



**OFFICE OF INSPECTOR GENERAL  
EXPORT-IMPORT BANK  
*of the* UNITED STATES**

# **Report on the Project Financing of Sasan Power Limited**

**September 28, 2015  
OIG-INS-15-02**



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*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”).*



OFFICE OF INSPECTOR GENERAL  
EXPORT-IMPORT BANK *of the* UNITED STATES



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From: Mark Thorum  
Assistant Inspector General, Inspections & Evaluations

Subject: Report on Sasan Power Limited (AP085392)

Date: September 28, 2015

Attached please find the final inspection report on Sasan Power Limited (AP085392). The report outlines six recommendations for corrective action. On September 23, 2015, Ex-Im Bank provided its management response to a draft of this report, agreeing with the six recommendations. The response identified the Bank's actions to address the recommendations. OIG considers the Bank's actions sufficient to resolve the report recommendations, which will remain open until OIG determines that the agreed upon corrective actions are successfully implemented. Please note that this report contains business confidential information and is not for external distribution. A redacted version of this report will be posted on the OIG web site shortly.

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Attachment: Inspection Report on Sasan Power Limited, OIG-INS-15-02, September 28, 2015.



# EXECUTIVE SUMMARY

Inspection Report Sasan Power Limited  
OIG-INS-15-02, September, 2015

## Why We Did This Inspection

The OIG's inspection seeks to determine the level of due diligence, risk assessment, policy compliance and asset monitoring performed by Ex-Im Bank for this transaction. This is particularly relevant given the substantial cost overruns that occurred during construction and the subsequent, necessary amendments to the support agreement for the transaction.

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

## What We Recommend

Ex-Im Bank's reauthorization expired as of June 30, 2015. In the event that the Bank were to be reauthorized, OIG has made a total of six recommendations in this Report to address issues concerning the vetting and disclosure of legal risks arising in host countries, the evaluation of FX exposure risks during construction and operation, the proper alignment of project risks with the transaction risk rating, the monitoring of a project's compliance with the bank's environmental and social policies and the reporting of potential violations, and the analysis of economic trends and the borrower's financial performance.

## What We Found

The Sasan Project involves the construction and operation of a 3,960 MW coal-fired power plant and a captive coal mine in the state of Madhya Pradesh, India. Ex-Im Bank provided a 16-year financing commitment of \$650 million for the export of US mining equipment and services and local costs for the Project. Although Sasan is nearing completion, the Project experienced a \$1.45 billion cost overrun, financed with additional equity and debt from other lenders. The Project did not meet certain affirmative covenants provided in the credit documentation including various financial and environmental reporting requirements. OIG's review, however, found that the Bank pro-actively monitored and restructured the Sasan transaction, effectively shifting repayment risk to the Sponsor, Reliance Power. Finally, the Borrower made the first loan payment of \$28.4 million in March, 2015.

With respect to the level of due diligence completed by Ex-Im Bank, OIG notes that certain legal risks associated with co-lending with local banks in India under the SARFAESI Act were not evaluated in the Board Memo, nor accounted for in the risk rating analysis of the transaction. Further, the risk rating of the Sasan transaction did not adequately address the risks of foreign currency exchange fluctuations in its financial projections on which it relied to make its credit determination and risk rating. In addition, we found that several project risks described in the 2010 Board Memo were not adequately reflected in the Risk Rating Worksheet used to determine the risk rating of the transaction. We also found that the Bank's Loan Manual and Risk Rating Worksheet in use at the time did not provide sufficient criteria for rating a transaction's project and country risk factors. Although the Bank revised the risk assessment process outlined in the Loan Manual in April 2015 and requires the Loan Officer to document the supporting rationale for evaluating specific risks, the revisions do not provide criteria and guidance in determining the final rating level.

Finally, OIG found that while an independent monitor was engaged by Sasan to conduct quarterly monitoring of the Project's environmental and social performance as required by Ex-Im Bank, only 7 of 12 required monitoring visits and related reports had been completed during the period of review. Further, notifications of health and safety incidents by the Project were untimely. We also note that Ex-Im Bank's process for receiving, processing and tracking the resolution of complaints is more informal and lags best practices.



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## ABBREVIATIONS AND GLOSSARY OF TERMS

Term	Description
AMD	Asset Management Division, Ex-Im Bank
BCL	Budget Cost Level (“BCL”) is a risk rating system of Ex-Im Bank that rates a transaction on a sliding scale of one (low risk) to 11 (high risk). The BCL rating determines loss reserves that will be allocated to a transaction.
Bank or Ex-Im Bank	Export-Import Bank of the United States
Board	The Board of Directors of Ex-Im Bank, responsible for approving all project financing transactions over \$10 million.
Board Memo or Board Memorandum	A memorandum submitted to the Ex-Im Bank Board as part of the process for approving a transaction for Bank support.
Borrower	Sasan Power Limited (“SPL”), “Sasan” or “Project”
CERC	Central Electricity Regulatory Commission of India
Chinese Lenders (Sinosure Lenders)	The Bank of China (Facility Agent), China Development Bank, the Export Import Bank of China, and Standard Chartered Bank
COD	Commercial Operation Date. The date a power plant is completed and begins commercial operation.
CRTI	Ex-Im Bank acronym for Character, Reputational and Transaction Integrity
CTA	Common Terms Agreement. An inter-creditor agreement dated April 21, 2009, between the 12 Indian lenders for (b) (4) and the Borrower, setting forth the terms and conditions of the credit that are common to all of the rupee senior secured lenders.
CTS	Common Terms Schedule. An inter-creditor agreement dated September 30, 2011, between the US dollar lenders and the Borrower setting forth the terms and conditions of the credit that are common to all of the rupee and US dollar senior lenders.
Commercial Lenders	Standard Chartered Bank, DBS Bank Ltd, and Mizuho Corporate Bank, Ltd.
Credit Agreement	The \$650 million Credit Agreement between Sasan Power Limited, the Borrower, and Ex-Im Bank dated September 30, 2011.
CRTI Due Diligence	CRTI due diligence is a process initiated by Ex-Im Bank to vet transaction participants, which consists of analyses of companies and individuals to identify potential fraud, corruption and integrity risks associated with parties to a transaction.



Term	Description
DSCR	Debt Service Coverage Ratio. DSCR is the ratio of cash available for debt service divided by debt service (principal and interest).
E&E Division	Engineering and Environment Division, Ex-Im Bank
EPC	Engineering, Procurement and Construction. EPC is often used in conjunction with “Contract” or “Contractor.”
EPC Contractor	Reliance Infrastructure is the EPC contractor for the Sasan Project.
Early Financing	The Early Financing Limited Waiver and Amendment Agreement entered into on January 23, 2013.
FX	Foreign exchange
GOI	Government of India
ICRAS	Interagency Country Risk Assessment System. ICRAS is a confidential interagency process through which the credit risk associated with US credit assistance to foreign countries is assessed periodically.
IE	Independent Engineer
INR	Indian rupee
kWh	Kilowatt per hour
Loan Manual	Ex-Im Bank’s Loan, Guarantee and Insurance Manual, January 2009 – 2013, which sets forth the policies and procedures for due diligence, structuring, and monitoring of Ex-Im Bank transactions.
Local Cost Financing	Ex-Im Bank financing for goods and services that originate and/or are manufactured in the Project’s host country.
MW	Megawatt (1,000 kilowatts)
Monitoring Manual	The Operating Manual of Ex-Im Bank’s Asset Management Division, March 2009, which sets forth the policies and procedures for monitoring and managing credit assets (i.e., loans, guarantees and insurance transactions).
OIG	Office of Inspector General, Ex-Im Bank
OMB	Office of Management and Budget, US Government
PFC	Power Finance Corporation of India. PFC is owned by the Indian government with the purpose to promote the Ultra Mega Power Projects (“UMPPs”) program.
PPA	Power Purchase Agreement. An agreement between Sasan Power and an Indian electric distribution company to sell electricity. For the Sasan Project, there is one PPA with 14 separate off takers, 11 are state owned distribution companies and three are privately owned utilities.



