U.S. Department of Energy
Office of Inspector General

Special Report

The Department of Energy's Loan Guarantee to Solyndra, Inc.

11-0078-I

August 24, 2015

Department of Energy
Washington, DC 20585

August 24, 2015

MEMORANDUM FOR THE SECRETARY

FROM: Gregory H. Friedman
Inspector General

SUBJECT: INFORMATION: Special Report: The Department of Energy's Loan Guarantee to Solyndra, Inc. (OIG Case No. 11-0078-I)

INTRODUCTION

This Special Report outlines the results of a 4-year investigation into concerns that Solyndra, Inc., (Solyndra) may have provided the Department of Energy with false and misleading information during the application process for a $535 million loan guarantee.

The *Energy Policy Act of 2005* (Act) established a Federal loan guarantee program for eligible energy projects that employed innovative technologies. Title XVII of the Act authorized the Secretary of Energy to make loan guarantees for a variety of types of projects, including those that "avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases; and employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued." The *American Recovery and Reinvestment Act of 2009* substantially expanded the program, adding billions of dollars of new authority, specifically focused on renewable energy systems, electric transmission systems, and leading edge biofuels projects. To date, the Department, through its Loan Programs Office (Loan Office), has supported a portfolio of more than $30 billion in loans, loan guarantees, and commitments covering more than 30 projects across the United States.

In September 2009, the Department made its first award under this program, a $535 million loan guarantee to Solyndra for the construction of a photovoltaic manufacturing facility in Fremont, California, referred to as Fab 2. In the ensuing 2 years, the Department disbursed over $500 million to Solyndra. In September 2011, the company initiated the layoff of 1,100 employees, ceased operations and manufacturing, and filed for bankruptcy protection.

In this report we outline the key aspects of our case. As with any 4-year investigation, it would be impossible to succinctly summarize all the evidence we collected and analyzed, and to capture all of the nuances and subtleties of the events that transpired. We are issuing this public report for two primary reasons. First, we believe there is a compelling public interest in this matter given the loss to U.S. taxpayers in excess of $500 million, a loss of confidence in the loan guarantee program, and the significant controversy that surrounded the Solyndra matter. Second, we have concluded that it is important that there be heightened awareness of key shortcomings in the Solyndra loan guarantee process and, in this context, that the Department be provided with certain lessons learned as it proceeds to exercise its authority to grant an additional $40 billion in loan guarantees.

FINDINGS

Our investigation confirmed that during the loan guarantee application process and while drawing down loan proceeds, Solyndra provided the Department with statements, assertions, and certifications that were inaccurate and misleading, misrepresented known facts, and, in some instances, omitted information that was highly relevant to key decisions in the process to award and execute the $535 million loan guarantee. In our view, the investigative record suggests that the actions of certain Solyndra officials were, at best, reckless and irresponsible or, at worst, an orchestrated effort to knowingly and intentionally deceive and mislead the Department.

We also found that the Department's due diligence efforts were less than fully effective. At various points during the loan guarantee process, Solyndra officials provided certain information to the Department that, had it been considered more closely, would have cast doubt on the accuracy of certain of Solyndra's prior representations. In these instances, the Department missed opportunities to detect and resolve indicators that portions of the data provided by Solyndra were unreliable. In the end, however, the actions of the Solyndra officials were at the heart of this matter, and they effectively undermined the Department's efforts to manage the loan guarantee process. In so doing, they placed more than $500 million in U.S. taxpayers' funds in jeopardy.

One question that remains is, "Could the Solyndra ordeal, with all of its consequences, have been avoided?" Although the question is impossible to answer with precision, we concluded that had Solyndra's executives met their obligation to provide the Department with complete, accurate, and timely information throughout the loan guarantee process, the Department would have been positioned to make a more realistic assessment of the risk factors. Department officials, in turn, would have been able to more confidently determine whether (1) the Solyndra loan guarantee ultimately should have been consummated, (2) the size of the Government's commitment was appropriate, and/or (3) more stringent guarantee terms should have been imposed.

While not the focus of the investigation, we were mindful of the concerns that had been raised regarding possible political pressure applied in the Solyndra decision-making process. Employees acknowledged that they felt tremendous pressure, in general, to process loan guarantee applications. They suggested the pressure was based on the significant interest in the program from Department leadership, the Administration, Congress, and the applicants.

