REPORT ON PUNJ LLOYD SOLAR POWER, LTD.
AP085995XX - INDIA

September 2014
OIG-INS-14-02
The Export-Import Bank of the United States (Ex-Im Bank) is the official export-credit agency of the United States. Ex-Im Bank is an independent, self-sustaining executive agency and a wholly-owned U.S. government corporation. Ex-Im Bank’s mission is to support jobs in the United States by facilitating the export of U.S. goods and services. Ex-Im Bank provides competitive export financing and ensures a level playing field for U.S. exports in the global marketplace.

The Office of Inspector General (OIG), an independent office within Ex-Im Bank, was statutorily created in 2002 and organized in 2007. The mission of the Ex-Im Bank OIG is to conduct and supervise audits, investigations, inspections, and evaluations related to agency programs and operations; provide leadership and coordination as well as recommend policies that will promote economy, efficiency, and effectiveness in such programs and operations; and prevent and detect fraud, waste, abuse, and mismanagement.

This inspection was conducted in accordance with the 2012 Quality Standards for Inspection and Evaluation as defined by the Council of Inspectors General on Integrity and Efficiency. This report does not constitute a Government audit and therefore, it was not conducted following the Generally Accepted Government Auditing Standards (“GAGAS”).
To: David Sena, Senior Vice President & Chief Financial Officer  
Claudia Slacik, Senior Vice President & Chief Banking Officer  

From: Mark Thorum  
Assistant Inspector General, Inspections & Evaluations  

AP085995XX  

Date: September 24, 2014  

Attached please find the final inspection report on the Punj Lloyd Solar Power, Ltd. project AP085995XX. The report outlines three recommendations for corrective action. Management’s response is included as an appendix to the final report. We consider management’s proposed actions to be responsive. The recommendations will be closed upon completion and verification of the proposed actions.  

We appreciate the courtesies and cooperation extended to us during the inspection.  

cc:  
Fred Hochberg, Chairman and President  
C.J. Hall, EVP and Chief Risk Officer  
Mike McCarthy, Acting Inspector General  
Angela Freyre, General Counsel  
Kenneth Tinsley, SVP-Credit Management Group  
James Mahoney, Jr., VP-Engineering & Environment  
Inci Tonguch-Murray, Business Compliance Officer  
Jennifer L. Fain, Deputy Assistant Inspector General  
Lilith D. Sanchez, Senior Bank Inspector  

Executive Summary

Why We Did This Inspection
The OIG’s inspection seeks to determine the level of due diligence, risk assessment and portfolio monitoring performed by Ex-Im Bank in this transaction. This is particularly relevant given the difficult nature of the industry, the bankruptcy of the Exporter and the implementation of the fast track approval process for solar energy transactions.

In writing this report, the OIG recognizes that our findings and recommendations primarily relate to the Punj project financing, and may not necessarily be generalizable to the broader universe of Ex-Im Bank transactions. Our approach is to review transactions from a “lessons learned perspective” and to help identify potential systemic weaknesses in Ex-Im Bank’s policies and procedures.

What We Recommend
The scope and frequency of Ex-Im Bank’s Character, Reputational, Transaction and Integrity (CRTL)/“Know Your Customer” (KYC) Due Diligence process should be more extensive to provide information on the key shareholders of all transaction participants. In addition, OIG recommends that Ex-Im Bank implement an enhanced risk-based assessment to determine the appropriate level of CRTL due diligence (enhanced or standard), and a systematic plan to screen, control and mitigate CRTL risk, as part of the initial due diligence and subsequent portfolio monitoring.

In line with its current policies, Ex-Im Bank should fully vet the performance and credit risks of transaction parties.

Ex-Im Bank should evaluate its current Post-Operative Monitoring Policy for PMCG credits with a view to implementing a more proactive approach that allows for timely recognition of credit developments.

What We Found
The Punj Lloyd Solar Power, Ltd. (“Punj” or “Borrower”) project involves the development of a five-megawatt solar photovoltaic power plant in the state of Rajasthan, India. The project utilizes photovoltaic technology to convert sunlight into electric energy for transmission over the grid. The solar modules were manufactured and exported by Abound Solar, Inc. (“Abound” or the “Exporter”) and financed by Ex-Im Bank through a comprehensive guarantee to PNC Bank. The $9.1 million Punj transaction is part of a portfolio of over 700 loans in amounts of $20 million or less, representing an aggregate outstanding balance of $822.2 million. This portfolio is monitored by Ex-Im Bank’s Portfolio Monitoring and Control Group (“PMCG”). At the time of this report, the financing is current in its interest and principal payments.

OIG’s inspection focused primarily on Ex-Im Bank’s performance and adherence to internal policies and procedures. The scope of our work involved a thorough analysis of project documents, financial projections, and industry best practices, as well as interviews with Ex-Im Bank staff.

Our inspection found that certain internal due diligence procedures had not been fully applied to all transaction parties including the Sponsor Punj Lloyd, Ltd. and the Exporter. The Exporter’s bankruptcy nullified the project’s solar modules’ 5-year Defect Warranty and 25-year Degradation Warranty and triggered a technical default under the terms of the Credit Agreement. In addition, we found that Ex-Im Bank’s CRTL due diligence procedures may not be sufficiently comprehensive to protect the Bank from potential reputational risks, fraud and abuse.

In reviewing the Borrower’s financial statements, OIG noted that the Borrower had potentially breached the debt service coverage requirement in the restricted payment covenant set forth in the Credit Agreement. Finally, we found that Ex-Im Bank’s current post-operative monitoring policy and resource allocation for PMCG credits should be updated to provide more proactive coverage and timely response to credit developments in the portfolio. Specifically, PMCG’s policy prescribes only one credit review per annum and allocates over fifty accounts to each monitoring officer.

For additional information, contact the Office of the Inspector General at (202) 565-3908 or visit www.exim.gov/oig.
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# Glossary of Terms

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<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD</td>
<td>Asset Management Division, Ex-Im Bank</td>
</tr>
<tr>
<td>BCL</td>
<td>Budget Cost Level is a rating system that identifies the risk level of each transaction in a sliding scale of one (low risk) to 11 (high risk)</td>
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<tr>
<td>CAPEX</td>
<td>Capital Expenditure</td>
</tr>
<tr>
<td>CdTe Photovoltaic</td>
<td>Photovoltaic (PV) technology that is based on using Cadmium Telluride (CdTe) thin film, a semiconductor layer designed to absorb and convert sunlight into electricity</td>
</tr>
<tr>
<td>CEA</td>
<td>Central Electricity Authority of India</td>
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<tr>
<td>CERC</td>
<td>Central Electricity Regulatory Commission</td>
</tr>
<tr>
<td>CIRR</td>
<td>Commercial Interest Reference Rate</td>
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<tr>
<td>COD</td>
<td>Commercial Operation Date as defined in EPC Contract and PPA</td>
</tr>
<tr>
<td>CRTI Process</td>
<td>Character, Reputational, Transaction Integrity Due Diligence analysis performed by Ex-Im Bank Library staff as requested by Bank staff</td>
</tr>
<tr>
<td>CREA</td>
<td>Country Risk and Economic Assessment Division of Ex-Im Bank</td>
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<tr>
<td>D/E</td>
<td>Debt/Equity</td>
</tr>
<tr>
<td>DSCR</td>
<td>Debt Service Coverage Ratio</td>
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<tr>
<td>EBITDA</td>
<td>Earnings Before Interest, Tax, Depreciation and Amortization</td>
</tr>
<tr>
<td>ECA</td>
<td>Export Credit Agency</td>
</tr>
<tr>
<td>E&amp;E</td>
<td>Engineering and Environmental Division, Ex-Im Bank</td>
</tr>
<tr>
<td>EPC</td>
<td>Engineering, Procurement, and Construction (Contract and Contractor)</td>
</tr>
<tr>
<td>EPC Contractor</td>
<td>Punj Lloyd Delta Renewables, Ltd.</td>
</tr>
<tr>
<td>Exporter</td>
<td>Abound Solar, Inc.</td>
</tr>
<tr>
<td>FCRA</td>
<td>Federal Credit Reform Act of 1990 (Public Law 101-508)</td>
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<tr>
<td>GOI</td>
<td>Government of India</td>
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<tr>
<td>GWh</td>
<td>Gigawatt hours (billion watts) equivalent to one million kilowatt hours (kWh)</td>
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<tr>
<td>ICRAS</td>
<td>Interagency Country Risk Assessment System</td>
</tr>
<tr>
<td>IDC</td>
<td>Interest During Construction</td>
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<tr>
<td>IEA</td>
<td>International Energy Agency (or the Department of Energy)</td>
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<tr>
<td>IREDA</td>
<td>Indian Renewable Energy Development Agency Limited</td>
</tr>
<tr>
<td>JNNSM</td>
<td>Jawaharlal Nehru National Solar Mission, the Indian solar mission</td>
</tr>
<tr>
<td>KW</td>
<td>Kilo-watts (thousand watts)</td>
</tr>
<tr>
<td>TERM</td>
<td>DESCRIPTION</td>
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<td>-------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
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<tr>
<td>kWh</td>
<td>Kilo-watt-hour (thousand watt-hours)</td>
</tr>
<tr>
<td>KYC</td>
<td>Know Your Customer is a term used in conjunction with transaction due diligence with respect to integrity, corruption and bribery risk in accordance with a set of Ex-Im Bank policy guidelines dated January 10, 2008</td>
</tr>
<tr>
<td>MARAD</td>
<td>U.S. Maritime Administration</td>
</tr>
<tr>
<td>MNRE</td>
<td>Ministry of New and Renewable Energy</td>
</tr>
<tr>
<td>Model</td>
<td>Sponsor’s Project Financial Model, as modified and reviewed through due diligence</td>
</tr>
<tr>
<td>MRS</td>
<td>Minimum Required Standards (minimum capacity of five-megawatts)</td>
</tr>
<tr>
<td>MW</td>
<td>Mega-watts (million watts)</td>
</tr>
<tr>
<td>NVVN</td>
<td>NTPC Vidyut Vyapar Nigam Ltd.</td>
</tr>
<tr>
<td>NTPC</td>
<td>National Thermal Power Corporation Ltd.</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>Operations and Maintenance</td>
</tr>
<tr>
<td>OECD Arrangement</td>
<td>OECD Arrangement on officially-supported Export Credits</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
</tr>
<tr>
<td>Offtaker</td>
<td>NTPC Vidyut Vyapar Nigam Ltd. (&quot;NVVN&quot;)</td>
</tr>
<tr>
<td>PMCG</td>
<td>Ex-Im Bank’s Portfolio Monitoring and Control Group</td>
</tr>
<tr>
<td>PPA</td>
<td>Power Purchase Agreement</td>
</tr>
<tr>
<td>RPO(s)</td>
<td>Renewable Purchase Obligation(s)</td>
</tr>
<tr>
<td>Rs.</td>
<td>Indian Rupees (INR)</td>
</tr>
<tr>
<td>RRVPN</td>
<td>Rajasthan Rajya Vidyut Prasaran Nigam Ltd.</td>
</tr>
<tr>
<td>Sponsor</td>
<td>Punj Lloyd, Ltd.</td>
</tr>
<tr>
<td>SPUUs</td>
<td>State Power Utilities of India</td>
</tr>
<tr>
<td>Staff</td>
<td>Ex-Im Bank Staff assigned to this transaction</td>
</tr>
</tbody>
</table>
## PARTIES TO THE TRANSACTION