Term	Description
Paise	1/100 of a rupee
Permanent Financing	A term referenced during the “Early Financing,” meaning the long term financing that includes all the lenders (i.e., Chinese lenders, Indian banks, commercial banks, and Ex-Im Bank) as contemplated in 2010 under a common intercreditor agreement.
rupee, INR	Indian currency
SBI	State Bank of India. The facility agent for the 12 Indian banks and institutions with total commitments of (b) (4) for the Sasan Project.
SPL	Sasan Power Limited
Sasan	The Borrower under Ex-Im Bank’s \$650 million loan commitment. Also, referred to as “SPL,” “Project,” or “Sasan Project.”
Security Sharing Agreement	A September 18, 2012, agreement among all senior lenders to share proceeds of all collateral on a pro rata basis and to keep each other informed of all foreclosure actions taken.
Sponsor	Reliance Power Limited (“Reliance Power”), the 100 percent owner of the Sasan Project.
Sponsor Support Agreement	The Second Amended and Restated Sponsor Support Agreement. Also referred to as the “Support Agreement.”
Tariff	The cost of electricity, consisting of a capacity charge and energy charge. The capacity charge covers fixed costs and debt service. The energy charge covers variable operating costs.
UMPP	Ultra Mega Power Project, a 3,960 MW power plant. UMPP is a term used in the Indian power sector and in the government’s plan to expand power generation by 100,000 MW through the development of ultra-mega power plants (“UMPP”).
USD	US dollar



# REPORT ON SASAN POWER LTD

## I. INTRODUCTION

In undertaking this inspection, our objective is to determine the level of due diligence, risk assessment and portfolio monitoring performed by Ex-Im Bank (or the “Bank”). In addition, we reviewed the transaction from a lessons learned perspective to help identify potential systemic improvements in the Bank’s policies and procedures. Our research is guided by several broadly-defined Points of Inquiry (“POI”). For each POI, OIG provides the applicable criteria used to assess the performance of the Bank on the individual transaction.

Applicable criteria are based on Ex-Im Bank’s policies and procedures, US government standards and market best practices. OIG benchmarks its observations with the applicable standards to assess the Bank’s performance and areas for potential improvement. OIG conducted site visits and interviews with representatives of the Borrower and related entities, exporters, outside consultants, lenders and Ex-Im Bank staff.

### India: Power Development Goals

In 2005, the Government of India (“GOI”), through the Ministry of Power of India and the Central Electricity Authority, introduced the Ultra Mega Power Projects (“UMPPs”) program to address the country’s acute shortage of electricity.<sup>1</sup> The program aimed to add an additional 100,000 megawatts (“MW”) of capacity to the power grid in India by developing ultra-mega power plants. The UMPPs program consisted of two stages: (1) the government-owned Power Finance Corporation (“PFC”) created subsidiaries as Special Purpose Vehicles (“SPVs”) to procure land, water and environmental clearances, power purchase agreements, and allocate coal blocks to be mined for fuel, and (2) private companies were invited to bid competitively to acquire an SPV based on the lowest “levelized” tariff to be charged for electricity.<sup>2</sup>

On February 10, 2006, the PFC incorporated Sasan Power Limited (“Sasan” or “Project”) to develop, own, operate and maintain a UMPP in the state of Madhya Pradesh. In coordination with the Ministry of Power, Sasan obtained land rights, water, environmental permits and coal blocks, a process that traditionally requires an extended period of time in India. In 2007, the PFC placed Sasan up for auction through a transparent, competitive bidding process. On August 7, 2007, Reliance Power Limited (“Reliance Power”) acquired Sasan at a levelized tariff of rupees 1.196/kWh (approximately USD 0.026/kWh at the time). Overall, 12 UMPPs were planned by the Ministry of Power in 2007. Four projects were awarded to private companies, three to Reliance Power and one to Tata Power.

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<sup>1</sup> For more information, see <http://www.pfcindia.com/Content/UltraMegaPower.aspx>.  
Sasan Power Limited Information Memorandum, October 29, 2009.

<sup>2</sup> The levelized tariff is the discounted tariff revenue generated over the life of the power purchase agreement divided by the discounted value of the electricity produced. It is conceptually similar to the average cost of electricity.



## Ex-Im Bank's India Portfolio

As of June 30, 2015, Ex-Im Bank's total exposure in India was \$5.93 billion. Of the total exposure, approximately 43 percent relates to aircraft financing (see Table 1 below). The average term of the sovereign sector is 7 years and 8.6 years for the private sector with Budget Cost Level ("BCL") risk ratings of (b) (4), respectively.<sup>3</sup>

Table 1: Ex-Im Bank Exposure in India as of June 30, 2015 (Confidential and Proprietary Information)		
Sector	Amount	
Sovereign (Aircraft)	\$2,145,818,278	
Non Sovereign (Aircraft)	\$374,352,493	
Total Aircraft		\$2,520,170,770
Non-Sovereign (Private)		
Reliance Industries	\$1,855,000,000	
Thermal Power Projects	1,191,960,955	
Renewable Energy Projects	284,525,193	
Gas Distribution and Oil	54,871,024	
Other	19,632,370	\$3,405,989,542 <sup>4</sup>
<b>Total Exposure</b>		<b>\$5,926,160,312</b>

Source: ERS Database, Ex-Im Bank

## II. SASAN POWER LIMITED

### Project Description and Status

The Sasan Project is a 3,960 MW coal-fired power plant consisting of six units of 660 MWs each of power generating capacity and a captive coal mine in the state of Madhya Pradesh, India. The mine is located approximately 20 kilometers (12.4 miles) from the power plant and is reported to have sufficient coal reserves for 30 years of plant operation.

Transportation of coal to the power plant is via a continuous 14.5 kilometer (9 mile) over land conveyor belt. The power plant employs super-critical boiler technology, designed to emit less carbon emissions than standard coal plants in India. Shanghai Electric of China supplies the power plant equipment. Bucyrus International ("Bucyrus") of Wisconsin is the primary US exporter and supplier of the coal mining equipment.<sup>5</sup> Photographs of the coal mine and power plant appear in Appendix K.

<sup>3</sup> The BCL rating is used by the Bank to determine the allocation of loss reserves for a transaction.

<sup>4</sup> Figure does not sum precisely due to rounding.

<sup>5</sup> In 2011, Caterpillar Inc. acquired Bucyrus International.



The Project began construction of the power plant and coal mine in 2009. Construction proceeded with the individual power units achieving commercial operation on the dates shown in the Table 2 below.<sup>6</sup> Project completion is anticipated in 2015.<sup>7</sup>

(b) (4)

Although currently behind schedule, the coal mine is in the final stages of completing the final drag line.<sup>8</sup> The current level of coal production is sufficient to meet the needs of the power plant, and Bank staff is confident that the mine will reach its full production in 2015 to 2016.