INVESTIGATION OVERVIEW

In late 2010, the Office of Inspector General opened its investigation after identifying seemingly inconsistent information between Solyndra's loan guarantee application and a publicly available Form S-1, *Registration Statement Under the Securities Act of 1933*, the company had filed with the U.S. Securities and Exchange Commission. More specifically, in the Form S-1, Solyndra indicated that it had "framework agreements" with its customers that set forth volume and price expectations over a number of years but generally do not result in a firm purchase commitment until a purchase order is issued. In contrast, while seeking the loan guarantee from the Department, Solyndra asserted it had successfully concluded firm sales contracts with its customers with selling price commitments. This apparent inconsistency prompted our investigation.

In September 2011, after Solyndra announced it was filing for Chapter 11 bankruptcy protection, Federal prosecutors and the Federal Bureau of Investigation joined our investigation. The 4-year investigation consisted of hundreds of interviews and the examination of hundreds of thousands of documents.

In early 2015, we were informed that the Department of Justice will not pursue criminal prosecution of Solyndra officials.

While the Solyndra investigation was a cooperative effort involving all of the noted Federal agencies, this report reflects the position of the Office of Inspector General.

INVESTIGATION DETAILS

The Department of Energy put into place a due diligence process to examine the viability and legitimacy of potential projects and project borrowers, fully identify technical and financial risks, and evaluate and propose risk mitigation strategies. This process was broad, included the work of several expert consultants, and encompassed many areas of Solyndra's loan guarantee application. Our investigation focused on five of these areas: (1) Solyndra's sales contract customers; (2) Solyndra's ability to command a premium market price; (3) Solyndra's financial model; (4) the efficiency and competitive performance of Solyndra's solar panels; and (5) the per-kilowatt-hour cost (in real dollars) of installing and operating Solyndra's panels over an assumed financial life and duty cycle, also known as levelized cost. In all five areas, we found instances where Solyndra either failed in its duty to disclose and/or misrepresented material information in its submissions to the Department and to outside consultants.

This section addresses our general investigative findings relating to the two most problematic areas: Solyndra's sales contracts and the firm's ability to command premium market price for its panels. What follows are examples of critical events that represent what we identified as the most notable misrepresentations and omissions made to the Department by Solyndra in these two specific areas. The events centered on specific senior Solyndra officials, each of whom had varying degrees of involvement and knowledge in the submission of information to the Department.

Solyndra's Sales Contracts

Strength of Sales Contracts

According to Department officials, Solyndra's assertion of sales contract commitments, valued at approximately $1.4 billion, was an important element in the Department's decision to grant the loan guarantee. Early in the process, in October 2007, the Department issued guidance to all loan guarantee applicants requiring, in part, that loan guarantee applications must include an analysis of the market for its product and copies of any contractual agreements for the sale of these products or assurance of the revenues to be generated from sales.

The investigation found that as early as November and December 2008, company officials were less than forthcoming. Specifically, during this timeframe, two senior Solyndra officials met with Department loan officers in Washington, DC, to discuss the company's application. The officials made a presentation regarding the company's financial projections. We were told that during the presentation, the officials indicated that Solyndra had four sales contracts totaling more than

$1.4 billion over the next 5 years. These four contract customers were specified by name and sales volume. The officials asserted that the sales contracts reflected strong demand for Solyndra's product and confirmed customer willingness to pay a premium price for its product.

The investigation uncovered a different narrative: prior to the November and December 2008 meetings with the Department, certain Solyndra officials were not anticipating future business from at least one of its four contract customers. We learned that this customer, whose contract was valued at more than $325 million, had informed Solyndra that it believed the contracted price was too high and that unless the company was given a significantly discounted price, it would not buy more panels from Solyndra. Although these events transpired before the November and December meetings, Solyndra neither disclosed this information when making its presentations to the Department, nor did it provide the information in any direct and meaningful way prior to loan closing.

Further, one of the other customers, with a contract valued at more than $220 million, had language in its contract with Solyndra obligating it to buy its full volume of panels or pay monetary penalties. In an interview with one of the customer's senior officials, we were informed that the customer had initially wanted to buy smaller volumes of panels. However, according to the official, when originally negotiating the contract, a Solyndra executive stated that he wanted the contract to reflect larger volumes. We were told that the purchaser was assured that Solyndra would not require the company to buy these higher volumes, nor would Solyndra enforce the penalties described in the contract. We found no evidence that this verbal side agreement was disclosed to the Department. Ultimately, the company failed to purchase its contracted volume and, as apparently promised, Solyndra never enforced the contract penalties.