<table>
<thead>
<tr>
<th>PARTY</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>Borrower</td>
<td>Punj Lloyd Solar Power, Ltd. (“Punj”), a ‘special purpose’ entity organized solely to sell power to NVVN, the wholly-owned power trading subsidiary of the National Thermal Power Corporation Ltd.</td>
</tr>
<tr>
<td>Sponsor/Completion Guarantor</td>
<td>Punj Lloyd, Ltd. (“PLL”), a global $2.1 billion engineering, procurement and construction conglomerate, providing services in the energy, infrastructure, and defense sectors.</td>
</tr>
<tr>
<td>Engineering, Procurement and Construction (“EPC”)</td>
<td>Punj Lloyd Delta Renewables Pvt. Ltd. (“Punj Renewables”) provides EPC services to the subject project. Punj Renewables is a joint venture between Punj Limited (51%) and TAT Global (49%) to develop, engineer and execute renewable energy-based products.</td>
</tr>
<tr>
<td>Exporter</td>
<td>Abound Solar, Inc. (“Abound”), manufacturer of Cadmium Telluride (CdTe) thin film photovoltaic (PV) solar modules who supplied the solar panels used in the Punj Lloyd project. Previously based in Longmont, Colorado, Abound produced low-cost solar modules designed for commercial and utility scale installations. The company filed for Chapter 7 (Liquidation) Bankruptcy on July 2, 2012.</td>
</tr>
<tr>
<td>Guaranteed Lender</td>
<td>PNC Bank, National Association (“PNC Bank, N.A.”)</td>
</tr>
<tr>
<td>Offtaker</td>
<td>NTPC Vidyut Vyapar Nigam Ltd. (“NVVN”) was formed in 2002 as a wholly-owned subsidiary of the National Thermal Power Corporation Ltd. (“NTPC”), the largest state-owned power-generating company in India. NVVN and Punj are parties to the Power Purchase Agreement (“PPA”) for the procurement of 5 MW Solar Power dated as of January 10, 2011.</td>
</tr>
</tbody>
</table>
PROJECT DESCRIPTION

The Punj Lloyd Solar Power, Ltd. (“Punj”) project consists of a five-megawatt (“MW”) photovoltaic solar power plant situated in the state of Rajasthan, India. The project involves several phases including site preparation, construction of the support structures, installation of PV solar modules and power inverters, as well as the installation of a transmission line to an existing electrical sub-station. With a total cost of approximately $16.7 million, the project utilizes the thin-film Cadmium Telluride (“CdTe”) photovoltaic technology to convert sunlight energy into electric energy for transmission over the grid. The thin film PV modules were manufactured and exported by Abound Solar, Inc. (“Abound”) and financial support was provided to Punj by Ex-Im Bank through a comprehensive guarantee to PNC Bank, N.A.

The project Offtaker is NTPC Vidyut Vyanap Nigam Ltd. (“NVVN”), a wholly-owned subsidiary of the National Thermal Power Corporation Ltd. (“NTPC”), the largest state-owned power-generating company in India. NVVN sells solar energy to various state power utility (“SPU”) companies across India’s national grid.
Punj Lloyd Delta Renewables Pvt. Ltd. (“Punj Renewables”) serves as the Engineering, Procurement and Construction (“EPC”) contractor on the project. It is responsible for the site preparation, infrastructure plan implementation and installation, commissioning, and the operation of the solar plant. The EPC contractor monitors the project’s performance, the PV modules and inverters. The EPC contractor is also responsible for providing the Performance Test Report to Ex-Im Bank after the first year of commercial operation. A detailed illustration of the Punj project structure is shown in Figure 1 below.

Figure 1: Punj Lloyd Solar Power, Ltd. Project Structure

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1 NTPC’s core business consists of engineering, construction and operation of power-generating plants and consultancy services to power utilities in India and abroad. It is a public sector company listed on the Bombay Stock Exchange in which the Government of India holds an ownership interest of 84.5 percent. With its electric power generating capacity currently at 41,184 MW, NTPC’s goal is to become a 128,000 MW company by 2032.
Project Ownership Structure

Punj is a special purpose entity organized to develop a five-megawatt solar power plant in Rajasthan, India, for the generation and sale of solar energy to the Central Government of India-owned power trading arm, NVVN. Punj is a wholly-owned subsidiary of Punj Lloyd Infrastructure, Ltd. (“Punj Infrastructure”), a project development company which specializes in Public Private Partnership projects in the energy, transportation, and urban infrastructure sectors. Its current portfolio of projects in India has an estimated total aggregate value of $438 million. Incorporated in 2007, Punj Infrastructure is a wholly-owned subsidiary of project Sponsor, Punj Lloyd, Limited (“PLL”).

Project Sponsor and Affiliated Companies

PLL is a diversified international conglomerate with approximately U.S. $2.0 billion in revenues for FY 2013. The company offers engineering, procurement and construction (“EPC”) services in the energy and infrastructure sectors, as well as engineering and manufacturing services in the defense sector. PLL operates through 21 international offices and entities across the Middle East, Caspian, Asia Pacific, Europe, Africa, and South Asia. It has over 50 subsidiaries, with over 200 projects in more than 120 countries. The company’s stock is listed on the Bombay Stock Exchange and the National Stock Exchange.

PLL’s business activities are divided into four global components: energy, civil and infrastructure, engineering and other businesses including defense.

Energy. Comprised of a range of engineering and construction activities including onshore oil and gas, offshore oil and gas, and power plants. Energy is the largest segment in PLL’s portfolio and accounts for 77 percent or approximately U.S. $1.5 billion of its total revenues in FY 2013.

Civil and Infrastructure. PLL’s civil and infrastructure business has steadily grown across geographies, including the Middle East, Asia Pacific, and South East Asia. It accounts for approximately 19 percent or approximately U.S. $380 million of the company’s total revenues in FY 2013.

Engineering. Over the years, PLL developed its engineering competencies to support both internal projects and its external customers through its subsidiary, PL Engineering Limited. In 2012, PLL acquired UK-based Simon Carves Engineering Limited. The engineering component contributed approximately U.S. $34 million to PLL’s total revenues in FY 2013.

Other Businesses. This sector encompasses infrastructure, defense, and upstream operations. PLL set up Punj Infrastructure in 2010 to pursue infrastructure development opportunities in India and international markets. Its focus has been on Public Private Partnership (“PPP”) projects in transportation, energy and urban infrastructure. Punj Infrastructure’s project-related assets are valued at approximately U.S. $355 million. In FY 2013, Punj Infrastructure primarily focused on its three existing projects, as follows:

• Punj Lloyd Solar Power, LTD Project in Rajasthan, India.
• NHAI Road Project in Bihar, India – Project completion targeted for April 2014.
• Ministry of Home Affairs Housing Project for Delhi Police in Dheerpur, Delhi, India.
As indicated below in Figure 2, PLL is owned by a combination of public, institutional and private Punj-related entities. The largest shareholder with a 23 percent interest is Cawdor Enterprises Limited (“Cawdor”), a private, limited company incorporated in the British Virgin Islands. Atul Punj serves as Chairman and CEO of Cawdor and PLL. In this capacity, he exercises control (direct and indirect) over several Punj-related entities including Cawdor, PLL (Project Sponsor and Completion Guarantor), and Punj (Borrower).

**Figure 2: Ownership Structure**

(b) (4)

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**Project Background**

In 2009, the Government of India (“GOI”) launched its Jawaharlal Nehru National Solar Mission (“NSM”) program, which aims to establish India as a global leader in solar energy. Among NSM’s immediate objectives was to commission several grid-connected solar power projects by 2013. In 2010, the GOI designated NVVN as the contracting agency for the purchase of solar power and resale of the same to India’s State Power Utilities (“SPUs”). NVVN solicited bids from developers to build, own and operate solar power generating facilities. It selected PLL and negotiated a 25-year Power Purchase Agreement (“PPA”) effective January 10, 2011.

Punj sought financing from Ex-Im Bank for its proposed five-megawatt (“MW”) solar photovoltaic (“PV”) power plant in Rajasthan, India and completed its application on June 30, 2011. The Borrower’s need for Ex-
Im Bank support was based on the unavailability of long-term financing with commercially feasible terms for solar projects in India. The loan was originated under the purview of Ex-Im Bank’s “Renewable Express” initiative. Although the $9.1 million loan was well within the Renewable Express parameters, Bank Staff recognized the project’s complexity and the need to dedicate additional time and resources to ensure compliance with Ex-Im Bank policies and procedures. The loan was subsequently transferred to the Structured Finance Division for underwriting and loan approval.

Loan Approval/Delegated Authority

On July 7, 2011, Ex-Im Bank approved a $9,171,217 direct loan for Punj Lloyd at a total fixed rate of 4.62% (CIRR rate plus 25 bp), with a term of 18 years and BCL rating (b) (4). In July 18, 2011, Ex-Im Bank changed the transaction from a direct loan to a guaranteed loan to address the Borrower’s concerns with the MARAD shipping requirements.

PNC Bank, N.A. (“PNC Bank”) became the guaranteed lender pursuant to its existing Master Guarantee Agreement with Ex-Im Bank. Later on December 14, 2011, Ex-Im Bank approved a second amendment (Amendment No. 2) to reduce the authorized financed amount to $9,135,184 (from $9,171,217) and to change the required establishment and funding date of the working capital, debt service and maintenance reserve accounts from no later than the date of first utilization of the credit to no later than the date of the commercial operation date of the project. Table 1 below provides the project’s sources and uses of funds.

Table 1: Punj Lloyd Solar Power, Ltd. - Sources and Uses of Funds

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2 Renewable Express was designed to provide a streamlined financing for U.S. exports to small solar energy projects. The initiative covered both direct loans and guarantees with loan amounts ranging from $3MM to $10MM, while providing financing of up to 30 percent of local costs, loan term of up to 18 years. See http://www.exim.gov/products/exportcreditinsurance/renewable-express.cfm.

3 Ex-Im Bank Request for Amendment dated July 18, 2011, was approved on July 28, 2011 (Amendment No. 1), by the Office of the CFO. The Summary of Amendment Action cites: “the high cost of shipping on U.S. vessels, as well as availability and the MARAD requirement” as reasons for the Borrower’s decision to change from a direct loan to guaranteed loan.
Exporter’s Bankruptcy Filing and Loss of Warranties

The project completed the installation of the PV solar modules in line with its scheduled commissioning date of January 9, 2012.\(^4\) Punj purchased a total of \((b) (4)\) solar panels from Abound for an estimated total cost of $6,647,206.\(^5\) However, during the first two months of plant commercial operations, the Borrower discovered that certain solar modules were defective, causing a reduction in the overall generation of the entire array. Abound agreed to replace the entire set of the 2 MW solar modules (or 40% of total project) with its new generation Revision G Series modules under Abound’s five-year Defect Warranty. The replacement work was completed in June 2012.