### Project Participants

Sasan is owned 100 percent by Reliance Power Ltd. (“Reliance Power” or “Sponsor”), a majority-owned subsidiary under the Anil Dhirubhai Ambani Group (“ADA Group”). Reliance Power is 42 percent owned by Reliance Infrastructure, an ADA Group company, 15 percent owned by the public with the remainder owned by the ADA Group. As the EPC contractor, Reliance Infrastructure provides engineering, procurement and construction services for the Project. Figure 1 below shows the structure of the Sasan Project and the participants.

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<sup>6</sup> To achieve commercial operation (or “COD”), a power unit is required to have run continuously for 72 hours at or above 95 percent of the contracted capacity.

<sup>7</sup> To achieve power plant completion, the power units must pass a Long-Term Reliability Test defined as (i) all six units operating simultaneously for 72 hours at or above 95 percent availability and (2) each unit running continuously for 30-days at or above 90 percent availability. Source: Ex-Im Bank Credit Agreement, September 30, 2011

<sup>8</sup> A drag line is an excavation tool used in surface mining operations.



(b) (4)

## Financing Arrangements

In 2010, the Project cost was estimated at \$4.5 billion,<sup>9</sup> financed by 70 percent debt and 30 percent equity. Total Project debt of approximately \$3.16 billion was initially envisioned to be provided by a group of lenders (“funded lenders”) comprised of the Indian banks led by the State Bank of India, other foreign commercial banks, Ex-Im Bank, and a consortium of Chinese lenders. (b) (4)

On April 20, 2009, Standard Chartered Bank submitted an application to Ex-Im Bank requesting financial support for the export of US mining equipment on behalf of Bucyrus, the primary US exporter and services from North American Coal Company and Black & Veatch. On June 24, 2010, the Bank’s Board voted to withhold financing for environmental concerns related to the potential for high carbon emissions from the coal fired power plant. The application was re-submitted in July 2010 and preliminarily approved by the Board on

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<sup>9</sup> The exchange rate at the time was 46 rupees to the US dollar. As of July 10, 2015, the rate is about 63.

<sup>10</sup> The September 18, 2012, Security Sharing Agreement requires the funded lenders to share proceeds of all collateral on a pro-rata basis and to keep each other informed of all foreclosure actions taken.



August 18, 2010, based on tighter carbon emission guidelines.<sup>11</sup> Additionally, the Bank entered into a memorandum of understanding (“MOU”) with Reliance Power requiring support of US exports for renewable energy projects providing up to 250 MWs of power. To date, Reliance Power has met 140 MWs of this intended requirement.<sup>12</sup>

On October 21, 2010, Ex-Im Bank approved a loan commitment of \$888 million for the export of \$641 million of US mining equipment, \$192 million for local costs (goods and services produced in India), and interest during construction for the Sasan Project. Subsequent to loan approval, Reliance Power reduced the scope of the Bucyrus contract and Ex-Im Bank revised the loan commitment to \$650 million. As of April 30, 2015, loan outstandings were \$508million.

The financing terms of Ex-Im Bank’s loan are as follows:

- Amount: \$650 million
- Purpose: To finance the exports of US Goods and Services and \$150 million of local goods and services in India.<sup>13</sup>
- Term: Up to 16 years, including 4 years of construction.
- Final Maturity: (b) (4)
- Repayment: (b) (4)
- Interest Rate: (b) (4)
- Upfront Exposure Fee: (b) (4)
- Commitment Fee: (b) (4)

The financial participants, consultants and advisors to the Project are shown in Figure 2 below.

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<sup>11</sup> Ex-Im Bank’s preliminary approval was based on a new requirement in the loan agreement that the Project emit no more than 850 grams of carbon per kWh, the upper limit for loan consideration in the Bank’s 2010 environmental policy absent verifiable carbon offsets.

<sup>12</sup> MOU between Reliance Power and Ex-Im Bank, July 8, 2010. The projects built to date with U.S. equipment are the 40MW Dhursar Solar PV project and the 100 MW Rajasthan Solar CSP project.

<sup>13</sup> Acquisition List, April 15, 2013; Section B – Local Goods and Services, \$149,619,707.



(b) (4)

Since the Board approval in 2010, Ex-Im Bank has participated in five related financial closings for Sasan. Appendix C provides an overview of the relevant documentation. In addition, a detailed timeline of the transaction is shown in Appendix D.

- The Credit Agreement and the Common Terms Schedule, September 30, 2011.
- The Security Sharing Agreement, September 18, 2012.
- The Early Financing Limited Waiver and Amendment Agreement, January 23, 2013.
- 2nd Limited Waiver and Amended Reliance Power Support Agreement, March 23, 2014.
- 3rd Limited Waiver and Amended Support Agreement, September 23, 2014.

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<sup>14</sup> Ex-Im Bank later reduced its commitment to \$650 million in line with the final amount for US exports. The Sinasure lenders and Mizuho Bank never funded. The Indian banks covered the funding shortfall.



## Project Cost Overrun

In November 2013, Ex-Im Bank received notification that the Project incurred a construction cost overrun of \$1.45 billion, or 32 percent of the original project cost estimate. A 35 percent depreciation of the rupee to the dollar contributed to approximately (b) (4), or (b) (4) of the cost increase. A breakdown of the total construction cost overrun follows:

- An increase (b) (4) the cost of the coal mine and power plant due to:
  - (b) (4) increase in the cost of imports due to the devaluation of the rupee,
  - (b) (4) increase in land acquisition costs for the coal mine,
  - (b) (4) due to the unexpected loss of the custom duty exemption for coal mining equipment, and
  - (b) (4) million in other factors.
- An increase (b) (4) in interest and financing charges during construction due to:
  - (b) (4) the cost of interest during construction (“IDC”) and financing charges caused by the devaluation and subsequent higher cost of interest on USD debt in rupee terms.
  - (b) (4) in additional interest costs due to use of Indian rupee debt at (b) (4) in lieu of the previously budgeted rate of (b) (4)
- An increase (b) (4) other costs to include pre-operative expenses.

The construction cost overrun was funded through (b) (4)

Table 3 below provides a breakdown of the Sasan transaction’s sources and uses of funds together with the increase in construction cost by each major component.<sup>16</sup> As table 3 depicts, the absence of the \$1.1 billion Chinese bank facility was met with an increase in rupee financing from various Indian banks.

<sup>15</sup> OIG learned that these institutions declined to participate in the project financing. Reliance Power subsequently requested the Indian bank syndicate to fund the shortfall. Ex-Im Bank’s funding decrease reflects Reliance’s requested commitment reduction in 2011 and expected usage under the \$650 million line.

<sup>16</sup> Amounts presented use the basis exchange rate of 46 rupees to the US dollar.



### III. INSPECTION SCOPE AND POINTS OF INQUIRY

#### Inspection Scope

The objective of the Office of Inspector General's ("OIG") inspection was to assess the level of due diligence, risk assessment, policy compliance, and asset monitoring performed by the Bank. Additionally, the scope of the OIG inspection included assessing Ex-Im Bank's compliance with its environmental policies and procedures as reflected in the credit documents given the size of the power plant and coal mine covering a large area of land with associated environmental and social impacts.

A combination of quantitative and qualitative techniques was employed by the OIG's Office of Inspection and Evaluation as part of its review. A more detailed discussion of the inspection methodology is provided in Appendix B of this Report.

#### Points of Inquiry

The following points of inquiry directed our focus and helped to guide our Inspection:

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<sup>17</sup> The revised budget amounts for the Indian banks, the Chinese banks and Mizuho Bank were adjusted to reflect the non-closure of loan commitments by the Chinese banks and Mizuho Bank. *Supra* note 15.