Independent Market Analysis

In the January 2009 timeframe, the Department engaged R.W. Beck, Inc. (Beck), an engineering firm, to prepare an independent study of the solar panel market as an integral part of the Government's due diligence process. During the course of the study, Solyndra represented to Beck that it had $1.4 billion in revenue under contract through 2012 and that Solyndra's sales contracts confirmed pricing and demand. In early March 2009, Beck issued its draft market report to the Department. The report used the prices in Solyndra's "firm" sales contracts as support for Solyndra's financial model. According to a Beck official, Solyndra did not inform Beck that three of the four customers had, by that point, received or been offered price concessions.

In March 2009, following issuance of the draft Beck report, the Department's Loan Office asked Solyndra if there were any significant updates to the sales contracts to date. A Solyndra executive responded via e-mail the next day indicating there were no significant updates. As noted, this was inconsistent with the actual status of the contracts.

We learned that by the time Beck issued its final report in May 2009, all four contract customers had been offered price concessions. Solyndra's failure to directly disclose these significant material changes in its contractual relationships distorted the view the Department and its consultants had of the market for Solyndra's product.

Credit Rating

Solyndra was required to hire an outside firm to prepare a credit assessment of the project to be funded by the loan guarantee. The company chose Fitch Ratings, Inc. (Fitch). In July 2009, a Fitch Ratings official requested from Solyndra, among other things, a summary of Solyndra's long term sales contracts. A Solyndra official e-mailed to the Fitch official a chart listing Solyndra's original four sales contracts and three new sales contracts, which in aggregate totaled more than $1.9 billion in projected revenue through 2013.

Over the course of its evaluation, Fitch had multiple telephonic discussions with Solyndra officials. A Fitch official told us he asked Solyndra if any contract customers had received price concessions and a Solyndra official told him no. According to Fitch, at no point did Solyndra provide clarification about the actual state of business between Solyndra and its contract customers. We found that, at that time, all seven of Solyndra's contract customers had already received price concessions. Additionally, Solyndra's largest contract customer had informed Solyndra it would not buy more panels in 2009 because Solyndra's price was too high, and, as noted previously, Solyndra was not expecting future business from another contract customer. According to Fitch, Solyndra failed to provide any of this information to the rating firm.

In August 2009, Fitch sent its final rating memo to officials at Solyndra and the Department. The memo gave Solyndra's project a BB- credit rating and noted, "The Sponsor has obtained sales contracts with a nominal face value of approximately $2.2 billion, confirming both demand and acceptance of the Solyndra product as well as its pricing model which is at a per watt premium to most other [photovoltaic] products."

A Fitch official informed us that had the rating firm been told that (1) Solyndra's contract customers had received price concessions, and (2) Solyndra was forecasting its contract customers would not purchase their full contract volumes, Fitch would have assigned Solyndra a lower credit rating. When the Fitch official was advised of the prices Solyndra's contract customers were seeking, he noted they were approximately 15 percent lower than the contract prices. The official stated that at the time Fitch did its analysis, it calculated that in such a scenario (i.e., a 15 percent drop in price), Solyndra would default on the loan. According to Fitch, it was not provided this information prior to or at the time it issued its credit rating.

Leading Up to Closing

Prior to the closing of the loan guarantee, the Office of Management and Budget (OMB) scored the risk of the Solyndra loan to calculate the credit subsidy cost. In late August 2009, Department loan officers briefed OMB on the Solyndra deal. The briefing slides included three references to Solyndra's sales contracts and a summary of Fitch Ratings final rating. Following the briefing, OMB had follow-up questions for the Department, one of which concerned the volume of panels Solyndra had under contract.

