote 340, 341, 342**

---

**From:** [REDACTED]  
**Sent:** Monday, April 26, 2010 3:08 AM  
**To:** Ken Levit  
**Subject:** Fw:

Well there is the ugly truth finally.

Please do not forward until we talk about this.

What a mess.

----- Original Message -----

**From:** Steve Mitchell [REDACTED]  
**To:** George Kaiser [REDACTED]  
**Cc:** [REDACTED] Ken Levit [REDACTED]  
**Sent:** Sun Apr 25 21:53:28 2010  
**Subject:** Fw:

----- Original Message -----

**From:** Steve Mitchell  
**To:** Steve Mitchell  
**Sent:** Sun Apr 25 21:52:32 2010  
**Subject:**

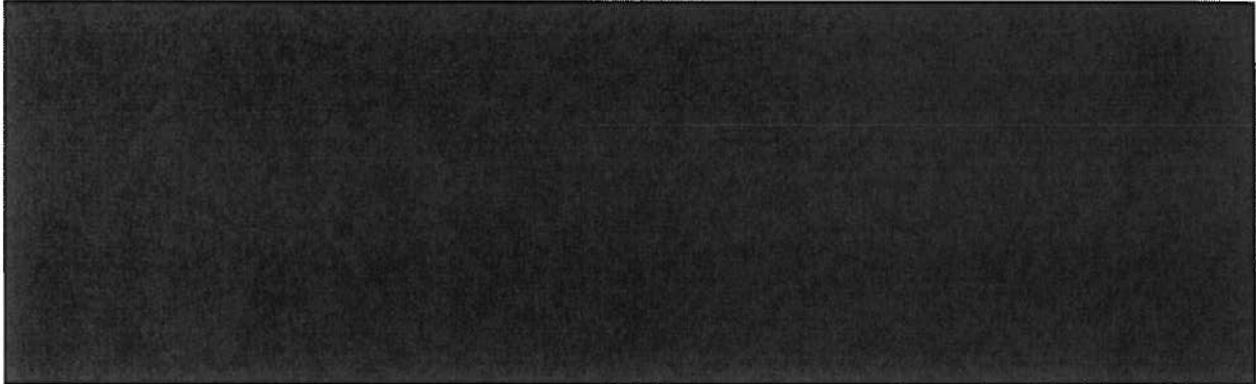
George,

As discussed, Solyndra is facing an unexpected increase in its projected capital needs to get to cash flow break even. I have been out at the company for the last two weeks and am headed back out tmrw morning as well. Under the business plan we had been operating under for the last year the company expected to need another \$50 million plus the equity portion of Fab 2 (likely \$250 to \$300 million) until it became a net cash producer. As previously discussed, the additional capital need for the company is now somewhere between \$200 and \$400 million (plus the phase 2 equity) - the difference in capital is primarily driven by when phase 2 occurs, panel pricing assumptions and watt per panel performance between now and 2012.