<sup>18</sup> Figure does not sum precisely due to rounding.



**POINT OF INQUIRY 1:** Did Ex-Im Bank conduct sufficient due diligence of the key project risks, parties involved, exposures, and red flags in accordance with Bank policies and project finance best practices? Were the relevant risks identified, evaluated, and mitigated accordingly? Did the assigned risk rating reflect the risks of the transaction?

**POINT OF INQUIRY 2:** Did Ex-Im Bank proactively monitor and manage the Sasan transaction in consideration of the project risks, parties involved, and exposures in accordance with Ex-Im Bank policies? Were the relevant repayment risks identified, evaluated, and mitigated accordingly? Was the risk rating reviewed and confirmed after a construction cost overrun and financial restructuring of the transaction?

**POINT OF INQUIRY 3:** Did Ex-Im Bank’s staff observe the Bank’s environmental policies and procedures in accordance with internal guidelines and the credit documents? Are these policies and procedures being adequately monitored for compliance?

The OIG conducted this inspection during fiscal years 2014 –2015 in accordance with the 2012 Quality Standards for Inspection and Evaluation as defined by the Council of Inspectors General on Integrity and Efficiency. Those standards require that we plan and perform the inspection to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our inspection objective and points of inquiry. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions.

## IV. PRINCIPAL FINDINGS AND RECOMMENDATIONS

**POINT OF INQUIRY 1: Did Ex-Im Bank conduct sufficient due diligence of the key project risks, parties involved, exposures, and red flags in accordance with Bank policies and project finance best practices? Were the relevant risks identified, evaluated, and mitigated accordingly? Did the assigned rating reflect the risks of the transaction?**

### Applicable Standards

In conducting this inspection, the OIG reviewed various Applicable Standards and focused on the following:

1. Project risk factors as outlined in Ex-Im Bank’s Loan and Guarantee Manual (“Loan Manual”) Chapter 14.5.1 Risk Factors, Appendix 14-M, January 2013 and April 2015 (Updated); Appendix 14F
2. OMB Circular No. A-129, Policies for Federal Credit Programs and Non-Tax Receivables, Executive Office of the President, Office of Management and Budget, November 2000 and January 2013 (Revised);
3. “Non-Subordination Requirement” of the Export-Import Bank Reauthorization Act of 2012 (“Reauthorization Act of 2012”), paragraph (j) to Section 2 of the Charter;



4. Rating criteria used by the principal credit rating agencies: Standard & Poor's, Moody's and Fitch Ratings; and
5. Ex-Im Bank's Character Reputational & Transaction Integrity ("CRTI") due diligence procedures.

### ***Analysis of Project Risk Factors***

A project finance transaction can be broadly defined as a non-recourse financing of a single asset or portfolio of assets where the lenders rely on those assets to generate the requisite cash flow to repay the loan, as defined by the contractual relationships within each project. As such, recourse to the project's Sponsor/Guarantor is defined in the interrelated collection of contracts and agreements among the various parties.

Reflecting the non-recourse nature of the financing, Ex-Im Bank's policies require a comprehensive analysis of all aspects of the project financing, including the various parties involved. Among the risk factors that are commonly addressed are the project's plan of operations, construction cost, projected cash flow coverage of debt service, currency exposure, legal structure, sponsor qualifications, environmental and social issues, contracts to include the power purchase agreement and EPC contract, risk sharing, and market demand.

In addition, the Bank's Loan Manual requires a detailed analysis of the financial model including a review of assumptions and sensitivities (base case, upside, and downside) for a transaction. At the conclusion of the above risk analysis, the Loan Officer assesses the risk of the transaction relative to that of the sovereign rating of the country where the project is located. For each of the project risk categories (e.g., Legal, Security, Debt Service Coverage Ratio Analysis, Offtake Currency, and Proper Allocation of Risks), Ex-Im Bank staff makes an assessment to increase or decrease the risk rating of the transaction relative to that of the sovereign, using a Risk Rating Worksheet<sup>19</sup> to evaluate various risk factors. The evaluation relies heavily upon the project due diligence and the professional judgment of the Loan Officer.

### ***Rating Agency Guidance***

Additional guidance on project analysis can be found in the rating criteria used by the principal credit rating agencies: Standard & Poor's ("S&P"), Moody's and Fitch Ratings. The agencies review a range of issues that may impact the project's ability to make timely payment of principal and interest as well as the lender's ability to recover past due amounts under foreclosure. Key rating drivers include completion risk, operation and revenue risk, debt structure, debt service and counterparty risk, Legal structure and country risks.<sup>20</sup> In addition, the quality of the Sponsor and involved parties is an important consideration when assessing the overall credit worthiness of the Project. In this regard, rating agencies assess many factors including the Sponsor's prior track

<sup>19</sup> See Appendix F, Sasan Risk Rating Determination.

<sup>20</sup> For more information see, <https://www.spratings.com/corporates/project-finance/ProjFinFocus.html> and <https://www.fitchratings.com/>



record, its ability to provide financial support and level of commitment to the project, etc.

### ***CRTI Due Diligence***

Transaction participants are also subject to Ex-Im Bank's Character Reputational & Transaction Integrity ("CRTI") procedures.<sup>21</sup> Pursuant to these guidelines, all 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. Ex-Im Bank adopts a risk-based approach to due diligence, recognizing that the level of due diligence should be scaled to the nature, complexity, and perceived risk level. A key concern is the potential for fraud and corruption as they may result in significant monetary loss and undermine Ex-Im Bank's programs and reputation. The Bank's policies and procedures related to fraud and corruption prevention are outlined in several core documents including "Transaction Due Diligence Best Practices."

### ***Non-Subordination of Federal Government Financial Interest***

In the absence of an approved waiver, OMB Circular A-129 provides federal agencies with suggested financial practices to follow in designing and administering their credit programs. For example, the Circular states, "Unless a deviation has been approved by OMB, agencies should follow the financial practices discussed below ... contractual agreements should include all covenants and restrictions (e.g., liability insurance) necessary to protect the federal government interest." Specifically, "the government's claims should not be subordinated to the claims of other creditors, as in the case of a borrower's default on either a direct loan or a guaranteed loan. Subordination increases the risk of loss to the government since other creditors would have first claim on the borrower's assets."<sup>22</sup>

In addition, the Export-Import Bank Reauthorization Act of 2012 requires the Bank to seek a creditor status that is not subordinate to that of all other creditors, in order to reduce the risk to, and enhance recoveries, for the Bank.<sup>23, 24</sup> Finally, the Bank's Loan Manual provides that "In every case, the Bank should seek a senior creditor status."<sup>25</sup> However, the provision also contemplates that there may be situations where subordination is unavoidable or in the best interests of the Bank.

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<sup>21</sup> In March 2015, Ex-Im Bank issued revised "CRTI Transaction and Enhanced Due Diligence Guidelines."

<sup>22</sup> OMB Circular No. A-129, Policies for Federal Credit Programs and Non-Tax Receivables, 3. Financial Standards, November 2000. The non-subordination requirement is also found in the most recent version of the OMB Circular No. A-129 (Revised), C. Financial Standards, January 2013.

<sup>23</sup> See Export-Import Bank Reauthorization Act of 2012 at <http://www.gpo.gov/fdsys/pkg/PLAW-112publ122/pdf/PLAW-112publ122.pdf>. Pub. L. No. 112-122, 126 Stat. 357 (2012).