In subsequent e-mail exchanges, a Solyndra official told the Department that the sales volume figures Solyndra had contracted on paper were correct, and used the prices in Solyndra's sales contracts to substantiate Solyndra's business model. However, approximately one month prior to these exchanges, this official provided the Department with a spreadsheet that contained Solyndra's actual and completed sales information for the first half of the year. The data reflected sales with certain of Solyndra's contract customers at low volumes and with below-contract prices that, if read carefully, may have indicated that Solyndra's sales contracts were not being enforced. However, our investigation uncovered no evidence that this official or any other company official explicitly informed the Department that at the time this information was provided, or at any time in advance of loan closing, the full truth about the company's relations with its contract customers—namely, that (1) Solyndra internally viewed the sales contracts as broken; (2) all seven contract customers had already purchased or been offered panels at below-contract prices; (3) Solyndra's internal forecasts projected the contract customers to collectively purchase less than half their contracted volumes in years 2009, 2010, and 2011; or (4) Solyndra had changed its sales strategy significantly, shifting from contract sales to selling on the spot market.

Final Agreement

In September 2009, the Department executed an agreement with Solyndra Fab 2, LLC, and U.S. Bank National Association concerning the awarding of the loan guarantee. Shortly after loan closing, the then Secretary of Energy attended the groundbreaking ceremony at Solyndra's site for Fab 2. During his remarks at the groundbreaking, the Secretary alluded to Solyndra having $2 billion in orders. The same day Solyndra issued a press release announcing the Fab 2 groundbreaking and reiterating its $2 billion "contractual backlog," which reflected sales strength that was inconsistent with the actual demand Solyndra internally forecasted from its contract customers.

<u>Solyndra's Ability to Command Premium Market Price for Its Panels</u>

Solyndra's business model relied on selling panels at above-market prices. The full market price of a panel system included the panel itself and what is referred to in the industry as the "Balance of System" cost. The Balance of System cost is composed of all components of a photovoltaic system other than the panels. This includes mounting systems, inverters, wiring, overhead costs, etc. The labor and material costs associated with installation are generally the largest Balance of System cost component.

According to available documents and witness accounts, Solyndra made representations to the Department that it could command a premium price for its panels over competitors because Solyndra panels were less expensive to install. The panel prices in the financial plan Solyndra submitted to the Department were at a premium compared to the prices industry analysts had forecast for conventional panels. Solyndra claimed that it had Balance of System cost advantage of approximately $0.69 and $0.74 per watt. Solyndra asserted that its systems inherently cost less to install than competing photovoltaic solutions, thus installers can offer their customers a lower price and realize higher margins.

Notably, the available documentation revealed that prior to loan closing, Solyndra internally acknowledged that its actual savings were, on average, 25 to 65 percent less than the savings the company originally represented to the Department. However, the Office of Inspector General found no evidence that Solyndra disclosed this information prior to loan closing. This is important because lower savings potentially translated to lower revenue which, in turn, could have affected Solyndra's ability to repay the loan. Compounding Solyndra's misrepresentations on this issue, a Solyndra official e-mailed the Department on August 28, 2009, just days before the loan closed, stating that Solyndra's Balance of System savings versus a popular manufacturer was "about $1.00/Watt." That claimed advantage was twice what the Solyndra official's supervisor had acknowledged internally.

Further, in the fall of 2009, Solyndra submitted an application for a second loan guarantee that represented to the Department that the company's Balance of System savings were between $0.70 and $0.75 per watt. This was a continuation of the same misrepresentation.

MISSED OPPORTUNITIES

The Department initiated and engaged in a due diligence process, with respect to the prospective Solyndra loan guarantee, which included both analysis by Federal staff and the engagement of external consultants. However, the investigation disclosed that the due diligence process missed opportunities to surface and critically analyze problematic information that Solyndra had provided to the Department.

For example, in June 2009, upon request from the Department, Solyndra sent an amendment to one of its sales contracts to a Department consultant. This amendment voided the customer's obligation to purchase future product from Solyndra. The Office of Inspector General found no evidence the consultant alerted the Department to its significance: specifically, that the customer requested the amendment because the contract already was not being followed or enforced, and it wanted to ensure it had no liability for refusing to purchase panels from Solyndra. When the Loan Office later summarized to the Secretary and OMB the solar panel volumes Solyndra had under contract, the summary included the original amount attributable to this customer.

Furthermore, after loan closing, the consultant created a loan monitoring memorandum for the Department that made no reference to the contract amendment and stated the contract "requires" the customer to purchase more than $300 million worth of product from Solyndra. Knowledge of this change for even a single contract customer could have provided the Department with a strong indicator that the market acceptance of Solyndra's product was not nearly as robust as that portrayed by Solyndra's executives.