Abound faced significant financial challenges beginning in 2010, as evidenced by a net loss from operations of $73.8 million in 2010 and $50.6 million in 2011. The company announced a restructuring in 2011 and laid off 70 percent of its work force.\(^6\) As the company’s credit position continued to decline in 2011, the Department of Energy froze its $400 million credit facility to Abound.\(^7\) Abound later announced it was in financial distress and on July 2, 2012, the company filed for Chapter 7 (Liquidation) Bankruptcy.\(^8\) This resulted in the loss of both the project’s solar modules’ 5-year Defect Warranty and 25-year Degradation Warranty. In September 2012, the federal judge overseeing Abound’s bankruptcy case approved a series of liquidation sales to settle the company’s debts.

PLL purchased additional solar modules at a steep discount to upgrade the project’s older modules and to secure a supply of spare modules for future needs. Although the defective solar panels were replaced, the installation of the panels and attendant down time caused a lower than expected electricity output in the early months of plant operation and contributed to the plant’s inability to achieve its projected first full year of net electricity output of \((b) (4)\).\(^9\) However, the project’s 11-month net electricity output of \((b) (4)\) is compliant with the Purchase Power Agreement (“PPA”), having exceeded its minimum energy generation requirement of \((b) (4)\). In addition, total operating expenses for FY 2013 increased by 120 percent over budget while Operating Profit (EBITDA) of \((b) (4)\) fell 27 percent below the budgeted level (Refer to Table 2). The PPA facilitates the generation of the project’s revenue stream that serves as a source of repayment for the Ex-Im loan.

According to Bank staff, technology risk was mitigated through the purchase of additional solar modules from Abound and the Sponsor’s guarantee extension through the replacement work. The project’s old modules were replaced with Abound’s G series modules and the project successfully negotiated with the Sponsor to have its Guarantee Agreement changed “from one year from Commercial Operations (Commencement) Date

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\(^4\) The Power Purchase Agreement defines the Scheduled Commissioning Date as January 9, 2012.
\(^5\) Refer to Appendix C - Supply Contract/Purchase Order 121, as amended on June 15, 2011.
\(^7\) U.S. Department of Energy Loan Programs Office – Discontinued Projects. See http://energy.gov/lpo/discontinued-projects. Abound’s $400 million credit facility was discontinued in September 2011.
to one year after the replacement of all of the modules.”\(^{10}\) As such, the Sponsor’s guarantee on the performance of the solar plant was extended for a total of 28 months from the Commercial Operations Commencement Date. OIG notes, however, that Ex-Im Bank will continue to bear the long-term technology risk as the solar modules’ long-term degradation warranty is inoperable due to the manufacturer’s bankruptcy.

**Table 2: Punj Lloyd Solar Power, Ltd. Financial Results as of FY Ended March 31, 2013**

(b) (4)

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**Provisional BCL Downgrade**

PMCG’s 2013 Risk Rating Adjustment Report downgraded Punj’s internal rating to a provisional\(^{(b) (4)}\) from \(^{(b) (4)}\). The downgrade reflected the borrower’s potential breach of the debt service coverage requirement in the restricted payment covenant set forth in the Credit Agreement,\(^{11}\) as well as the “inconsistent/missing data in the financial reports and lack of exchange risk hedging requirement ....”\(^{12}\)

\(^{10}\) The Punj project’s actual Commercial Operations Commencement Date is January 9, 2012.

\(^{11}\) The DSCR requirement is specified in Section 9.03(h) (iii), *Restricted Payment*, a negative covenant in the Credit Agreement.

INSPECTION SCOPE AND POINTS OF INQUIRY

The Office of Inspector General (“OIG”) inspection assesses the level of due diligence, risk assessment, risk mitigation and portfolio monitoring performed by Ex-Im Bank given its $9.1 million commitment, 18-year term of the transaction, the complexity of the Punj project financing, and the non-recourse nature of repayment once Project Completion is accepted by Ex-Im Bank.\textsuperscript{13}

A combination of quantitative and qualitative techniques was employed by the OIG’s Office of Inspection and Evaluation (“OIE”) as part of its review. These included (1) a review of the project’s legal documents, internal Ex-Im Bank reports and correspondence related to the transaction; (2) interviews of Ex-Im Bank staff including representatives from Structured Finance, Asset Management Division, Engineering and Environmental Division, Credit Policy, and Office of the General Counsel; (3) interviews of the guaranteed lender, PNC Bank, N.A.; (4) analysis of the Borrower’s financial statements, disbursement requests, invoices and payment history; and (5) a review of public and open source documents, press releases and network analysis. Finally, the following points of inquiry directed our focus and helped guide our inspection:

**POINT OF INQUIRY 1:** Did Ex-Im Bank perform the CRTI/KYC Transaction Due Diligence in accordance with its current policies and procedures? Are current policies and procedures sufficiently comprehensive to protect Ex-Im Bank from potential waste, fraud, abuse and reputational risk issues?

**POINT OF INQUIRY 2:** Did Ex-Im Bank sufficiently monitor and manage the credit in light of the project risks identified? Are waivers and/or amendments processed in a timely basis to ensure preservation of Ex-Im Bank asset values and legal rights under the Transaction Documents?

**POINT OF INQUIRY 3:** Did Ex-Im Bank conduct sufficient due diligence on the credit and performance risks of the transaction parties in accordance with Ex-Im Bank policies and procedures?

The OIG conducted this inspection during FY 2013-2014 in accordance with the 2012 Quality Standards for Inspection and Evaluation as defined by the Council of Inspectors General on Integrity and Efficiency (“CIGIE”). Those standards require that we plan and perform the evaluation to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our inspection objectives and points of inquiry. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions.

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\textsuperscript{13} Project Completion per Section 3.1.2 of the Share Retention and Sponsor Guarantee Agreement means “the date (the “Completion Date”) on which the Borrower demonstrates to Ex-Im Bank either that (i) the Borrower has conducted the Performance Test conducted in accordance with Section 9.01(w)(j) of the Credit Agreement and the Facility meets the Minimum Requirements or (ii) if the Facility fails the Performance Test and fails to meet the Minimum Required Standards after implementing a remedial plan as set forth in 9.01(w) of the Credit Agreement, the Borrower has prepaid the principal amount of the Credit in an amount sufficient to allow the Borrower to achieve a minimum Debt Service Coverage ratio of \textsuperscript{(b)} , assuming the revised capacity level of the Facility ....”
PRINCIPAL FINDINGS AND RECOMMENDATIONS

In writing this report, OIG recognizes that our findings and recommendations primarily relate to the Punj project financing, and may not necessarily be generalizable to the broader universe of Ex-Im Bank transactions. Our approach is to review transactions from a “lessons learned perspective” and to help identify potential systemic weaknesses in Ex-Im Bank’s policies and procedures. For each Point of Inquiry, OIG provides applicable criteria based on Ex-Im Bank’s policies and procedures, market best practices, as well as rating agency criteria. The report continues with OIG’s findings and attendant recommendations to management.

POINT OF INQUIRY 1: Did Ex-Im Bank perform the CRTI/KYC Transaction Due Diligence in accordance with its current policies and procedures? Are current policies and procedures sufficiently comprehensive to protect Ex-Im Bank from potential waste, fraud, abuse and reputational risk issues?

Applicable Standards

OIG reviewed various Applicable Standards and focused on the following: (1) Ex-Im Bank’s CRTI policies as outlined in Ex-Im Bank’s Loan Guarantee and Insurance Manual, January 2013 (“Loan Manual”), Chapter 24, Credit Review and Compliance Division; (2) Ex-Im Bank’s Risk Assessment Policy as outlined in Ex-Im Bank’s Loan Manual, Chapter 14.5.1; (3) “Transaction Due Diligence Best Practices,”14 Export-Import Bank of the U.S., January 10, 2008; (4) Ex-Im Bank’s CRTI Training Presentation, June 2013; (5) The U.S. Foreign Corrupt Practices Act of 1977 (“FCPA”); (6) the OECD Convention on Combating Bribery;15 and (7) best practices as observed by other multilateral financial agencies.

U.S. and OECD Anti-Corruption Frameworks

Anti-corruption due diligence is an important component of transactional due diligence.16 Regulators have endorsed a risk-based approach, focusing on those countries, entities and names that potentially represent higher levels of perceived risk. The U.S. Foreign Corrupt Practices Act of 1977 (“FCPA”) was enacted for the purpose of making it unlawful for certain classes of persons and entities to make payments to foreign government officials to assist in obtaining or retaining business. Relatedly, the OECD Anti-Bribery Convention establishes legally binding standards to criminalize bribery of foreign

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14 The CRTI/KYC Transaction Due Diligence is a process to identify potential debarment, fraud, corruption, bribery, and integrity risks associated with companies and individuals.


public officials in international business transactions and provides for a host of related measures that make this effective. Under both FCPA and OECD, the bribery of foreign officials is prohibited, either directly or through third parties.\textsuperscript{17} The U.S. Department of Justice is charged with the criminal enforcement of the FCPA’s provisions.

To avoid being held liable for corrupt third party payments, U.S. companies are encouraged to exercise due diligence and take all necessary precautions to ensure that they have formed a business relationship with reputable and qualified partners and representatives. In addition, the Criminal Division of the U.S. Department of Justice and the Enforcement Division of the U.S. Securities Exchange Commission have jointly published “A Resource Guide to the U.S. Foreign Corrupt Practices Act.”\textsuperscript{18} Failure to adequately assess clients, agents and business partners, and to know how they operate, can expose organizations to reputational risk, as well as monetary losses and criminal liability.

**Ex-Im Bank CRTI/KYC Transaction Due Diligence**

Ex-Im Bank’s policies related to fraud and corruption prevention are outlined in several core documents including Ex-Im Bank’s “Transaction Due Diligence Best Practices”\textsuperscript{19} and Character Reputational & Transaction Integrity (“CRTI”) procedures in Chapter 24 of its Loan Manual.\textsuperscript{20}

Ex-Im Bank policy prescribes a two-step approach to CRTI due diligence. Step one provides that all relevant parties to the transaction are to be vetted, including the foreign buyer, borrower, project sponsors, off-takers, end-users, guarantors, and principal owners of each of these entities. If Ex-Im Bank determines there is an elevated risk of CRTI issues or evidence of fraud or corruption with any of the participants in step one, Ex-Im Bank may proceed to step two, enhanced due diligence, or decline to process the application for financing. As outlined in Appendix C, step two CRTI due diligence involves a more comprehensive database check\textsuperscript{21} and additional action steps. Finally, Ex-Im Bank cooperates with OIG, law enforcement authorities, foreign and domestic, and will refer to such authorities on fraud or corruption allegations that Ex-Im Bank deems appropriate.