<sup>24</sup> Non Subordination Requirement, Charter of the Export-Import Bank of the United States as amended, May 30, 2012, Section 2, Paragraph (j), p. 46

<sup>25</sup> For more information, see Chapter 8. Standard Credit Structure of the Loan Manual, January 2013, Appendix 8-A Subordination Policy, July 2012.



**Finding 1A: Under Indian law, Ex-Im Bank has fewer foreclosure rights and may be subject to a more protracted process than the other lenders participating in the Sasan transaction. Although Ex-Im Bank made contractual arrangements to mitigate this risk, the legal effectiveness of this approach is untested and may result in additional delays and uncertainty in the recovery of proceeds. The legal risks were not discussed in the Board Memorandum nor accounted for in the risk rating analysis of the transaction, apart from the status of the overall legal system.**

In reviewing the 2010 Board Memorandum, Risk Rating Worksheet, Board meeting transcripts and the Sasan Project Risk Review dated July 22, 2014, OIG did not find any specific reference or analysis of the potential legal and collection risks represented by the preferential foreclosure rights given to the SARFAESI banks under the 2002 SARFAESI Act of India.<sup>26, 27</sup> The discussion of legal risk in the Board Memo was limited (b) (5)

Further, the rating assigned in the Risk Rating Worksheet for “Legal/Regulatory Environment and Mitigants” was (b) (5)

As a non-SARFAESI lender, Ex-Im Bank’s ability to exercise its remedies under foreclosure is limited and subject to a different, more time consuming legal process. (b) (5)

Pursuant to Ex-Im Bank’s Loan Manual, and rating agency guidelines, a host country’s legal and regulatory environment is a project specific risk factor that should be assessed in the credit review and risk rating of the project.

***SARFAESI Act grants registered lenders certain enforcement rights, which are not available to Ex-Im Bank***

Under the terms of the 2002 Act, SARFAESI-registered lenders are provided certain foreclosure rights over non-SARFAESI secured lenders participating in the same transaction. For example, SARFAESI lenders can recover amounts due through an expedited foreclosure process involving the Debt Recovery Tribunal, an entity created

<sup>26</sup> The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (“SARFAESI” or “Act”) of India was enacted to allow secured Indian lenders to foreclose on secured assets without pursuing their claims through the Indian courts, a time consuming, uncertain process that can take five to seven years. A full copy or sections of the Act are retrievable at <http://indiacode.nic.in/>.

<sup>27</sup> Section 2(1)(c) of SARFAESI defines a bank as: a banking company, a corresponding new bank, the State Bank of India, a subsidiary bank or bank which the Central Government, may by notification, specify for the purpose of the Act.

<sup>28</sup> Lending on a secured basis to the same borrower with or without an intercreditor agreement.



under the SARFAESI Act to streamline the foreclosure process.<sup>29</sup> In contrast, non-SARFAESI lenders are required to pursue their remedies in the protracted Indian court system.

As a non-SARFAESI secured lender to the Project, the risks to Ex-IM Bank are

(b) (4)

(b) (4)

(b) (5)  
(b) (5)

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<sup>29</sup> Under the Act, if a borrower fails to discharge its liability in full within a specified period of time, the secured SARFAESI creditor may exercise one or more of the following measures to recover amounts due: (i) take possession of the secured assets of the borrower including the right to transfer by way of lease, assignment or sale for realizing the value of the secured asset; (ii) take over the management of the secured assets of the borrower including the right to transfer by way of lease, assignment or sale and realize the value of the secured asset; (iii) appoint new management to manage the secured assets; and (iv) require any person who has acquired any of the secured assets from the borrower and from whom any money is due or may become due to the borrower, to pay the secured SARFAESI creditor sufficient funds to pay the amount due.

<sup>30</sup> (b) (5)

<sup>31</sup> Section 529A of India's Companies Act, 1956 provides for the priority allocation of proceeds to secured lenders as a result of foreclosure. Under Section 13(9) of SARFAESI, proceeds are to be distributed according to these provisions. See the Companies Act, 1956 at [http://www.mca.gov.in/Ministry/pdf/Companies\\_Act\\_1956\\_13jun2011.pdf](http://www.mca.gov.in/Ministry/pdf/Companies_Act_1956_13jun2011.pdf) and the SARFAESI Act, 2002 at <http://indiacode.nic.in/>.

<sup>32</sup> (b) (5)



(b) (5)

merits full consideration in the Board Memorandum and risk analysis as prescribed by Ex-Im Bank policy. (b) (4), (b) (5)

In addition to its contractual arrangements with SARFAESI lenders, Ex-Im Bank has actively sought inclusion under the SARFAESI Act from the Government of India since 2005.<sup>35</sup> More recently in November 2014, the Chairman of Ex-Im Bank met with India's Ministry of Finance and Governor of the Reserve Bank of India to discuss the status of the Bank's SARFAESI application. As of the date of this Report, the Bank has yet to receive approval from the Government of India.

Additionally, OIG reviewed nine other Ex-Im Bank transactions in India and found no discussion or mention of the SARFAESI risk in the attendant Board Memos approving the transactions.<sup>36</sup> As the SARFAESI risk was not specifically addressed in the Board Memo and the risk assessment of the nine other Ex-Im Bank supported transactions in India, the risk ratings ascribed to those transactions may be understated as a result.

### **RECOMMENDATION 1A**

OIG recommends that Ex-Im Bank:

- Continue to apply for notification (i.e., inclusion) under the SARFAESI Act.
- Ex-Im Bank's reauthorization expired as of June 30, 2015. In the event that the Bank were to be reauthorized, OIG recommends the following:

For future transactions in India, Ex-Im Bank should ensure that the SARFAESI risks are appropriately presented in the Board Memo and reflected in the risk rating analysis when co-lending with SARFAESI lender banks on a secured basis.

### **Management Response:**

Please see Appendix A, Management Response and OIG Evaluation.

<sup>33</sup> (b) (5)

<sup>34</sup> (b) (4)

<sup>35</sup> OIG notes that the SARFAESI issue was known as early as 2005 and was discussed in separate memos internally among Bank staff as well as during briefings with various Board members.

<sup>36</sup> OIG reviewed the Board Memos for the following nine transactions: Asure Power, Dahanu Solar, Ford India, Gail India, Mahindra Surya, Rajasthan Sun, Reliance Industries, Samalkot India, and Solarfield Energy.



**Finding 1B: The risk rating of the Sasan transaction did not adequately address the risks of foreign currency exchange fluctuations. Although Ex-Im Bank implemented a currency hedging program seeking to mitigate these risks during the operational period of the project, these risks were not included in the financial model during the Project’s four year construction period, resulting in unrepresentative credit ratios used to inform the risk rating and financial structure of the transaction.**

The Sasan Project faced substantial currency exposure risk<sup>37</sup> from inception arising from the mismatch between the loan disbursements and required repayments being denominated in dollars and the revenue stream from the project being denominated in rupees. In addition, certain capital expenditures denominated in US dollars were originally anticipated to be paid with US dollar borrowings via the Chinese bank syndicate, thus providing a natural hedge for the foreign currency exposure. However, the decision by the Chinese lenders not to participate in the financing required the Project to borrow additional rupee financing and further exacerbated the US dollar to rupee exposure. During the four-year construction period of the project, the rupee depreciated 35 percent against the dollar, contributing approximately (b) (4), to a \$1.45 billion project cost increase. This cost increase adversely affected key credit ratios, including Total Debt to EBITDA<sup>38</sup> and the Debt Service Coverage Ratio (“DSCR”).