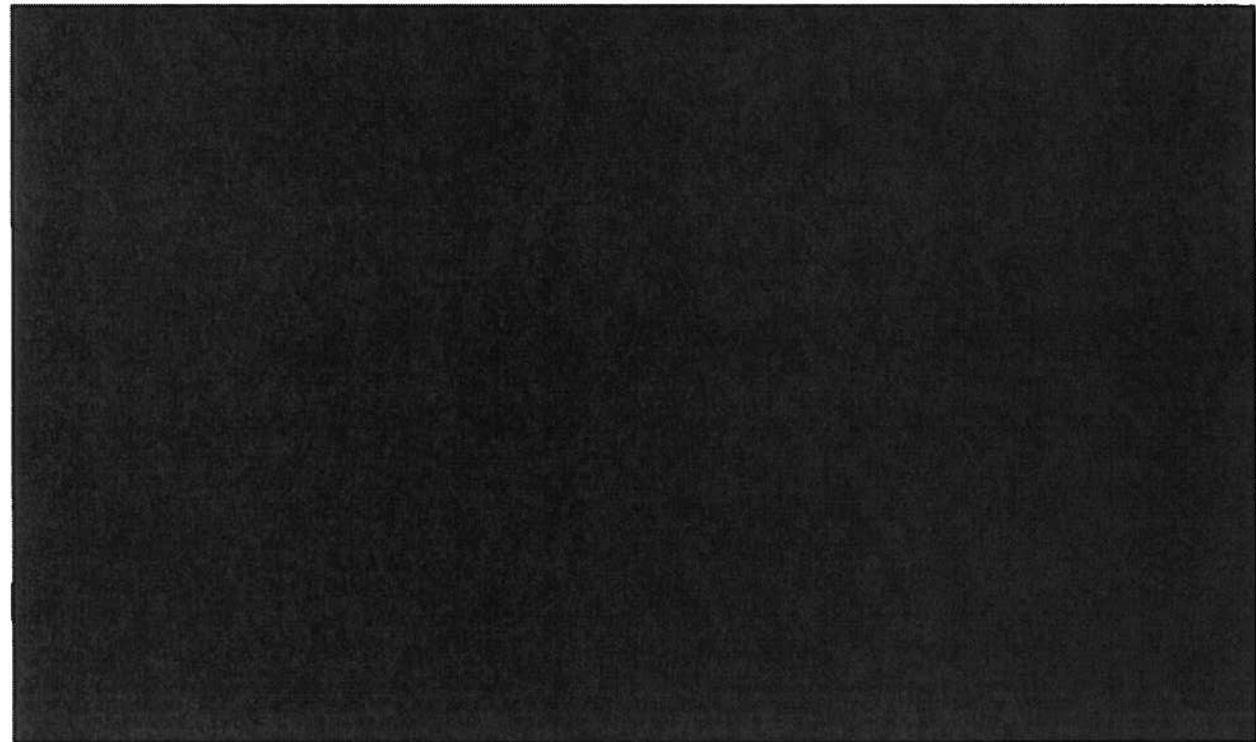
The miss was driven by four issues set out below in relation to their level of magnitude of impact on the company:

1) Chinese panel pricing: the Chinese are essentially dumping panels on the world market (apparently the WTO may bring charges but certainly that won't happen in a time that matters). The Chinese government has provided its three leading panel producers with essentially unlimited zero cost capital which has enabled them to completely vertically integrate and grind panel cost to a point that no one (analysts, competitors and us included) believed crystalline silicon could reach. As a result, Solyndra's price curve is declining at a faster than expected pace. This has forced the company to revise their price targets through 2013 and is the primary contributor to the projected capital shortfall. Important to note that Gronet was unwilling to accept that the market was forcing a lower price - he reacted unilaterally by forcing his sales people to maintain high pricing in spite of customers' pleas to "help them out" - this attitude worked when

Solyndra was on "allocation" during our ramp period and customers were very interested in trying out the panels. Unfortunately, Gronet over played his hand with these customers and burned a lot of bridges and started selling to lower tiered customers who would pay the higher price but as you know this comes at a price to the company as these customers can't meet our rapidly growing supply and are a lower credit risk as well.



3) Timing of DOE: Across the board management does believe we will get the DOE approval for phase 2, but the government does things in its own time line. The delay in the second phase pushes revenue generation from phase 2 off on a day for day basis. This also effects our cash needs as all of our equipment division and some of our overhead gets allocated to the project and is covered by the loan - this is not occurring until we close the loan and in the interim the company must fully fund these teams which impacts cash needs in the short term.





We are in the process of finalizing a revised business plan but it appears we will be projecting a capital need to break even of app. \$520 million which is on the low end of the outlook we were provided a couple of weeks back. We will present this plan to Goldman Sachs and Morgan Stanley at the end of this week with the intention of going public in the very near term (June) and hope to raise \$300 to \$350 million. We will have to go out on a Fab 2 phase 1 only business plan with the DOE and phase 2 as implicit upside in the plan. As a result, we have dramatically revised our valuation expectations from \$3 to \$4 billion pre-money to \$1 to \$2 billion (and would probably take the company public at \$750 million if necessary). In the event the company gets the phase 2 DOE approval, it will need another app. \$200 million of equity. We are anticipating that the bankers will push us to provide a solution for that capital need as it is assumed we will get the DOE loan and the IPO could suffer greatly from fear of a secondary offering in the short term and the resulting dilution (or potential IPO investors could sit on the side line and wait to see if we get the DOE loan knowing they can get an allocation then). We are anticipating a shareholder loan that goes into effect if certain covenants are met - the big ones being the IPO and the DOE loan approval. This loan would be in the \$200 million range and we anticipate it being very expensive for the current shareholders (we are trying to get it done on a pro-rata basis by all major shareholders to show support for the company).