**CRTI Due Diligence Best Practices**

OIG conducted interviews with several multilateral agencies including the Inter-American Development Bank (“IADB”), the European Bank for Reconstruction and Development (“EBRD”) and

\begin{itemize}
  \item \textsuperscript{17} Under certain circumstances, it is considered unlawful to make a payment to an intermediary “knowing” that all or part of the payment will be used as a bribe to a foreign official. The U.S. Congressional Record accompanying the statute indicates “conscious disregards” and “willful blindness” may also constitute “knowledge.” For more information, see FCPA web site at http://www.justice.gov/criminal/fraud/fcpa/ and OECD web site at http://www.oecd.org/corruption/.
  \item \textsuperscript{18} See http://www.justice.gov/criminal/fraud/fcpa/guidance/.
  \item \textsuperscript{19} Transaction Due Diligence Best Practices, Ex-Im Bank, January 10, 2008.
  \item \textsuperscript{20} Chapter 24, Loan Guarantee and Insurance Manual, CRTI Transaction Due Diligence Guidelines (2011).
  \item \textsuperscript{21} Currently, 21 watch lists of World-Check are used by Ex-Im Bank.
\end{itemize}
the International Finance Corporation ("IFC"). OIG has confirmed that these institutions employ a broad and in-depth CRTI process at transaction inception. The results of this CRTI process are used to guide further, on-going due diligence efforts, credit structuring, documentation, and asset monitoring. In addition, transactions typically require the sign off from an “Office of Integrity” that certifies satisfactory completion of the due diligence efforts.

Depending on the nature of the perceived risks, these institutions will employ an array of standard checks and enhanced due diligence techniques:

- The use of a large number of databases including (although not limited to) World-Check.
- Comprehensive web-screening for Politically Exposed Persons ("PEPs") and other reputational and integrity issues.
- The use of vertical and affiliated entity relationship analysis to “pierce the ownership veil” of transaction parties including individuals, sponsors, EPC contractors, major vendors and local cost providers, etc. The objective is to identify non-transparent ownership and relational CRTI risks.
- Interviews with local agents and/or embassy staff in the host country.
- Cross checks and exchange of information with other government agencies, and multilaterals, etc.

In addition to CRTI due diligence, several multilateral agencies have independent accountability mechanisms to address impacts to a community while enhancing project outcomes. These mechanisms include:

- Addressing complaints by affected people seeking to resolve problems with Bank staff.
- Reviewing compliance where a complainant may seek an independent review of a Bank’s project.
- Providing advice to management on policies and procedures.

Finding 1: CRTI procedures as employed on the Punj Lloyd transaction were not sufficiently developed, nor systematically applied to adequately protect Ex-Im Bank from potential fraud, reputational and integrity risks.

**Not All CRTI Relevant Parties were Vetted**

The Memorandum of Individual Action of July 7, 2011 ("Approval Memo"), approving the Punj Lloyd Solar Power, Ltd. stated: “As part of Staff’s due diligence efforts, all significant parties associated with the transaction were reviewed in accordance with Ex-Im Bank’s CRTI Due Diligence Procedures.” Following an investigation on May 3, 2011, Staff confirmed “no negative findings.”

A subsequent screening request on June 27, 2011, for Abound Solar, Inc. also resulted in “no negative findings.” OIG notes that both screening requests were confined to “Company Names” only. Key individuals/shareholders and beneficial owners of Sponsor and Participant entities were not vetted.
OIG observed that the CRTI screening requests of July 2011 included the project sponsors, owners, and certain participants, but did not include the names of any individuals, such as directors and key officers of project participants. All of this information was available to Ex-Im Bank at the time of the screening request. In addition, the current CRTI Screening may not place sufficient emphasis on individuals. Although individuals and not organizations often present the highest level of character and reputational risk, OIG could not find any record of individual names submitted for screening in connection with the Punj transaction from 2011 through the date of this report.

OIG notes that the loan monitoring policy of Ex-Im Bank does not require CRTI analysis and screening on a periodic basis after initial due diligence, with the exception of “new” participants brought into the transaction subsequent to closing. Moreover, Ex-Im Bank’s Asset Management Division Operating Manual does not reference CRTI due diligence and responsibilities. As CRTI events and circumstances change throughout the life of a transaction, the absence of ongoing CRTI analysis may expose Ex-Im Bank to further reputational risk. In the case of the Punj transaction, Ex-Im Bank maintains a relationship with the various project participants for an 18 year time frame.

Ex-Im Bank’s Current CRTI Screening Fails to Identify Known Risks

OIG conducted a test to assess the effectiveness of the standard CRTI process currently utilized by Ex-Im Bank. As part of its review, OIG submitted for CRTI analysis the names of Sponsor and Participant entities, including key individuals/shareholders and beneficial owners that may have been the subject of investigations, suspensions, debarment, and/or bankruptcy filings. The objective of the test was to compare the results obtained from the standard CRTI check with the results obtained by the OIG using in-depth screening of publicly available data sources. As shown in Table 3 below, OIG’s CRTI screening request submitted to the Ex-Im Library in 2013 resulted in no negative findings for the Sponsor and Participant entities, while OIG’s open-sourced internet search revealed several findings concerning the Exporter, Sponsor, and the key individual/beneficial owner. Although the post-dated test that we conducted does not necessarily indicate that the Bank lacked relevant information at the time of the transaction, it does indicate that the CRTI process does not routinely capture relevant information. Ex-Im Bank notes that CRTI is just one component of a broader due diligence process. Nonetheless, the failure of the CRTI test to find relevant public-source information about the bankruptcy of a transaction participant indicates a need for improvement in the CRTI process.

### Table 3: CRTI Screening Results for Punj Lloyd Solar Power, Ltd. Transaction

<table>
<thead>
<tr>
<th>CRTI Screening Request Submitted By OIG</th>
<th>Date of Publication</th>
<th>Open Source Web Search Performed by OIG</th>
<th>Library CRTI Screening Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7/02/2012</td>
<td>Reuters. “Abound Solar to Liquidate in Bankruptcy”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7/02/2012</td>
<td>Public Access to Court Electronic Records (Pacer) reports Abound Solar filed for Chapter 7 Bankruptcy in the state of Delaware on July 2, 2012.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10/06/2012</td>
<td>PV Magazine. “Abound Solar Facing 3-Pronged Investigation for Securities and Consumer Fraud”</td>
<td></td>
</tr>
<tr>
<td>Punj Lloyd Limited (Sponsor)</td>
<td>2/20/2008</td>
<td>Live Mint &amp; Wall Street Journal. Central Intelligence/Indian Customs names PLL and 8 other infrastructure firms in an investigation involving customs duty evasion thru diversion of imported construction machineries to private entities.</td>
<td>No Findings</td>
</tr>
<tr>
<td></td>
<td>8/27/2012</td>
<td>Economic Times India. India’s Ministry of Home Affairs barred Punj Lloyd Limited from participating in three domestic port projects citing security clearance issues.</td>
<td>No Findings</td>
</tr>
<tr>
<td>Atul Punj (PLL Chairman)</td>
<td>8/27/2012</td>
<td>The Times of India. “Court Orders Probe Against Top IAS Officers” Punj Lloyd Chairman Atul Punj named as accused in complaint alleging corruption committed by former Indian Administrative Services chief secretary DC Samant involving Rs 155 crore (US $25.2 million) benefiting Road Infrastructure Development Corporation of Rajasthan. Atul Punj is a managing director of RIDCOR.</td>
<td>No Findings</td>
</tr>
</tbody>
</table>

Source: ‘Library Search’ column represents Library screening results as requested by OIG in 2013

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Other Adverse Information

PLL’s leading shareholder exercises management control over several Punj-related entities that are participants in the Ex-Im Bank financing for the Punj project. These include the Sponsor, Borrower, and Completion Guarantor (shown in Figure 2 above). According to various public sources, several of these related entities were involved in alleged malfeasance, including investigations by Indian authorities related to financial fraud, defense manufacturing, and import duty evasion.24 There was no evidence that Ex-Im Bank conducted any due diligence on controlling parties or related entities to the project participants, so there was no assessment as to whether these related entity activities could affect operational risks of the transaction or reputational risks to the Ex-Im Bank.

Current Procedures do not Require Risk Assessment to be Conducted Prior to CRTI Screening of Participants

Applying the appropriate CRTI due diligence in accordance with the perceived level of integrity risk is critical to a successful CRTI screening. However, the CRTI procedures of Ex-Im Bank do not require the risk assessment process to be conducted prior to the CRTI screening of participants. Accordingly, it is not clear whether the risk assessment is properly directing the CRTI screening process and subsequent due diligence. Although Bank staff has claimed to have conducted enhanced due diligence, there is no documented evidence in the transaction file that the CRTI Risk Indicators assessment was performed.

RECOMMENDATION 1

In a recently issued report, Report on the PNG LNG Project Financing (OIG-INS-14-01), we made recommendations to improve the CRTI/KYC process. In its management response, Ex-Im Bank agreed to review and evaluate its current CRTI/KYC process and expects to complete its review no later than December 31, 2014.

Finding 1 of this report, which was prepared during the same timeframe as the recently issued PNG LNG report, supports the same recommendation made in that report. Management’s actions to address the recommendation will be responsive to both the previous report and this one.

To strengthen the effectiveness and transparency of the CRTI/KYC due diligence, OIG recommends that Ex-Im Bank review and evaluate its current CRTI policies and procedures, giving consideration to the following:

- Enhance efficiency and effectiveness of the CRTI/KYC due diligence by implementing a risk-based assessment to determine the appropriate level of due diligence (enhanced or standard) required for each transaction. On the basis of these results, develop an appropriate systematic plan to screen, mitigate and monitor CRTI risk, particularly in the critical pre-approval stage of a transaction.

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• Conduct enhanced, upfront internet web screening to include local in-country sources and media for Politically Exposed Persons (“PEP”s) and other potential reputational/integrity issues.

• Employ vertical and affiliated entities relationship analysis to “pierce the ownership veil” to identify non-transparent and relational CRTI risks including owners, sponsors, EPC contractors, etc.

• Expand the external databases and sources being used for CRTI screening beyond the 21 watch lists of World-Check currently being used.

• Implement CRTI screening on all relevant transactional parties on a regular, periodic basis during asset monitoring subsequent to initial due diligence.

• Develop a dialogue with multilateral financial institutions such as IFC to learn more about CRTI and KYC best practices.

While enhancing the Ex-Im Bank’s CRTI procedures cannot guarantee that improper conduct will not occur, appropriate due diligence research will help reduce the potential misuse of financing involving fraud and corruption that could result in monetary loss to the transaction participants as well as loss of creditability in Ex-Im Bank’s programs and reputation.