As noted previously, in August 2009, in response to a request for data from the Department, Solyndra provided a spreadsheet listing sales for the first two quarters of 2009 along with an updated copy of Solyndra's financial plan. The revised plan incorporated more conservative prices and lower yearly volumes than previous financial plans Solyndra submitted to the Department.

The spreadsheet included an entry indicating that Solyndra's revenue for the first half of 2009 had exceeded the company's financial plan by 2 percent. A comprehensive comparison of the initial plan to the spreadsheet by Loan Office staff would have revealed that Solyndra had, in fact, missed its original revenue plan by more than 16 percent. It was the revised plan that was exceeded by 2 percent. We found no evidence anyone at the Department recognized this critically important difference. Ultimately, in its final memo to the Secretary before the loan closed, Department officials represented that Solyndra exceeded its plan by 2 percent.

Furthermore, the spreadsheet listed sales from the original four customers and a number of new customers. A more careful review of the spreadsheet would also have revealed Solyndra sold panels to two contract customers at prices lower than those in the contracts. Analysis also would have shown the contract customers bought relatively small volumes of panels in the first half of 2009. We learned that this was due, in part, to Solyndra's plan to manufacture and sell the majority of its 2009 volume in the second half of the year. However, this potentially relevant information in the spreadsheet did not appear to have prompted the Department to seek clarification. The Department loan officers who received this spreadsheet each told us they did not examine it closely. While Solyndra did nothing to highlight or emphasize the new information, the Department missed an opportunity, prior to loan closing, to evaluate the fact that Solyndra's contract customers were not buying product at the contracted terms.

Additionally, during the due diligence process, one of the Department's consultants attempted to obtain references for all four original Solyndra contract customers. Solyndra officials internally discussed that at least one contract customer risked informing the consultant that Solyndra's price was too high. The officials then created an excuse explaining why the consultant should not be referred to all the contract customers. The company ultimately referred the consultant to only two of the customers. Had the consultant more aggressively sought information for the remaining two customers and followed up with them, the consultant may have learned that the planned volumes and prices for these customers were lower than those presented to the Department by Solyndra.

Approximately a week before loan closing, a Loan Office employee recognized that an unrelated report, produced by the Department's Office of Energy Efficiency and Renewable Energy, projected the installed cost of rooftop solar systems would be $2.50 per watt in 2015. The employee compared this to $3.19, which was the 2015 installed cost projected for Solyndra's product (including panel cost and Balance of System costs). The Loan Office employee sent three e-mails to two senior Department loan officials alerting them to this pricing issue. Yet, no action was taken. This information should have raised serious questions concerning the viability of Solyndra's financial model and Solyndra's corresponding ability to service its debt payments. Instead, it was apparently disregarded. Had the Department examined the differences in projected costs more closely, it would have been in a better position to evaluate the impact, if any, on the decision to approve the loan guarantee.

It is clear that there were shortcomings in the Department's due diligence process. However, despite these issues, there was no reasonable basis for Solyndra to conclude that (1) the Department was not relying on the company to provide reliable sales volume and pricing data as an essential element of the Department's decision-making process, and (2) the company's obligation to provide complete, accurate, and timely disclosures to the Department was diminished in any way.

OBSERVATIONS

The Solyndra ordeal resulted in a loss to U.S. taxpayers likely to exceed $500 million and a corresponding loss of confidence in the loan guarantee program. At its core, Solyndra officials failed to make complete, accurate, and direct disclosures to the Department of information that was relevant to the loan guarantee process. While the Department's due diligence effort had shortcomings, it is our view that providing misleading answers to Departmental inquiries and failing to openly disclose critical information violated the spirit and intent of the requirement for Solyndra to report material changes to its loan guarantee application to the Department.

As outlined previously, Solyndra furnished information to the Department relating to sales activities and projections as it worked to secure loan guarantee funding, and the Department missed opportunities at several junctures to critically analyze the information. However, we found that even when such information was conveyed, it was not complete and was provided in a less than transparent manner. Department officials acknowledged, for instance, that they understood the sales contracts were subject to price and volume adjustments, but Solyndra failed to fully inform the Department when price and volume adjustments happened.

A plain reading of disclosure requirements confirms that Solyndra officials knew, or should have known, that the company was obligated to be transparent in its dealings with the Department and the Department's representatives. On March 20, 2009, the Department issued a term sheet to Solyndra signed by both the then Secretary and Solyndra's Chief Executive Officer. The term sheet, among other items, required that in the event Solyndra learned of a material change to the information contained in its loan guarantee application, Solyndra notify the Department within 3 business days of the change.