***High inflation differential and historical volatility of exchange rates underscored the need to evaluate the prospect of currency devaluation and appropriate devaluation assumptions.***

The substantial differential in inflation rates between the US and Indian economies foretold further rupee devaluation during construction and potentially over the life of the Project.<sup>39</sup> As illustrated in Figure 3 below, the inflation differential between the US and Indian economies was 11.3 percent in 2009. The historical US dollar/rupee exchange rates have exhibited substantial volatility. For example, the rupee devalued by 35 percent from 46 rupees per US dollar in 2010 to 62 in 2014. Together with the

<sup>37</sup> Currency exposure refers to the extent to which a firm is affected by changes in foreign exchange rates. Broadly speaking, there are three types of exposure: translation exposure, transaction exposure, and operating exposure. The latter two are considered cash flow exposures and combine to form economic exposure, the extent to which the value of a firm will change as the result of exchange rate movements.

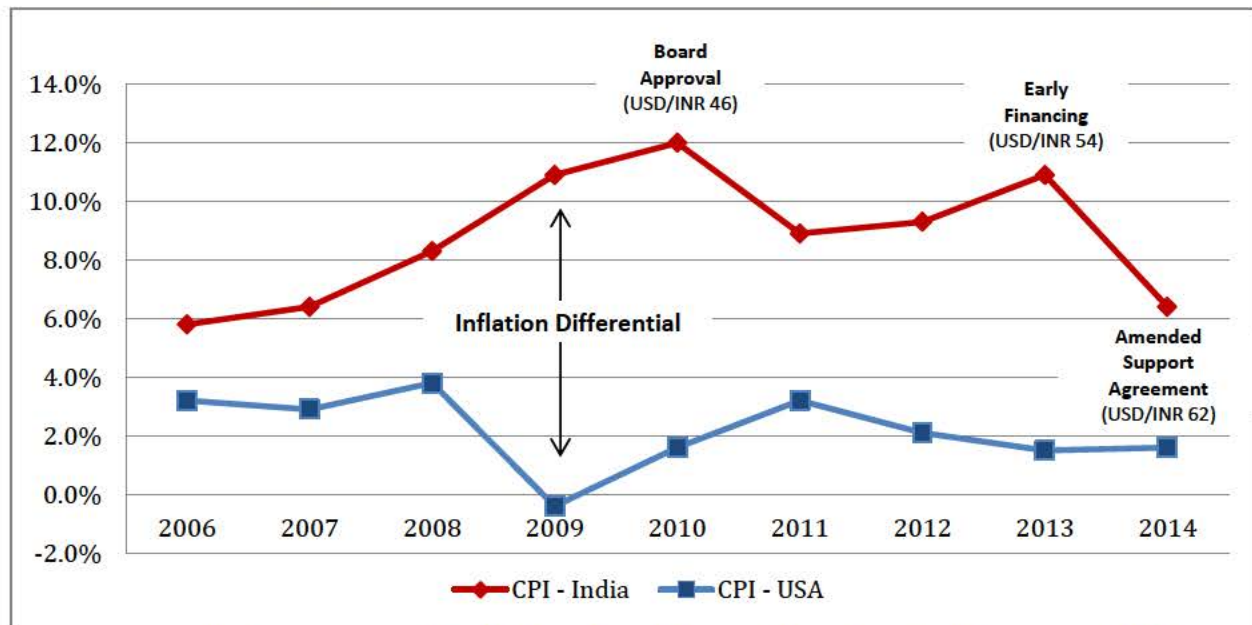
<sup>38</sup> Earnings Before Interest, Tax, Depreciation and Amortization.

<sup>39</sup> Empirical research suggests a strong relationship between relative inflation rates and changes in exchange rates over time. For more information on the theory of purchasing power parity, see both Alan Shapiro, *Multinational Financial Management* 10<sup>th</sup> edition 2013 and Henry Gaillot, “Purchasing Power Parity as an Explanation of Long-Term Changes in Exchange Rates,” *Journal of Money, Credit, and Banking*, August 1971.



existing rupee/dollar exposure of the Project, these factors suggest the need to carefully consider the potential effect on the Project's future cash flows and risk to the lenders during both construction and operation. (b) (5)

Figure 3: India – USA Inflation Differential 2006-2014



Source: OECD.StatExtracts at <http://stats.oecd.org/Index.aspx?querytype=view&queryname=221#>

### ***Principal components of the Sasan hedging program***

Recognizing the need to address the foreign currency exposure risk, Ex-Im Bank's 2010 Board Memorandum stipulated, (b) (4)

<sup>40</sup> (b) (5)

<sup>41</sup> (b) (4), (b) (5)



(b) (5)

Later in January 2013, Ex-Im Bank executed the Early Financing agreement without the Chinese bank syndicate and Mizuho Bank, which declined to participate (see Appendix C for further details). Together these lenders represented (b) (4) of financing commitments. Their absence would fundamentally alter the currency funding mix and interest expense of the Project as their US dollar commitments were replaced by additional, more expensive rupee loans from Indian banks.<sup>43</sup> In response, (b) (4)

***Rupee devaluation costs were not adequately addressed in the financial model***

In reviewing the Project's documentation, financial projections and credit analysis, OIG found that the foreign currency exposure risks were not adequately addressed in the financial model that was used for Board approval. (b) (4)

(b) (4)

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<sup>42</sup> (b) (4)

<sup>43</sup> (b) (4)

<sup>44</sup> (b) (4)

<sup>45</sup> (b) (4)



(b) (4)

(b) (4)

(b) (4)



## **RECOMMENDATION 1B**

In the *Report on PNG LNG Project Financing* (OIG-INS-14-01),<sup>47</sup> OIG made a recommendation to the Bank to evaluate and mitigate FX exposure during construction as a separate risk factor, and if deemed material, to include FX volatility in the financial model as a relevant variable subject to stress testing and sensitivity analysis. In its management response, Ex-Im Bank agreed with the recommendation.

Finding 1B of this Report supports a similar recommendation. . OIG notes that the Sasan transaction closed several years prior to the issuance of the PNG LNG recommendations. Management's actions to address the recommendation will be responsive to both the previous report, including the consideration of FX exposure during operation, and this one.

Ex-Im Bank's reauthorization expired as of June 30, 2015. In the event that the Bank were to be reauthorized, OIG recommends the following:

- In an effort to improve the accuracy of its financial modeling, the Bank should evaluate and account for foreign exchange risk and attendant costs during construction as well as operation. Further, the Bank should provide guidance on the formulation of assumptions for the financial model used in the credit and risk rating analysis and consider additional skill building in evaluating and modeling financial projections.

### **Management Response:**

Please see Appendix A, Management Response and OIG Evaluation.

**Finding 1C: Several transaction risks described in the 2010 Board Memo were not adequately accounted for in the Risk Rating Worksheet used to calculate the risk rating. The Bank has not documented the criteria and characteristics used to translate narrative risk descriptions into quantitative assessments that can be used in risk rating calculations. As a result, the risk rating for a transaction is potentially vulnerable to subjective interpretation and cannot be independently verified and replicated.**

In reviewing the Board Memo and attendant risk analysis, OIG found that several risk factors described in the memo were not adequately accounted for in the Risk Rating Worksheet used to determine the risk rating of the Sasan transaction.<sup>48</sup> Specifically, OIG found that project-specific risks such as (b) (4), (b) (5) described

<sup>47</sup> For more information, see Ex-Im Bank OIG's *Report on PNG LNG Project Financing* (OIG-INS-14-01, June 18, 2014), available for review at <http://www.exim.gov/oig/reports/upload/PNG-LNG-INSPECTION-REPORT-508-Final-Redacted.pdf>.