Management Response:
Please see Appendix A, Management Response and OIG Evaluation.

POINT OF INQUIRY 2: Did Ex-Im Bank sufficiently monitor and manage the credit in light of the project risks identified? Are waivers and/or amendments processed in a timely basis to ensure preservation of Ex-Im Bank asset values and legal rights under the Transaction Documents?

Applicable Standards

In conducting this inquiry, the OIG reviewed various Applicable Standards and focused on the following: (1) Ex-Im Bank’s analysis and due diligence of the risk factors as outlined in Ex-Im Bank’s Loan, Guarantee and Insurance Manual, January 2011 (“Loan Manual”); (2) Asset Management Division Operating Manual, March 2009 (“Monitoring Manual”); and (3) industry best practices in respect of frequency of portfolio credit reviews.

Frequency of Portfolio Reviews

U.S. financial regulators have cited best practices related to credit portfolio management and state that an effective review process is fundamental to a sound credit portfolio. The Office of the Comptroller of the Currency (“OCC”) notes that effective loan portfolio management relies on not only “trailing indicators of credit quality such as delinquency, nonaccrual, and risk rating trends,” but
also “obtain[ing] early indications of increasing risk by taking a more comprehensive view of the loan portfolio.”

As noted by OCC’s Loan Portfolio Management Handbook, sound practices in portfolio management require “risk ratings [to be] updated in a timely fashion and that appropriate changes are made anytime there is a significant occurrence” with a minimum of annual risk rating evaluations. The FDIC posits that a system of periodic reviews is particularly important to the Allowance for Loan and Lease Losses (“ALLL”) determination process and states “reviews of significant credits should generally be performed annually, upon renewal, or more frequently when factors indicate a potential for deteriorating credit quality.”

In addition, OIG conducted interviews with several foreign Export Credit Agencies and multilateral agencies including the Inter-American Development Bank (“IADB”), the European Bank for Reconstruction and Development (“EBRD”) and the International Finance Corporation (“IFC”). OIG has confirmed that these institutions adhere to the following best practices:

- Review financial information from the borrower on a quarterly basis and as provided in the attendant credit documentation.
- Perform a thorough review and credit assessment on an annual basis.
- Perform more frequent reviews of individual credits that may have experienced credit impairment and as determined by management.

**Post-Operative Management**

Post-operative management of transactions originated by Ex-Im Bank’s Trade Finance and Structured Finance Divisions is provided by the Asset Management Division (“AMD”). Within AMD, the Portfolio Monitoring and Control Group (“PMCG”), is responsible for managing operative credits whenever the exposure amount is $20 million or less. Additionally, PMCG manages all sovereign risk transactions, regardless of amount, other than those originated by the Transportation Division.

PMCG’s responsibilities include: 1) monitoring compliance with the approved transaction terms; 2) periodic assessment of obligor risk, with the scope and frequency of assessments determined by the size and risk rating of the obligor exposure; 3) reviewing and processing post-operative transaction related requests for waivers, consents, and amendments (other than those relating to medium term insurance policies) in a timely fashion, while preserving the value of Ex-Im Bank’s credit assets, as well as protecting the Bank’s legal rights in all transactions; and 4) management of troubled/impaired transactions.

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26 Ibid.

27 For more information see http://www.fdic.gov/regulations/safety/manual/section3-2.html.
assets through prompt follow-up with lenders/borrower and formulation of an action plan that may include forbearance and pre/post claim restructuring.\(^{28}\)

**Finding 2: Ex-Im Bank’s current Post-Operative Monitoring Policy (“Monitoring Policy”) for PMCG credits should be updated to provide more proactive coverage and timely response to credit developments in the portfolio.**

Although PMCG staff executed their duties within the parameters of the current loan monitoring policy, the combination of infrequent credit reviews and inadequate staff resources may elevate the level of operational, credit and compliance risks to Ex-Im Bank. In particular, this policy’s mandate for an annual review does not provide the requisite level of monitoring of the operating and financial risks inherent in the individual credits to ensure timely recognition of adverse developments.

With respect to the Punj project, the OIG’s review of bank records and internal interviews revealed that Ex-Im Bank staff did not respond in a timely manner to several negative credit developments including the Exporter’s July 2nd bankruptcy filing and loss of performance warranty, the Borrower’s failure to provide legal notice regarding certain covenant breaches\(^ {29}\) and the related Events of Default.\(^ {30}\) Bank records show that Bank staff were aware of the Exporter’s Chapter 7 (Liquidation) Bankruptcy filing as early as June 28, 2012 and considered how it would affect the Punj project. However, OIG found no evidence in the internal credit file of the deliberative process and methodology used to assess these negative developments and to inform Ex-Im Bank staff’s response to the Borrower’s covenant defaults. The documents in the credit file, specifically the risk rating adjustment reports, show a delay in addressing the negative credit developments.

PMCG’s July 30, 2012, Risk Rating Adjustment Report did not address the Exporter’s pending bankruptcy, nor did it reveal that the Punj power plant was undergoing extensive replacement work on 40 percent of its solar modules. The replacement of the defective panels and attendant delays represented a higher level of operating risk by increasing the project’s operating costs and affecting

\(^{28}\) Loan, Guarantee and Insurance Manual. Chapter 23, Section Two, Subsection 2 – Corporate/Project Risks (Exp.<$20 million) states: “Portfolio Managers will review each obligor BCL rating once a year, unless there are specific developments concerning the obligor (payment history, default, restructuring) or the country (ICRAS rating change) that require additional review(s).”

\(^{29}\) OIG’s review of the Exporter’s Bankruptcy Petition of July 2, 2012, revealed that EPC contractor Punj Renewables Pvt. Ltd. (“Punj Renewables”) was listed in the Creditors Matrix as a creditor. Punj Renewables’ receipt of the notice of Exporter’s bankruptcy petition should have, in turn, triggered a notice to the Borrower and fulfillment of the Borrower’s notice requirements outlined in Section 9.02 of the Credit Agreement. However, there was no evidence in the loan files to indicate that Punj formally provided notice to the Lender and/or Ex-Im Bank.

\(^{30}\) Borrower’s Affirmative Covenants contained in Section 9.02 of the Credit Agreement, and subsections (a) (ii) (C), (a) (iv), (v) and (x) (i) constitute the Borrower’s “notice” requirements. Pursuant to the terms and conditions of the credit agreement, the Borrower is required to report within ten business days “an Event of Default or of any Potential Default … including the particulars of such occurrence and the corrective action proposed to be taken by the Borrower with respect thereto... or any other condition or event that could have a material adverse effect on the ability of ... any other Project Participant to perform its obligations under any Transaction Document to which it is a party.
the project’s capacity to continue to generate the quantity and quality of the projected plant output over the life of the project.

PMCG’s August 16, 2013, Risk Rating Adjustment Report indicated that it was not until December 2012 (approximately six months after Abound’s bankruptcy filing) that PMCG learned of the project’s 2 MW faulty modules and the replacement work that was completed in June 2012, which was immediately followed by the Exporter’s bankruptcy filing.

A more proactive approach in its post-operative monitoring activities and more frequent reviews could have led the Bank to identify and address the heightened risk posed by the Exporter’s deteriorating financial position and the attendant breach in the Affirmative Covenant earlier. The Bank relied on the Exporter’s replacement of defective solar panels, the Borrower’s purchase of additional solar modules, and the renegotiation of the Sponsor’s guarantee agreement to address the associated project technology risk.

Absent a complete record of the PMCG’s monitoring activities, there is an increased risk that the Bank did not consider all relevant information in its decision making processes. Moreover, insufficient record keeping makes it difficult for the Bank to provide a basis for its actions or inaction.

**Borrower’s Debt Service Coverage Ratio Cannot be Accurately Calculated Using Audited Financial Statements. Credit Agreement Does Not Require Borrower to Provide a Certificate of Compliance**

The Debt Service Coverage Ratio (“DSCR”) is a key metric used in analyzing the credit performance of a project financing. Ex-Im Bank expects the project to have a reasonable coverage ratio under base and adverse assumptions and that the debt service reserve account have at least six months coverage. Projects without such characteristics are downgraded. However, as currently formulated in the Punj credit agreement, the DSCR cannot be accurately calculated using the Borrower’s audited financial statements. Nor is there a requirement for the Borrower to provide a certificate of compliance for the DSCR test included in the Restricted Payment covenant.

In addition, OIG’s initial review of the Borrower’s FY 2013 audited financial statements indicated a potential breach of the Borrower’s DSCR component used in the Restricted Payment covenant. As indicated in Table 4 below, PMCG calculated the DSCR at (b) (4) at FYE March 31, 2013, versus the (b) (4) minimum required. This subsequently led to PMCG’s decision to downgrade the Punj transaction from (b) (4) to provisional (b) (4), citing the potential breach of the DSCR, along with “inconsistent/missing data in the financial reports and lack of exchange risk hedging requirement”

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31 Ex-Im Bank, through its Chairman, is required to “make and preserve records containing adequate and proper documentation of the organization, function, policies, decisions, and essential transactions of the ... [Bank] ... designed to furnish the information necessary to protect the legal and financial rights of the Government and the persons directly affected by the ... [Bank’s] ... activities. 44 U.S.C § 3101.

32 Ex-Im bank Loan Manual, Chapter 14, page 106.

33 Section 9.03(h) (iii), Restrictive Payments, Negative Covenants of the Borrower, Credit Agreement, page 56.

(Refer to Appendix E for more details on the DSCR calculation for the 2013 Risk Rating Adjustment Report). Finally, OIG notes that the DSCR calculation methodology utilized in the PMCG’s 2013 Risk Rating Adjustment Report is inconsistent with the Credit Agreement’s DSCR definition (See Tables 4 and 5 below).

**Table 4: Punj Lloyd Solar Power, Ltd. Risk Rating Adjustment Report DSCR Calculation**

(b) (4)

**Table 5: Punj Lloyd Solar Power, Ltd. DSCR Calculation Based on Credit Agreement**

(b) (4)

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35 (b) (4)
36 (b) (4)
37 (b) (4)
38 (b) (4)
Frequency of Portfolio Credit Reviews may be Inadequate

The OIG further notes that pursuant to PMCG’s monitoring policy, resolution of the potential financial covenant breach and the provisional downgrade to (b) (4) may not be finalized until the next PMCG Risk Rating Adjustment Report scheduled for August 2014 as the loan is on an annual review interval. PMCG has indicated that it will pursue several amendments to the Credit Agreement and require the Borrower to (i) provide a DSCR calculation and a compliance certification on a quarterly basis, and (ii) require that the DSCR be calculated in accordance with the definitions in the Credit Agreement.

This time lag to resolve outstanding issues potentially exposes Ex-Im Bank to additional operational risks and credit compliance issues.