I apologize that all of this is coming down at the end of what has felt like a very good deal for some time, but please know that we are 100% focused on making this work and I do believe there is still a lot of value we can extract from our investment - it just may take more time. I will continue to update you as things evolve.

Steve

---

**From:** [REDACTED]  
**Sent:** Saturday, May 08, 2010 2:02 AM  
**To:** [REDACTED] Ken Levit  
**Cc:** [REDACTED]  
**Subject:** Solyndra Update - More Important to Read than [REDACTED]

## Solyndra Update

Gentlemen - I apologize for the multiple emails but given the length and the issues discussed I decided to separate the emails for Solyndra and [REDACTED] into two.

To put it bluntly our poster child of private equity is acting up something fierce. The past five months have witnessed a tremendous competitive headwind for the company coupled with some severe management mistakes. Cutting to the chase - we will not be going public during 2010 and our longer term business plan looks to be somewhat in jeopardy. I am sorry to deliver this bad news, it's been sudden and unexpected but I'll attempt to summarize the issues and go forward plan.

Over the last six months the average selling price for solar panels globally has plummeted due to Chinese "dumping" which is really a combination of their breaking the cost barrier nobody thought they could and generous govt subsidies. Solyndra's business model has been predicated on maintaining a premium to traditional solar, and we have maintained that - but as the competitors price has fallen so has ours despite our maintaining a premium price. At the same time our CEO has been very slow to react, and on the sales side has harmed our large customer relationships with his unwillingness to find a middle ground. Couple this with continued issues speeding production and you have a brutal combination that leads to a \$200MM or more capital hole we did not expect in addition to the \$350MM we wanted to raise in an IPO to fund the next Fab alongside DOE loan two. It's the funding gap, coupled with the freefall in selling prices that have the bankers saying we can't go public and we shouldn't sell the company. Rather than go into even more detail, after my comments I have attached two emails from Steve doing a good job explaining the situation and the solutions we are working towards for those interested in all the dirty laundry. The punch line is that if all goes according to the recalculated plan we will be asked to put more \$'s into the company along with other insiders in order to bridge us to an IPO. The DOE loan, despite these issues, is still on track for October and should be flexible enough to allow for a 2011 IPO.

Clearly my key considerations have been understanding what went wrong, whether we have a handle on it (credible plan) and helping with the strategic decision around what path to go down next. To his credit Steve has been very communicative during this crisis review process and I am sitting in on the board discussions, the calls with bankers, and discussions with George. The board was very slow to recognize the problem - but the reaction has been swift as soon as the problems were discovered.

Steve has spent most of the last five weeks in Fremont at the company. Along with the board member from USVP and Madrone he is basically running the company now that Chris Gronet the CEO has been compromised with the board. Because of the huge time commitment Steve is making (rightly so) he, [REDACTED] and I sat down yesterday and went through his other companies to see where there might be people time needed while he is occupied. The good news, in contrast to [REDACTED] most of Steve's companies are managed in conjunction with [REDACTED] or myself and three of his companies are in a sales process. I'll be spending more time with [REDACTED] will help fill in some of the other spaces.

Obviously the surprise downward turn here is unexpected and unfortunate and I am sorry to have to relay this to you especially given how well things had been going. I think there is still a plan here to getting a solid return out of Solyndra for ourselves (and our friends and family shares alongside us) but we have pushed out any significant positive event until

2011 and perhaps 2012. The go forward plan is under discussion everyday and we hope to have a solid option for discussion next week.

As always I am happy to talk about any aspect of this.



Email's from Steve today and a week ago:

George

As discussed earlier today, both Goldman and Morgan Stanley have advised that Solyndra cannot realistically access the public markets today in light of size of capital need (\$300 to \$350 million), use of proceeds (viability capital - not growth capital), solar industry is specifically tough right now, our ASP drop needs to show stability (we've dropped prices from \$3.15/watt in Q4 09, \$2.88/watt last quarter to \$2.54/watt this quarter - we weren't reflective of the market the last 6 months but they feel strongly we need to show this decline curve flattening out through Q3 of this year), and it would be very helpful to have the DOE approval for phase 2 in hand prior to an IPO as well.

We have made many operational changes to the business that are taking hold and I believe have positioned the company to accomplish its revised plan of record. More importantly, we have asked the management team (and they have done so) to draw up a realistically conservative plan of record that they believe they will not miss. The three large components of Solyndra's business are watt per panel, average sales price and utilization.