<sup>48</sup> (b) (4)



below were more favorably assessed in the risk rating worksheet than the Board Memo (see Appendix F for additional examples).

- (b) (4) (b) (4), (b) (5)

- (b) (4) (b) (4), (b) (5)

OIG ascertained that the Bank's Loan Manual in use at the time of transaction approval did not provide specific criteria for applying the rating scale of "Low, Low/Medium, Medium, Medium/High and High" used by the Loan Officer in assessing the level of risk for each factor in the worksheet nor guidance on the methodology to be used to determine the risk level. Further, Bank policy did not provide the criteria or characteristics used to translate narrative risk descriptions into quantitative assessments of risk. Moreover, the Loan Officer was not required to document the rationale applied including any mitigants that would support a more favorable assessment of risk for each factor. As a result, the risk rating developed for a transaction is potentially vulnerable to subjective interpretation and cannot be independently verified and replicated.

In April 2015, Ex-Im Bank revised the risk assessment process outlined in the Loan Manual's Chapter 14, Project Finance. Revisions to the Chapter included the adoption of AMD's Project Finance Risk Rating Model with the "Project Finance Report" replacing the Risk Rating Worksheet in Appendix 14-M of the Loan Manual.<sup>53</sup> Under the new risk rating model for project finance the general and project risk factor analyses and related

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49 (b) (4)

<sup>53</sup> According to the revised Chapter 14 of the Loan Manual, the Bank's Structured Finance Division began using AMD's Project Finance Risk Model in March 2015.



risk factors are rated on a scale of “Low, Moderate, and High.” Further, the Loan Manual requires the Loan Officer to document the supporting rationale for the risk assessment in the Project Finance Report for the subject transaction. OIG notes, however, that the revised Chapter does not provide specific criteria and guidance for applying the rating scale when assessing the level of risk for each factor considered by the Loan Officer in developing the risk rating for a transaction.

### ***RECOMMENDATION 1C***

Ex-Im Bank’s reauthorization expired as of June 30, 2015. In the event that the Bank were to be reauthorized, OIG recommends the following:

- To enhance transparency and to ensure a systematic approach to the risk rating methodology, the Bank should provide written criteria or benchmarks as to what constitutes a “Low, Moderate or High” risk rating for each factor considered in developing the risk rating for a transaction.

### ***Management Response:***

Please see Appendix A, Management Response and OIG Evaluation.

**Point of Inquiry 2: Did Ex-Im Bank proactively monitor and manage the Sasan transaction in consideration of the project risks, parties involved, and exposures in accordance with Ex-Im Bank policies? Were the relevant repayment risks identified, evaluated, and mitigated accordingly? Was the risk rating reviewed and confirmed after a construction cost overrun and financial restructuring of the transaction?**

### **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, 2009- 2013 (“Loan Manual”), Chapter 14.5 Risk Factors; Chapter 22, Post-Operative Monitoring;
2. Asset Management Division Operating Manual, March 2009 (“Monitoring Manual”);
3. Asset Monitoring System, Report Optimization Project Operating Manual, May 19, 2010, Revised September 30, 2013
4. Industry best practices.

### ***Ex-Im Bank Asset Monitoring Policy***

According to Ex-Im Bank’s Monitoring Manual, the mission of the Asset Management Division (“AMD”) is to proactively monitor portfolios so as to provide an early warning mechanism of potential loss situations and emphasizes the importance of oversight



when monitoring project finance transactions during the construction period.<sup>54</sup> The Monitoring Manual requires AMD staff to review and evaluate the financial projections for a transaction for accuracy and validity and to review construction progress reports submitted by the obligors as well as engineering reports submitted by the Independent Engineer.

Ex-Im Bank follows a risk-based approach to monitoring credits where staffs actively and continuously review transactions to help to ensure early identification of cost overrun risks.<sup>55</sup> The 2009 Monitoring Manual required the preparation of trip reports and semi-annual reports on all actively monitored obligors and quarterly reports on all defaulted and/or impaired credits. In September 2013, the Bank revised the timing of reporting requirements from semi-annual to annual with on-demand reporting if a material event occurred that could affect risk ratings.

AMD is responsible for monitoring, structuring and managing loans as specified in Chapter 22 of the Bank's Loan Manual. The division assumes this responsibility at the time of the first disbursement, which in the case of Sasan occurred in February 2013. Prior to this date, the Project Finance Division, the originator of the Sasan transaction and the Early Financing, had loan monitoring responsibility.

**Finding 2A: Ex-Im Bank's AMD proactively restructured the Sasan transaction following a construction cost overrun, effectively shifting the risk of non-payment to Reliance Power, the Sponsor and 100 percent owner of Sasan.**

The restructuring of the Sasan transaction began in November 2013 when Ex-Im Bank met with Reliance Power to address the announced \$1.45 billion construction cost overrun and the resulting financing gap in Project funding. In the months that followed, Ex-Im Bank had various meetings with Reliance Power, the other lenders, and its consultants and legal advisors.

In March 2014, the Bank concluded negotiations and amended the Sponsor Support Agreement. The amended agreement effectively shifted the repayment risk of Sasan to Reliance Power, making it the guarantor of Sasan's obligations. Under the amended agreement Reliance Power is contractually obligated to:

- (b) (4), (b) (5)

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<sup>54</sup> Asset Management Division Operating Manual, March 2009, pp. 3, 15 and 24

<sup>55</sup> "Portfolio Experience with Projects in the Construction Phase," Ex-Im Bank, October 24, 2013



- (b) (4), (b) (5)

In September 2014, Ex-Im Bank amended the Support Agreement to reinforce portions of the agreement, (b) (4)

OIG reviewed the efforts of Ex-Im Bank's monitoring efforts. The OIG found that the Bank is conducting regular, periodic calls and meetings with Reliance Power and the lender group to address noncompliance in an effort to seek workable solutions (b) (4) to maintain credit quality. Further, the Sasan transaction (b) (4) and the Bank continues to closely and proactively monitor the Sasan transaction.

Ex-Im Bank is currently in the process of reviewing the risk rating of the Sasan transaction, which is presently a BCL risk rating of (b) (4) and has remained unchanged since Board approval in 2010 despite the restructuring of the transaction. Of note is that Reliance Power, the effective guarantor of the Sasan transaction, is presently facing a number of business and financial challenges within the context of (b) (4) liabilities as discussed in Appendix H of this Report. In January 2015, ICRA (an Indian affiliate of Moody's) rated Reliance Power's long term loans as "A- Negative", taking into consideration the potential drain on cash flow of Sasan, the increased risk profile of its power subsidiaries, and the Reliance Power's corporate guarantee of Ex-Im Bank loans for Samalkot Power of approximately \$505 million. In accordance with the monitoring policy of the Bank, the risk rating review will include a full and detailed, comprehensive credit evaluation of Reliance Power in addition to Sasan to determine the appropriate BCL risk rating of the transaction as it currently stands.