Additionally, a senior Solyndra officer signed the Common Agreement on behalf of the company in September 2009. The Common Agreement for the loan guarantee contained a full disclosure section in which Solyndra certified (1) that the statements it had made to the Department in the course of seeking a loan guarantee "are true and correct in all material respects and do not contain any material misstatement of fact or omit to state a material fact or any fact necessary to make the statements contained therein not materially misleading in the light of the circumstances in which they were made" and (2) there was no fact known to Solyndra that had not been disclosed to the Department which could be material to the Department's decision or could reasonably be expected to cause a material adverse effect.

The investigation showed that Solyndra failed to meet these obligations in a meaningful way. As noted previously, our investigation revealed that by the time of loan closing, Solyndra was not expecting significant business from one of its four original customers and offered price reductions to all seven. Additionally, the company internally forecasted the contract customers collectively wanted to purchase more than $700 million less volume than that exhibited in the sales contracts. Officials at the company were also aware that Balance of System savings were lower than the amount disclosed to the Department. Solyndra's misrepresentations about its contractual relationships were compounded by the Department's failure to ask specific questions, and require specific assurances, about Solyndra's performance in the marketplace, the strength of its sales contracts, and the basis for its Balance of System savings representations.

Solyndra's pattern of false and misleading assertions and statements was evident not only in its dealings with the Department of Energy but also in its interactions with the U.S. Congress. On June 23, 2011, Solyndra submitted a document to the House Energy and Commerce Committee entitled "Exceeding Expectations: Solyndra Today." The document stated, in part, "<u>Solyndra […] continues to make excellent progress to the company's overall annual strategic plan, while meeting the company's technical, cost and performance milestones.</u>" (Emphasis added) While it is not clear what performance milestones were being referenced, in the preceding quarter, Solyndra's actual revenue was 11 percent lower than its financial plan, and in the quarter including June 2011, Solyndra was on track to miss its planned revenue metric by 15 percent.

Also, in early summer 2011, about 2 months prior to its bankruptcy declaration, Solyndra retained a Washington, DC, firm to burnish its image. On July 13, 2011, Solyndra's President sent letters to Congressional leaders with a positive assessment of Solyndra's business performance. The letters went to Congresswoman DeGette and Congressmen Stearns, Upton, and Waxman, all of whom had direct oversight responsibilities for Department activities. In the letter, Solyndra's President noted, for example, that Solyndra's revenues grew from $6 million in 2008 to $100 million in 2009 to $140 million in 2010, and he projected that revenues for 2011 would double again. He also noted that the company's new manufacturing facility (Fab 2) would produce nearly half of its maximum output that year. These representations, while not factually inaccurate, were misleading and painted only part of the picture, as Solyndra was barely surviving, and within weeks would file for Chapter 11 bankruptcy protection.

PATH FORWARD

The Department currently has additional loan guarantee authority of nearly $40 billion, and it is in the process of evaluating applications for new guarantees under this program. While many of its efforts in the loan guarantee arena have been successful in advancing new technologies and expanding energy markets, another experience similar to the Solyndra affair could seriously undermine the program and its goals, perhaps even leading to its termination.

Trustworthiness and reliability of business partners is an essential element of not only the loan guarantee program but also of all Department-sponsored contracts, grants, cooperative agreements, and other financial assistance instruments. Consequently, it is our view that the Solyndra matter and the facts developed as part of our investigation provide lessons the Department can use to strengthen its efforts going forward.

Specifically, it is important to reemphasize to loan applicants that they have an absolute obligation to provide the Department with all requested information in a truthful, complete, timely, and transparent manner and that an applicant's most senior officials must be fully familiar with, and must certify, the accuracy of the information provided. Applicants must further understand that their duty to provide the Department with fully accurate information is ongoing, and that the Department must be fully and proactively informed when material changes occur to previously provided information without prompting from the Department. Further, Department loan officials and consultants should be fully conversant with the noted shortcomings in the Department's Solyndra due diligence process to heighten their awareness of signs that applicants are not meeting the highest standards for data integrity. As part of the due diligence process, the Department should consider implementing, on a risk basis, new and more intrusive validation techniques to deter and identify information misrepresentations and omissions. It is also important that Federal officials provide necessary quality assurance checks on contractors and expert consultants retained to assist in the Department's loan guarantee application due diligence process. As part of this effort, consultants must be held accountable for the quality of their work.