As discussed in the prior email below, although the company made some poor decisions in the face of the onslaught of low priced Chinese panels, it is the dramatic move in the price of crystalline silicon panels (which is the baseline for pricing all solar panels) that has opened up an additional \$200 to \$250 million hole in the company's plan to cash break even.



The company will have a cash need beginning in July of this year and the vast majority of its capital need is within the next 12 months (\$300

million). We are working to raise \$300 million internally or to bring in a strategic partner, however, we don't believe we will be able to bring in a strategic partner within the timeframe necessary to fix the company's balance sheet in the short term. Accordingly, we are suggesting an internal round of \$200 million that has a bifurcated valuation - if the company can raise another \$150 million from a strategic (or internally) by Sept 1 then this round is priced as a pre-IPO round with various IRR hurdles depending on when the company goes public (probably 25% in 12 months, 40% from 12 to 24 months and 55% from 24 to 36 months)(we will also require the F round that was raised last year to reprice from \$750 million pre-money to \$500 million pre-money since the F's preference is probably in the money even if we sold the company in a fire sale today. Alternatively, if we don't raise the strategic capital then the "G round" would re-price at a very dilutive valuation (we are still working on this but we are talking about the new money converting into the greater of 80% of the company or a 40% IRR in an IPO or a 2.5X liquidation preference in a sale event). Our primary intent is to properly reward new capital for the risk and lower ultimate value of the company as well as to highly incent existing investors to write a check in this new round.

We are still working on the business operations and the framework in which we would recommend that GKFF invests additional capital but I wanted to get you and [REDACTED] (who we have been meeting with regularly on this) an update with the current situation. I will have another email with a more fleshed out transaction in the next 3 or 4 days for your questions and comments prior to discussing beyond our group and Madrone.

Please let me know what questions and comments you may have. I will be back at Solyndra's office the last part of next week.

Steve

----- Original Message -----

From: Steve Mitchell

To: Steve Mitchell

Sent: Sun Apr 25 21:52:32 2010

Subject:

George,

As discussed, Solyndra is facing an unexpected increase in its projected capital needs to get to cash flow break even. I have been out at the company for the last two weeks and am headed back out tmrw morning as well. Under the business plan we had been operating under for the last year the company expected to need another \$50 million plus the equity portion of Fab 2 (likely \$250 to \$300 million) until it became a net cash producer. As previously discussed, the additional capital need for the company is now somewhere between \$200 and \$400 million (plus the phase 2 equity) - the difference in capital is primarily driven by when phase 2 occurs, panel pricing assumptions and watt per panel performance between now and 2012.

The miss was driven by four issues set out below in relation to their

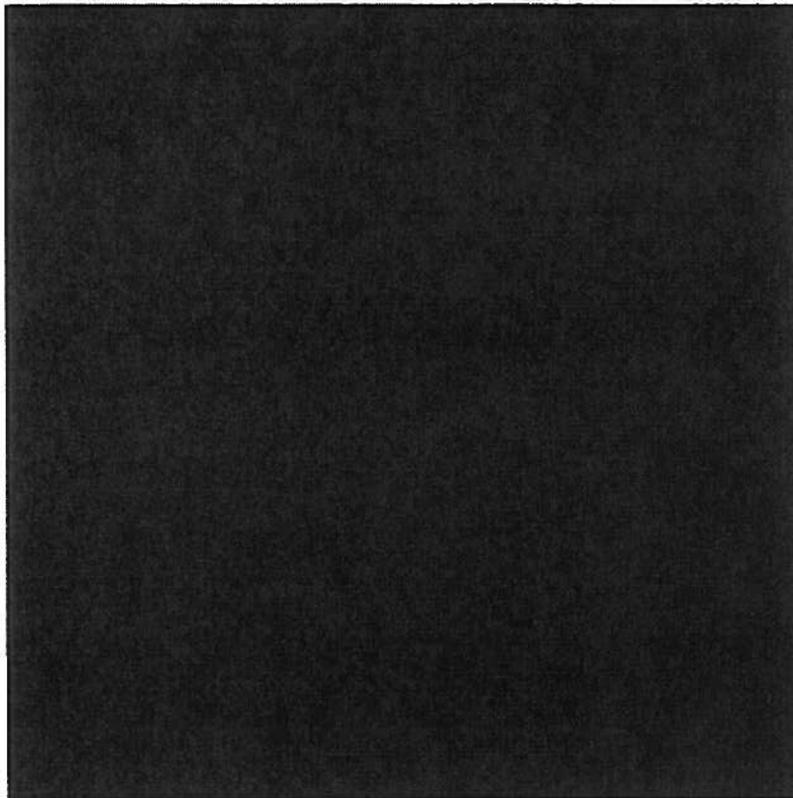
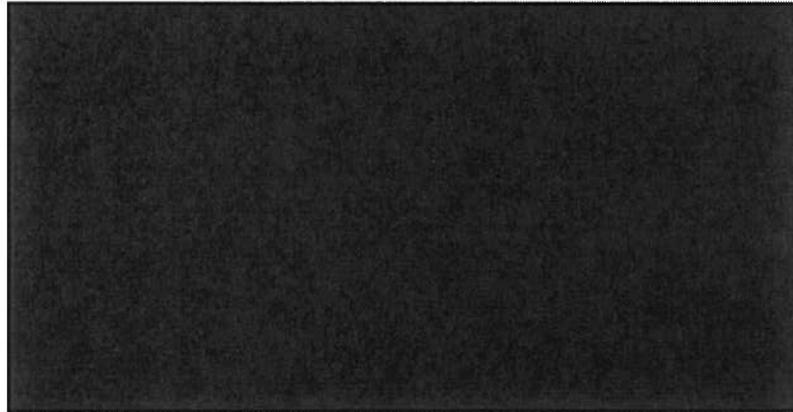
level of magnitude of impact on the company:

1) Chinese panel pricing: the Chinese are essentially dumping panels on the world market (apparently the WTO may bring charges but certainly that won't happen in a time that matters). The Chinese government has provided its three leading panel producers with essentially unlimited zero cost capital which has enabled them to completely vertically integrate and grind panel cost to a point that no one (analysts, competitors and us included) believed crystalline silicon could reach. As a result, Solyndra's price curve is declining at a faster than expected pace. This has forced the company to revise their price targets through 2013 and is the primary contributor to the projected capital shortfall. Important to note that Gronet was unwilling to accept that the market was forcing a lower price - he reacted unilaterally by forcing his sales people to maintain high pricing in spite of customers' pleas to "help them out" - this attitude worked when Solyndra was on "allocation" during our ramp period and customers were very interested in trying out the panels. Unfortunately, Gronet over played his hand with these customers and burned a lot of bridges and started selling to lower tiered customers who would pay the higher price but as you know this comes at a price to the company as these customers can't meet our rapidly growing supply and are a lower credit risk as well.



3) Timing of DOE: Across the board management does believe we will get the DOE approval for phase 2, but the government does things in its own time line. The delay in the second phase pushes revenue generation from phase 2 off on a day for day basis. This also effects our cash needs as all of our equipment division and some of our overhead gets allocated to the project and is covered by the loan - this is not occurring until we close the loan and in the interim the company must fully fund these teams which impacts cash needs in the short term.





We are in the process of finalizing a revised business plan but it appears we will be projecting a capital need to break even of app. \$520 million which is on the low end of the outlook we were provided a couple of weeks back. We will present this plan to Goldman Sachs and Morgan Stanley at the end of this week with the intention of going public in the very near term (June) and hope to raise \$300 to \$350 million. We will have to go out on a Fab 2 phase 1 only business plan with the DOE and phase 2 as implicit upside in the plan. As a result, we have

dramatically revised our valuation expectations from \$3 to \$4 billion pre-money to \$1 to \$2 billion (and would probably take the company public at \$750 million if necessary). In the event the company gets the phase 2 DOE approval, it will need another app. \$200 million of equity. We are anticipating that the bankers will push us to provide a solution for that capital need as it is assumed we will get the DOE loan and the IPO could suffer greatly from fear of a secondary offering in the short term and the resulting dilution (or potential IPO investors could sit on the side line and wait to see if we get the DOE loan knowing they can get an allocation then). We are anticipating a shareholder loan that goes into effect if certain covenants are met - the big ones being the IPO and the DOE loan approval. This loan would be in the \$200 million range and we anticipate it being very expensive for the current shareholders (we are trying to get it done on a pro-rata basis by all major shareholders to show support for the company).

I apologize that all of this is coming down at the end of what has felt like a very good deal for some time, but please know that we are 100% focused on making this work and I do believe there is still a lot of value we can extract from our investment - it just may take more time. I will continue to update you as things evolve.

Steve