RECOMMENDATION 2

Ex-Im Bank should evaluate its current Post-Operative Monitoring Policy for PMCG credits with a view to implementing a more proactive approach that allows for timely recognition of credit developments. Specifically, Ex-Im Bank should consider the following initiatives:

- In line with portfolio management best practices, update policy and practice to require review of financial statements and other information as received, more frequently than current annual reviews. Particular focus should be given to those PMCG credits which may have experienced adverse credit developments.
- Review current staffing levels within PMCG to ensure that each PMCG officer’s workload is commensurate with industry and peer group standards.39
- Plan to transition current paper-driven reporting system to a digital platform and an online financial reporting system.
- Perform an internal review of PMCG files to establish the level of compliance with reporting requirements, financial covenants, and/or any financial ratio requirements tied to negative covenants set forth in the Credit Agreement.
- Ensure Credit Agreement provisions, such as certifications and definitions, are in place and conducive to pro-active credit monitoring.

Management Response:

Please see Appendix A, Management Response and OIG Evaluation.

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39 Ex-Im Bank’s Audit Committee commissioned KPMG to review Ex-Im Bank’s portfolio management practices and to benchmark them against peers. Completed in 2013, the report found that Ex-Im Bank staff was responsible for monitoring approximately more than twice the number of accounts as their peers.
POINT OF INQUIRY 3: Did Ex-Im Bank conduct sufficient due diligence on the credit and performance risks of the transaction parties in accordance with Ex-Im Bank policies and procedures?

Applicable Standards

**Ex-Im Bank Credit Policy - Project Finance Risk Factors**

Reflecting the complex, non-recourse nature of a project financing, Ex-Im Bank’s Loan Manual calls for a comprehensive analysis of all aspects of the project financing. Among the many risk factors that are commonly addressed are construction, market, country, transportation, sponsor, fuel and operations. In addition, the project’s plan of operations, financial projections and scenario, legal structure, and the background of the sponsor(s) and project management team are also carefully evaluated. As outlined in Ex-Im Bank’s Loan Manual, Chapter 14.5.1 Risk Factors, a thorough review of all major contracts and underlying project documents are required to include the Engineering, Procurement and Construction (“EPC”) contracts.

**Ex-Im Bank’s Participant Transaction Due Diligence Policy**

Ex-Im Bank’s Participant Transaction Due Diligence Policy set forth in Section 8.1.3 “Standard Credit Structures” of the Ex-Im Bank Manual, states: “the exporter/supplier is assumed to be capable of performing its responsibilities unless the scope and size of the transaction is materially greater than the exporter/supplier’s previous contracts; financial information on exporter/supplier reflects concerns; or the credit report lacks detail sufficient to understand the exporter/supplier or contains material negative information, such as indication that the company may not exist in the near future.”

Finding 3: Ex-Im Bank did not sufficiently vet the financial and performance risks relative to the Exporter and technology supplier, Abound Solar, Inc.

Ex-Im Bank did not sufficiently vet the financial risks and performance risks relative to the Exporter and Technology Supplier, Abound Solar, Inc. Abound filed for Chapter 7 (Liquidation) Bankruptcy protection within 80 days after the loan’s Financial Closing, triggering a technical default under the terms of the Credit Agreement.

Ex-Im Bank’s Memorandum for Individual Approval (“Loan Approval”) of July 7, 2011, reported net losses incurred by Abound in amounts of approximately $51 million and $74 million against revenues of $6 thousand and $26 million in FY 2009 and FY 2010, respectively (See Table 6 below), but failed to address the risks inherent in the Exporter’s poor financial performance and its ability to continue commercial operations. This is a departure from Ex-Im Bank’s Participant Transaction Due Diligence Policy set forth in Section 8.1.3 “Standard Credit Structures” of the Ex-Im Bank Manual as described above.
Ex-Im Bank Credit Due Diligence Did not Include a Credit Reference Check with the U.S. Department of Energy

The U.S. Department of Energy (“DOE”) approved a $400 million Loan Guarantee for Abound in December 2010. The publicized event should have served as an impetus for Ex-Im Bank to initiate a dialogue with the DOE for purposes of obtaining a credit reference on Abound. The DOE suspended Abound’s $400 million Loan Guarantee Payments in September 2011\(^4\) due to its failure to meet established financial targets, a highly-publicized event that came within 60 days of the Punj loan approval and 6 – 9 months preceding the project’s Commercial Operations Commencement Date (January 9, 2012) and financial closing date (April 13, 2012).

The OIG’s review of the loan files did not indicate that Ex-Im Bank pursued any due diligence relative to Abound’s credit relationship with the DOE. As discussed in the press, Abound was experiencing financial difficulties and rapidly becoming insolvent well before the financial closing.

**RECOMMENDATION 3**

In accordance with Ex-Im Bank’s Project Finance Risk Factors\(^4\) and Participant Transaction Due Diligence Policy, Ex-Im Bank should conduct thorough due diligence on all project Participants, including the Exporter. In conducting due diligence, if Ex-Im Bank identifies other federal credit programs that participants utilize, Ex-Im Bank should consider obtaining a credit reference or sharing information with the other federal credit programs.

**Management Response:**

Please see Appendix A, Management Response and OIG Evaluation.

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\(^{40}\) Ex-Im Bank’s Memorandum of Individual Action as of July 2, 2011.


\(^{42}\) Ex-Im Bank Loan, Guarantee and Insurance Manual: Chapter 14.5.1 – Project Finance Risk Factors.

\(^{43}\) Ex-Im Bank Loan, Guarantee and Insurance Manual: Chapter 8.1.3 Standard Credit Structures – Participant Transaction Due Diligence.

\(^{44}\) Ibid.
Conclusions

The Punj Lloyd Solar Power, Ltd. (“Punj”) project involves the development of a five-megawatt solar photovoltaic power plant in the state of Rajasthan, India. With a total cost of approximately $16.7 million, the project utilizes cadmium telluride photovoltaic technology to convert sunlight into electric energy for transmission over the grid. The solar modules were manufactured and exported by Abound Solar, Inc. (“Abound”) and financed by Ex-Im Bank through a comprehensive guarantee to PNC Bank.

The OIG’s inspection found the Punj transaction to be adequately structured, while falling short in fully complying with Ex-Im Bank’s Project Finance Risk Factors and Participant Transaction Due Diligence Policy. Both require the full vetting of all project participants. Ex-Im Bank failed to fully analyze the credit and performance risks of the Exporter and technology supplier, Abound. The company experienced financial difficulties in 2010 and 2011 and filed for Chapter 7 (Liquidation) Bankruptcy within 80 days of the project’s Financial Closing. This in turn led to the loss of both the 5-year Defect Warranty and 25-year Degradation Warranty for the project’s solar modules.

The loss of the technology and degradation warranties for the solar panels, coupled with the Borrower’s weak financial performance and covenant default have increased the risk profile of the Punj transaction. Accordingly, Ex-Im Bank has increased the internal risk or “BCL rating” from(b) (4). The Borrower is current in its principal and interest payments.

The following provides a summary of the inspection’s Points of Inquiry, Findings, and Recommendations:

**Point of Inquiry 1**: Did Ex-Im Bank perform the CRTI/KYC Transaction Due Diligence in accordance with its current policies and procedures? Are current policies and procedures sufficiently comprehensive to protect Ex-Im Bank from potential waste, fraud, abuse and reputational risk issues?

**Finding 1**: CRTI procedures as employed on the Punj Lloyd transaction were not sufficiently developed, nor systematically applied to adequately protect Ex-Im Bank from potential fraud, reputational and integrity risks.

**Recommendation 1**: In a recently issued report, Report on the PNG LNG Project Financing (OIG-INS-14-01), we made recommendations to improve the CRTI/KYC process. In its management response, Ex-Im Bank agreed to review and evaluate its current CRTI/KYC process and expects to complete its review no later than December 31, 2014.

Finding 1 of this report, which was prepared during the same timeframe as the recently issued PNG LNG report, supports the same recommendation made in that report. Management’s actions to address the recommendation will be responsive to both the previous report and this one.

To strengthen the effectiveness and transparency of the CRTI/KYC due diligence, OIG recommends that Ex-Im Bank review and evaluate its current CRTI policies and procedures, giving consideration to the following:

- Enhance efficiency and effectiveness of the CRTI/KYC due diligence by implementing a risk-based assessment to determine the appropriate level of due diligence (enhanced or standard) required for each transaction. On the basis of these results, develop an appropriate systematic plan to screen, mitigate and monitor CRTI risk, particularly in the critical pre-approval stage of a transaction.
• Conduct enhanced, upfront internet web screening to include local in-country sources and media for Politically Exposed Persons (“PEP”s) and other potential reputational/integrity issues.

• Employ vertical and affiliated entities relationship analysis to “pierce the ownership veil” to identify non-transparent and relational CRTI risks including owners, sponsors, EPC contractors, etc.

• Expand the external databases and sources being used for CRTI screening beyond the 21 watch lists of World-Check currently being used.

• Implement CRTI screening on all relevant transactional parties on a regular, periodic basis during asset monitoring subsequent to initial due diligence.

• Develop a dialogue with multilateral financial institutions such as IFC to learn more about CRTI and KYC best practices.

While enhancing the Ex-Im Bank’s CRTI procedures cannot guarantee that improper conduct will not occur, appropriate due diligence research will help reduce the potential misuse of financing involving fraud and corruption that could result in monetary loss to the transaction participants as well as loss of creditability in Ex-Im Bank’s programs and reputation.

**Management Response:**
Please see Appendix A, Management Response and OIG Evaluation.

**Point of Inquiry 2:** Did Ex-Im Bank sufficiently monitor and manage the credit in light of the project risks identified? Are waivers and/or amendments processed in a timely basis to ensure preservation of Ex-Im Bank asset values and legal rights under the Transaction Documents?

**Finding 2:** Ex-Im Bank’s current Post-Operative Monitoring Policy (“Monitoring Policy”) for PMCG credits should be updated to provide for timely response to credit developments in the portfolio.

**Recommendation 2:** Ex-Im Bank should evaluate its current Post-Operative Monitoring Policy for PMCG credits with a view to implementing a more proactive approach that allows for timely recognition of credit developments. Specifically, Ex-Im Bank should consider the following initiatives:

• In line with portfolio management best practices, update policy and practice to require review of financial statements and other information as received, more frequently than current annual reviews. Particular focus should be given to those PMCG credits which may have experienced adverse credit developments.

• Review current staffing levels within PMCG to ensure that each PMCG officer’s workload is commensurate with industry and peer group standards.

• Plan to transition current paper-driven reporting system to a digital platform and an online financial reporting system.
- Perform an internal review of PMCG files to establish the level of compliance with reporting requirements, financial covenants, and/or any financial ratio requirements tied to negative covenants set forth in the Credit Agreement.

- Ensure Credit Agreement provisions, such as certifications and definitions, are in place and conducive to pro-active credit monitoring.

Management Response:
Please see Appendix A, Management Response and OIG Evaluation.

Point of Inquiry 3: Did Ex-Im Bank conduct sufficient due diligence on the credit and performance risks of the transaction parties in accordance with Ex-Im Bank policies and procedures?