Given the amount of funds involved and the Government's exposure to risk, the Office of Inspector General placed the Department's loan guarantee program on its Management Challenges Watch List several years ago. As such, we intend to initiate additional reviews of the program in the future.

RELATED OFFICE OF INSPECTOR GENERAL PRODUCTS

The Office of Inspector General has issued several reports relevant to the operation of the Department's loan guarantee program. A full list of related products is provided at Exhibit A.

PRIOR REPORTS

- Audit Report on *Implementation of Recommendations from the January 2012 Independent Consultant's Review of the Department of Energy Loan and Loan Guarantee Portfolio*, (DOE/IG-0909, May, 2014). The Office of Inspector General received allegations that the Loan Guarantee Program had not fully implemented recommendations to improve operations made in an independent consultant's report, issued in January 2012. The allegations were not substantiated. The consultant's report identified areas for Program improvement and provided 12 overall recommendations aimed at enhancing the oversight and management of the Program. The audit found that the Department had completed actions to address 4 of the report's 12 recommendations and initiated actions in response to the remaining 8 recommendations. While the Department had made substantial progress in implementing recommended improvements, we were unable to make a determination as to whether these efforts would ultimately be fully effective to address all of the issues identified by the consultant, because a number of actions, such as clarifying authorities, establishing an external advisory board, and incorporating lessons learned were still ongoing.

- Audit Report on *The Department of Energy's Loan Guarantee to Abound Solar Manufacturing, LLC*, (DOE/IG-0907, April 2014). This audit identified several weaknesses in the Department of Energy's administration of the loan guarantee to Abound Solar Manufacturing, LLC. Specifically, the audit found that the Loan Guarantee Program had not consulted with the Credit Review Board concerning a material change in the credit subsidy subsequent to its recommendation to approve the loan. In addition, the report found that the Loan Guarantee Program had not resolved the conflicting opinions of its advisors regarding the company's ability to overcome technical issues or adequately documented the assumptions in the financial modeling used to support loan approval and monitoring. Further, the report noted that ongoing, formal financial and industrial analyses had not been conducted as part of monitoring activities for the loan.

- Audit Report on *Special Report: Inquiry into the Procurement of Law Firm Services and Management of Law Firm-Disclosed Organizational Conflicts of Interest by the Department of Energy's Loan Programs Office*, (OAS-RA-12-14, August 2012). This audit identified opportunities to improve transparency over the Loan Program's management of organizational conflict of interest waiver requests. Specifically, the review noted that the Loan Programs Office had not deployed a tracking system for managing law firm waiver requests and had not documented, in an organized system of records, the rationale for denying or approving waiver requests.

- Audit Report on *The Department of Energy's Loan Guarantee Program for Clean Energy Technologies*, (DOE/IG-0849, March 2011). This audit revealed that the Loan Guarantee Program could not always demonstrate, through systematically organized records, how it resolved or mitigated relevant risks prior to granting loan guarantees. Decision documents summarizing the process did not always describe the actions taken by officials to address, mitigate, and/or resolve risks. In addition, loan origination files were not maintained in the Loan Guarantee Program's official electronic information repository, which according to Federal regulations was to contain key documentation to support actions as part of the loan guarantee process. The report noted that the Loan Guarantee Program had not adopted a records management system that imposed structure, consistency, and discipline in the development and retention of loan documentation.

- Audit Report on *The Department of Energy's Loan Guarantee Program for Innovative Energy Technologies*, (DOE/IG-0812, February 2009). The Office of Inspector General found that while the Loan Guarantee Program had developed and implemented some key programmatic safeguards, it had not completed a control structure necessary to award loan guarantees and to monitor associated projects. Specifically, the Loan Guarantee Program had not finalized policies and procedures, formally documented portions of its applicant reviews, and formalized procedures for disbursing loan proceeds.

- Audit Report on *Loan Guarantees for Innovative Energy Technologies*, (DOE/IG-0777, September 2007). This report concluded that there were a number of steps that should have been taken to foster the success of the Loan Guarantee Program. These included finalizing a staffing plan, developing risk mitigation strategies, implementing and executing a monitoring system, and promulgating liquidation procedures.