Finding 3: Ex-Im Bank did not sufficiently vet the financial and performance risks relative to the Exporter and technology supplier, Abound Solar, Inc.

Recommendation 3: In accordance with Ex-Im Bank’s Project Finance Risk Factors and Participant Transaction Due Dilligence Policy, Ex-Im Bank should conduct thorough due diligence on all project Participants, including the Exporter.

Management Response:
Please see Appendix A, Management Response and OIG Evaluation.
Dear Inspector General McCarthy,

Thank you for providing the Export-Import Bank of the United States ("Ex-Im Bank" or "the Bank") management with the Office of the Inspector General's (OIG) "Report on Punj Lloyd Solar Power, Ltd" (March 2014) ("Punj"). Management continues to support the OIG's work and inspections which complement the Bank's efforts to continually improve its processes. Ex-Im Bank is proud of the strong and cooperative relationship it has with the OIG.

The Bank appreciates the OIG noting that at the time of this report "the financing is current in its interest and principal payments." The Bank continues to expect full repayment of this $9.1 million transaction. Ex-Im Bank is also pleased that the report acknowledges that Bank staff "executed their duties within the parameters of the current loan monitoring policy."

The Bank's comprehensive risk management framework protects the U.S. Taxpayer. This framework starts with effective underwriting to ensure a reasonable assurance of repayment. More than 80% of our entire portfolio is backed by some form of collateral or a sovereign guarantee. Our comprehensive risk management program includes detailed documentation to ensure the Bank's rights are protected legally and that the transaction is not in violation of U.S. government policy, including Iran sanctions. And it continues after a transaction is approved with pro-active monitoring efforts to minimize defaults. The Bank believes that a comprehensive risk management framework with strong emphasis on continuous improvement minimizes claims and defaults. This comprehensive risk management framework, which was noted in a 2013 Government Accountability Office (GAO) audit, has been effective in protecting the U.S. Taxpayer. Since FY 2006, the Bank's default rate has dropped from 1.6% to 0.194% as of June, 2014.
The Inspection "Report on Punj Lloyd Solar Power, Ltd." makes recommendations in the areas of Character, Reputational, Transactional Integrity (CRTI) checks, post-operative monitoring policy, and due diligence on transaction participants.

Recommendation 1: In a recently issued report, Report on the PNG LNG Project Financing (OIG-INS-14-01), we made recommendations to improve the CRTI/KYC process. In its management response, Ex-Im Bank agreed to review and evaluate its current CRTI/KYC process and expects to complete its review no later than 12/31/2014. Finding 1 of this report, which was prepared during the same timeframe as the recently issued PNG LNG report, supports the same recommendation made in that report. Management’s actions to address the recommendation will be responsive to both the previous report and this one.

To strengthen the effectiveness and transparency of the CRTI/KYC due diligence, OIG recommends that Ex-Im Bank review and evaluate its current CRTI policies and procedures, giving consideration to the following:

- Enhance efficiency and effectiveness of the CRTI/KYC due diligence by implementing a risk-based assessment to determine the appropriate level of due diligence (enhanced or standard) required for each transaction. On the basis of these results, develop an appropriate systematic plan to screen, mitigate and monitor CRTI risk, particularly in the critical pre-approval stage of a transaction.
- Conduct enhanced, upfront internet web screening to include local in-country sources and media for Politically Exposed Persons (“PEP”s) and other potential reputational integrity issues.
- Employ vertical and affiliated entities relationship analysis to “pierce the ownership veil” to identify non-transparent and relational CRTI risks including owners, sponsors, EPC contractors, etc.
- Expand the external databases and sources being used for CRTI screening beyond the 21 watch lists of World-Check currently being used.
- Implement CRTI screening on all relevant transactional parties on a regular, periodic basis during asset monitoring subsequent to initial due diligence.
- Develop a dialogue with multilateral financial institutions such as IFC to learn more about CRTI and KYC practices.

Management Response: As the report states, the OIG has previously made this same recommendation in its last inspection report a short time ago, Report on the PNG LNG Project Financing, June 18, 2014 (OIG-INS-14-01). The Bank’s response to that prior report applies again here. The Bank is currently reviewing and evaluating its current CRTI process, and expects to have this completed by the end of this calendar year. Management agrees to take the OIG recommendations into consideration. Due to budgetary and staffing constraints, the Bank will need to conduct a cost-benefit analysis to determine the level of participant review which is both...
practical and feasible. The Bank will continue to evaluate other potential databases for inclusion. The Bank notes that local in-country sources and media are often politically motivated, therefore not the most accurate and reliable sources of information.

Recommendation 2: Ex-Im Bank should evaluate its current Post-Operative Monitoring Policy for PMCG credits with a view to implementing a more proactive approach that allows for timely recognition of credit developments. Specifically, Ex-Im Bank should consider the following initiatives:

- In line with portfolio management best practices, update policy and practice to require review of financial statements and other information as received, more frequently than current annual reviews. Particular focus should be given to those PMCG credits with a BCL rating of 7 and above given the greater credit risk.
- Review current staffing levels within PMCG to ensure each PMCG officer's workload is commensurate with industry and peer group standards.
- Plan to transition current paper-driven reporting system to a digital platform and an online financial reporting system.
- Perform an internal review of PMCG files to establish the level of compliance with reporting requirements, financial covenants, and/or financial ratio requirements tied to negative covenants set forth in the Credit Agreement.
- Ensure Credit Agreement provisions, such as certifications and definitions, are in place and conducive to pro-active credit monitoring.

Management Response: Management agrees to evaluate the recommendation and consider the issues raised by OIG.

In regard to Recommendation 2(a), the Bank conducts annual reviews, reviews financial statements more frequently, and engages in frequent reviews for impaired credits. Consistent with the OIG recommendation, the Bank will update its policy in FY 2015 to reflect the Bank's current practice, including a focus on impaired credits and negative credit developments.

In regard to Recommendation 2(b), the Bank has already hired additional employees in FY 2014. The increased staffing ensures the monitoring officers' workload is commensurate with industry and peer group standards.

In regard to Recommendation 2(c), the Bank agrees to evaluate this recommendation in FY 2015 considering cost and technology constraints. The Bank believes that a comprehensive technological solution requires detailed study and cost benefit analysis.

In regard to Recommendation 2(d), the Bank agrees with this recommendation and will perform compliance reviews of these files beginning by the end of first quarter FY 2015. The Bank has
created a new Business Compliance Group to work with Bank staff to develop procedures to ensure transactional compliance with requirements. The transaction compliance members of this group will work with loan officers to develop processes for documentation and ensure the required documentation is contained in each loan file.

In regard to Recommendation 2(e), the Bank agrees with this recommendation and will perform reviews of Credit Agreement provisions beginning by the end of first quarter FY 2015 to ensure that appropriate certifications and definitions are in place.

**Recommendation 3:** In accordance with Ex-Im Bank’s Project Finance Risk Factors and Participation Due Diligence Policy, Ex-Im Bank should conduct thorough due diligence on all project participants, including the Exporter. In conducting due diligence, if Ex-Im identifies other federal credit programs that participants utilize, Ex-Im Bank should consider obtaining a credit reference or sharing information with the other federal credit programs.

**Management Response:** Management agrees to continue to conduct thorough due diligence on all project participants, and will ensure the Exporter is included in the due diligence process. In conducting due diligence, the Bank will consider reaching out to other federal agencies who may be providing financing to transaction participants.

We thank the OIG for your efforts to ensure the Bank’s policies and procedures continue to improve, as well as the work you do with us to protect Ex-Im funds from fraud, waste, and abuse. We look forward to strengthening our working relationship and continuing to work closely with the Office of the Inspector General.

Sincerely,

Charles J. Hall
Executive Vice President and Chief Risk Officer
Export-Import Bank of the United States
OIG Evaluation

On September 18, 2014, Ex-Im Bank provided its management response to a draft of this report, agreeing with OIG’s three primary recommendations, two of which contain sub-recommendations. The response identified Bank actions to address the primary recommendations and sub-recommendations. OIG considers the Bank’s actions sufficient to resolve the reported recommendations, which will remain open until OIG determines that the agreed upon corrective actions are completed and responsive to the reported recommendations.

With regard to the Bank’s comprehensive risk management program, we commend the Bank for recognizing the importance of having a program with strong emphasis on continuous improvement to minimize claims and defaults. We also recognize the Bank’s efforts to improve its CRTI checks, post-operative monitoring policy, and due diligence on transaction participants. However, it should be noted that this inspection did not evaluate the efficacy of the Bank’s comprehensive risk management program or the Bank’s calculation of its default rate. The scope of this inspection was limited to the $9.1 million Ex-Im guaranteed loan to Punj Lloyd Solar Power, Ltd.

The Bank’s management response to the reported recommendations and OIG’s assessment of the response are as follows:

RECOMMENDATION 1

Management Response: As the report states, the OIG has previously made this same recommendation in its last inspection report a short time ago, Report on the PNG LNG Project Financing, June 18, 2014 (OIG-INS-14-01). The Bank’s response to that prior report applies again here. The Bank is currently reviewing and evaluating its current CRTI process, and expects to have this completed by the end of this calendar year. Management agrees to take the OIG recommendations into consideration. Due to budgetary and staffing constraints, the Bank will need to conduct a cost-benefit analysis to determine the level of participant review which is both practical and feasible. The Bank will continue to evaluate other potential databases for inclusion. The Bank notes that local in-country sources and media are often politically motivated, therefore not the most accurate and reliable sources of information.

Evaluation of Management’s Response: Management’s proposed actions are responsive; therefore, the recommendation is resolved and will be closed upon completion and verification that the proposed actions have been implemented.

RECOMMENDATION 2

Management Response: Management agrees to evaluate the recommendation and consider the issues raised by OIG.

In regard to Recommendation 2(a), the Bank conducts annual reviews, reviews financial statements more frequently, and engages in frequent reviews for impaired credits. Consistent with the OIG recommendation, the Bank will update its policy in FY 2015 to reflect the Bank’s current practice, including a focus on impaired credits and negative credit developments.

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45 Recommendations 1 and 2 contain sub-recommendations to help the Bank address the related findings of this report.
In regard to Recommendation 2(b), the Bank has already hired additional employees in FY 2014. The increased staffing ensures the monitoring officers’ work load is commensurate with industry and peer group standards.

In regard to Recommendation 2(c), the Bank agrees to evaluate this recommendation in FY 2015 considering cost and technology constraints. The Bank believes that a comprehensive technological solution requires detailed study and cost benefit analysis.

In regard to Recommendation 2(d), the Bank agrees with this recommendation and will perform compliance reviews of these files beginning by the end of first quarter FY 2015. The Bank has created a new Business Compliance Group to work with Bank staff to develop procedures to ensure transactional compliance with requirements. The transaction compliance members of this group will work with loan officers to develop processes for documentation and ensure the required documentation is contained in each loan file.

In regard to Recommendation 2(e), the Bank agrees with this recommendation and will perform reviews of Credit Agreement provisions beginning by the end of first quarter FY 2015 to ensure that appropriate certifications and definitions are in place.

**Evaluation of Management’s Response:**

For Recommendation 2(a), the OIG recognizes the Bank’s intent to update its policy in FY 2015 to reflect the Bank’s current practice as a first step. The update should also address the recommendation for enhanced review of PMCG credits which may have experienced adverse credit developments. Therefore, this recommendation remains open until Ex-Im Bank provides information to support that the actions to be taken are consistent with the intent of the recommendation, and verification that the proposed actions have been implemented.

For Recommendation 2(b), the OIG recognizes the hiring of additional employees in FY 2014 as responsive to the intent of the recommendation. However, management’s response did not contain information, such as the number of staff hired and allocation of the staff within the Bank. Therefore, the recommendation remains open until Ex-Im Bank provides information to support the actions taken are consistent with the intent of the recommendation, and verification that the proposed actions have been implemented.

For Recommendation 2(c), the OIG recognizes the Bank’s intent to evaluate the recommendation with respect to its cost and technology constraints as a first step. However, the recommendation remains open until Ex-Im Bank provides information to support the actions to be taken are consistent with the intent of the recommendation, and verification that the agreed upon proposed actions have been implemented.

For Recommendations 2(d), the OIG recognizes the Bank’s intent to perform compliance reviews of PMCG files. As recommended this review should establish the level of compliance with reporting requirements, financial covenants, and/or financial ratio requirements tied to negative covenants set forth in the Credit Agreement. The Bank would also benefit from formalizing the methodology (e.g., file selection, procedures) used when conducting the compliance reviews in its Post-Operative Monitoring Policy for PMCG Credits. Management’s proposed actions are responsive; therefore, the recommendation is resolved and will be closed upon completion and verification of the proposed actions.

For Recommendation 2(e), management’s proposed actions are responsive; therefore, the recommendation is resolved and will be closed upon completion and verification that the proposed actions have been implemented.
RECOMMENDATION 3

Management Response: Management agrees to continue to conduct thorough due diligence on all project participants, and will ensure the Exporter is included in the due diligence process. In conducting due diligence, the Bank will consider reaching out to other federal agencies who may be providing financing to transaction participants.

Evaluation of Management’s Response: Management’s proposed actions are responsive; therefore, the recommendation is resolved and will be closed upon completion and verification of proposed actions.

SUMMARY OF MANAGEMENT’S COMMENTS ON THE RECOMMENDATIONS

<table>
<thead>
<tr>
<th>Rec. No.</th>
<th>Corrective Action: Taken or Planned</th>
<th>Expected Completion Date</th>
<th>Resolved: Yes or No</th>
<th>Open or Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The Bank is reviewing its CRTI/KYC process. The Bank will need to conduct a cost-benefit analysis to determine the level of participant review which is both practical and feasible. The Bank will continue to evaluate other potential databases for inclusion.</td>
<td>12/31/2014</td>
<td>Yes</td>
<td>Open</td>
</tr>
<tr>
<td>2(a).</td>
<td>Consistent with the OIG recommendation, the Bank will update its policy in FY 2015 to reflect the Bank’s current practice.</td>
<td>No target completion date provided</td>
<td>Yes</td>
<td>Open</td>
</tr>
<tr>
<td>2(b).</td>
<td>The Bank hired additional employees in 2014.</td>
<td>No target completion date provided</td>
<td>Yes</td>
<td>Open</td>
</tr>
<tr>
<td>2(c).</td>
<td>The Bank agreed to evaluate the recommendation in FY 2015 considering cost and technology constraints.</td>
<td>No target completion date provided</td>
<td>Yes</td>
<td>Open</td>
</tr>
<tr>
<td>2(d).</td>
<td>The Bank will perform compliance reviews of PMCG files beginning by the end of first quarter FY 2015.</td>
<td>12/31/2014</td>
<td>Yes</td>
<td>Open</td>
</tr>
<tr>
<td>2(e).</td>
<td>The Bank will perform reviews of Credit Agreement provisions beginning by the end of first quarter FY 2015 to ensure that appropriate certifications and definitions are in place.</td>
<td>12/31/2014</td>
<td>Yes</td>
<td>Open</td>
</tr>
</tbody>
</table>

46 Ex-Im OIG has requested target completion dates for each of the outstanding recommendations.

47 “Resolved” means that (1) Management concurs with the recommendation, and the planned, ongoing, and completed corrective action is consistent with the recommendation; or (2) Management does not concur with the recommendation, but alternate action meets the intent of the recommendation.

48 Upon determination by the Ex-Im OIG that the agreed-upon corrective action has been completed and is responsive to the recommendation, the recommendation can be closed.
<table>
<thead>
<tr>
<th>Rec. No.</th>
<th>Corrective Action: Taken or Planned</th>
<th>Expected Completion Date</th>
<th>Resolved: Yes or No</th>
<th>Open or Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>The Bank will conduct thorough due diligence on all project participants, and will ensure the Exporter is included in the due diligence process. Further, the Bank will consider reaching out to other federal agencies that may be providing financing to transaction participants.</td>
<td>No target completion date provided</td>
<td>Yes</td>
<td>Open</td>
</tr>
</tbody>
</table>
APPENDIX B: SUPPLY CONTRACT/PURCHASE ORDER – 121

(b) (4)
APPENDIX C: CRTI TRANSACTION DUE DILIGENCE GUIDELINES
## APPENDIX C: CRTI TRANSACTION DUE DILIGENCE GUIDELINES (Cont.)

<table>
<thead>
<tr>
<th>YES(^4)</th>
<th>YES(^5)</th>
<th>No</th>
<th>Risk Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1. Destination market represents elevated CRTI risk</td>
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<td></td>
<td></td>
<td></td>
<td>Comments:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2. Financial statements appear to be unreliable or lack appropriate transparency</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Comments:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3. Foreign principal is a Politically Exposed Person or represents significant reputational risk</td>
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<td></td>
<td></td>
<td></td>
<td>Comments:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4. Transaction participant has been a party to a high volume of unseasoned transactions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Comments:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5. Transaction involves industry or sector with poor CRTI attributes (e.g. gaming industry)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Comments:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6. Transaction involves inexperienced or poorly experienced key participant (i.e. lender, exporter, supplier, etc.)</td>
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<td></td>
<td></td>
<td></td>
<td>Comments:</td>
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<td></td>
<td></td>
<td></td>
<td>7. Transaction presents weak origination characteristics</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Comments:</td>
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<td></td>
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<td></td>
<td>8. Transaction involves non-OEM exporter</td>
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<td></td>
<td></td>
<td></td>
<td>Comments:</td>
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<td></td>
<td></td>
<td></td>
<td>9. Transaction is supporting majority proportion of used equipment</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>Comments:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10. Other material CRTI risk factors exist</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Comments:</td>
</tr>
</tbody>
</table>

\(^4\) CRTI risk indicator(s) exists but appropriately mitigated as noted by staff.  
\(^5\) CRTI risk indicator(s) exists but are not appropriately mitigated as documented by staff.
## APPENDIX D: TRANSACTION TIMELINE

<table>
<thead>
<tr>
<th>DATE</th>
<th>EVENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 2010</td>
<td>Ex-Im Bank Staff travels to India to conduct due diligence</td>
</tr>
<tr>
<td>December 9, 2010</td>
<td>U.S. Department of Energy approves Abound Solar, Inc.’s $400MM Loan Guarantee</td>
</tr>
<tr>
<td>March 3, 2011</td>
<td>Punj Lloyd (&quot;Borrower&quot;) submits financing request to Ex-Im Bank</td>
</tr>
<tr>
<td>May/June 2011</td>
<td>Ex-Im Bank’s CRTI Due Diligence results in “No Negative Findings”</td>
</tr>
<tr>
<td>July 7, 2011</td>
<td>Ex-Im Bank approves the Punj project financing as a Direct Loan</td>
</tr>
<tr>
<td>July 18, 2011</td>
<td>Ex-Im Bank approves Amendment No. 1; Loan type change to Guaranteed Loan</td>
</tr>
<tr>
<td>September 2011</td>
<td>U.S. Department of Energy suspends Abound Solar’s Guarantee Payments</td>
</tr>
<tr>
<td>January 9, 2012</td>
<td>“Actual” Commercial Operations Commencement Date</td>
</tr>
<tr>
<td>February 15, 2012</td>
<td>Credit Agreement’s Execution Date</td>
</tr>
<tr>
<td>April 13, 2012</td>
<td>“Financial Closing Date” and Promissory Note’s Execution Date</td>
</tr>
<tr>
<td>June 2012</td>
<td>Borrower completes replacement of faulty 2 MW solar modules (under warranty)</td>
</tr>
<tr>
<td>July 2, 2012</td>
<td>Abound Solar files for Chapter 7 (Liquidation) Bankruptcy Protection</td>
</tr>
<tr>
<td>July 30, 2012</td>
<td>Ex-Im Bank’s Portfolio Monitoring &amp; Control Group’s (PMCG) 2012 Annual Risk Rating Adjustment Report confirms a Risk Rating of $^{(b)}$^{(4)} and Outlook Rating of “Stable”</td>
</tr>
<tr>
<td>October 10, 2012</td>
<td>U.S. Congress (Oversight &amp; Investigations) launches inquiry into Abound</td>
</tr>
<tr>
<td>October 29, 2012</td>
<td>Colorado District Attorney launches an investigation on Abound for securities fraud, financial misrepresentation, and consumer fraud.</td>
</tr>
<tr>
<td>February 9, 2013</td>
<td>Project’s original Performance Test Date. Ex-Im Bank postpones the test until the solar modules’ Replacement Work is completed.</td>
</tr>
<tr>
<td>February 25, 2013</td>
<td>Ex-Im Bank Meeting with Punj Lloyd in India</td>
</tr>
<tr>
<td>April 22, 2013</td>
<td>Borrower completes Replacement Work on remaining 3 MW modules</td>
</tr>
<tr>
<td>August 29, 2013</td>
<td>PMCG downgrades Borrower’s risk rating to a provisional $^{(b)}$^{(4)} for potential breach of the Debt Service Coverage Ratio (DSCR) Minimum Requirement of $^{(b)}$^{(4)}.</td>
</tr>
<tr>
<td>November 15, 2013</td>
<td>Ex-Im Bank Engineering conducts inspection of Punj Lloyd’s 5 MW Solar Power Plant. Performance Test Results under review by external consultant, TUV Rheinland.</td>
</tr>
</tbody>
</table>
APPENDIX E: DSCR CALCULATION FOR 2013 RISK RATING ADJUSTMENT REPORT

(b) (4)
ACKNOWLEDGEMENTS

This report was prepared by the Inspection and Evaluation Group, Office of Inspector General for the Export-Import Bank of the United States. Several individuals contributed to this report including Lilith D. Sanchez, Senior Bank Inspector for Inspections and Evaluations, and Daniel Wong, Inspector.