During the inspection, OIG observed that Ex-Im Bank outsourced the financial advisory and modeling services to a consultant, Portland Advisors, particularly in the origination phase accomplished by the Structured and Project Finance Division and through extensions of the contract by AMD during the monitoring phase of the Project. Although

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<sup>56</sup> (b) (4)



Ex-Im Bank's Monitoring Manual requires AMD staff to be proficient in the application of modeling skills and encourages the use of financial advisors to complement the knowledge of staff where appropriate, AMD would benefit from having readily available financial modeling capabilities. This is of particular importance given AMD's responsibility for monitoring of transactions for 12 to 15-years post-closing. Moreover, it is important for complex project finance transactions such as Sasan whose assets are relied upon to generate the requisite cash flow to repay the Ex-Im Bank loan. The development of financial modeling capabilities would be for such purposes as ongoing scenario analysis, re-assessment of the risk rating, and stress testing (e.g., individual obligor/names, occurrence of exogenous events in the market) for a transaction.

## **RECOMMENDATION 2A**

OIG recommends that Ex-Im Bank:

- Continue to closely and proactively manage the Sasan transaction and its Sponsor, Reliance Power given Ex-Im Bank's \$650 million exposure, the ongoing issues with Sasan covenant compliance, and the remaining 12-year life of the transaction. As part of the Bank's annual BCL review process, AMD should perform a full stand-alone analysis of the Reliance Power holding company including its projected cash flows and financial obligations related to Sasan and other projects under development and in operation.
- Improve its financial modeling capabilities for the purposes of ongoing scenario analysis, re-assessment of the BCL risk rating, and stress testing (e.g., individual obligor/names, occurrence of exogenous events in the market) for a transaction.

### **Management Response:**

Please see Appendix A, Management Response and OIG Evaluation.

### **Point of Inquiry 3: Did Ex-Im Bank staff observe the Bank's environmental policies and procedures in accordance with internal guidelines and the credit documents? Are these policies and procedures being adequately monitored for compliance?**

#### **Applicable Standards**

OIG reviewed various Applicable Standards and focused on the following:

1. Ex-Im Bank's Environmental Procedures and Guidelines, dated August 14, 2008, revised as of March 9, 2010 ("Procedures and Guidelines").
2. Ex-Im Bank's policies for Application Processing and Credit Documentation as outlined in Chapter 1: of the Loan, Guarantee and Insurance Manual, 2009-2013 ("Loan Manual").



3. Common Terms Schedule (“CTS”) of the Credit Agreement dated September 30, 2011, between Sasan Power Limited, as Borrower, and Export-Import Bank of the United States.
4. OECD common approaches for addressing environmental issues as outlined in TAD/ECG (2007)9: Revised Council Recommendation on Common Approaches on the Environment and Officially Supported Export Credits, June 12, 2007 (“Arrangement Rules”).
5. International Finance Corporation’s (“IFC’s”) Performance Standards on Social and Environmental Sustainability, April 30, 2006 (“Performance Standards”), supplemented by the IFC’s Environmental Health and Safety Guidelines and Sector Guidelines for Mining and Thermal Power.
6. The Equator Principles, June 2006 (“Principles”).

### ***Ex-Im Bank’s and International Environmental Procedures and Guidelines***

According to Ex-Im Bank’s Environmental Procedures and Guidelines (“Procedures and Guidelines”), the Bank is required under its Charter to establish “procedures to take into account the potential beneficial and adverse environmental effects of goods and services for which support is requested, consistent with the mandate to foster expansion of exports.”<sup>57</sup> In addition, Ex-Im Bank is subject to OECD’s “Common Approaches,” which are intended to ensure consideration of the environmental effects of projects on a consistent basis among the major Export Credit Agencies.<sup>58</sup> Ex-Im Bank financed projects are to be monitored in such a manner to ensure they maintain ongoing compliance with the environmental guidelines pursuant to which the Bank evaluated the project.

The Bank screens and categorizes all applications greater than \$10 million for potential environmental impact and to determine to what extent a transaction will be subject to an environmental review. This determination is based on information contained in the Environmental Screening Document (“ESD”) submitted by the Applicant.<sup>59</sup> A transaction’s categorization as A, B, C, or N directs the level of information required by Ex-Im Bank for its review. Table 5 below describes the different environmental categories and attendant requirements.

<sup>57</sup> For more information, see Procedures and Guidelines, Introduction, p. 1, paragraph 1.

<sup>58</sup> For more information on OECD’s Common Approaches, see <http://www.oecd.org/tad/xcred/oecd-recommendations.htm>.

<sup>59</sup> A project’s categorization may change based on consideration of additional information obtained during the Bank’s review process.



Table 5: Ex-Im Bank Environmental Categories			
Category	Description	Specifications	Subject to IFC Standards
A	Large Greenfield Projects of Projects located in, or impacting a Sensitive Site	Projects that have the potential to cause significant adverse environmental effects or impacting protected areas identified by national or international law.	Yes
B	Expansions, Upgrades and Projects having Limited Environmental Impact	Projects whose environmental impacts are site specific; few if any of them are irreversible and mitigation measures are readily identifiable and available.	Yes
C	Categorical Exclusions	Projects that do not require further environmental review because they are likely to have minimal or no adverse environmental impacts.	No
N	Nuclear	Nuclear power projects, nuclear research reactors or production or disposal of nuclear fuel.	Yes <sup>60</sup>

Source: Procedures and Guidelines

As the transaction encompasses a captive coal mine<sup>61</sup> and power plant, Sasan was classified as a Category A project, and therefore, evaluated for compliance with the International Finance Corporation's ("IFC's") eight Performance Standards on Social and Environmental Sustainability ("Performance Standards").<sup>62</sup> The IFC Performance Standards are supplemented by the IFC Environmental, Health and Safety General Guidelines and Sector Guidelines for Mining and Thermal Power. In accordance with Ex-Im Bank's policy, Sasan was required to submit an Environmental Impact Assessment ("EIA") to the Bank for review. Ex-Im Bank requires that the EIA and supporting information be of sufficient detail "to identify the environmental impact of the project and measures needed to mitigate adverse environmental effects, and to evaluate whether and to what degree, the project meets relevant international environmental guidelines."<sup>63</sup>

<sup>60</sup> Nuclear projects are also subject to additional health and safety guidelines prescribed by the International Atomic Energy Agency.

<sup>61</sup> The power plant utilizes coal from the Moher and Moher-Amlohri Extension Coal Blocks that are part of the Sasan UMPP.

<sup>62</sup> At the time of Project evaluation in August 2010, Ex-Im Bank had not adopted the Equator Principles and therefore, did not require the Sasan transaction to comply with the Principles. The Bank adopted the Equator Principles in March 2011, which are implemented through its Environmental and Social Due Diligence Procedures and Guidelines. For more information, see <http://www.exim.gov/policies/exim-bank-and-the-environment>.

<sup>63</sup> For more information, see Procedures and Guidelines, Section II, p. 8, paragraph 2.



The Performance Standards address eight areas: (1) social and environmental assessment and management systems, (2) labor and working conditions, (3) pollution prevention and abatement, (4) community health, safety and security, (5) land acquisition and involuntary resettlement, (6) biodiversity conservation and sustainable natural resource management, (7) indigenous peoples and (8) cultural heritage. In addition, the Bank's Procedures and Guidelines provide a summary of the objectives and requirements for each of the Performance Standards. See Appendix I for a summary of the eight Performance Standards.

Although Ex-Im Bank had not adopted the Equator Principles when it approved the Sasan transaction,<sup>64</sup> other lenders to the transaction (e.g., Standard Chartered Bank) had adopted the Principles and required adherence by the Borrower. Therefore, the Sasan Project was also evaluated for compliance with the Principles then in place, which provide a risk management framework for determining, assessing and managing environmental and social risk in projects.<sup>65</sup> The Principles are primarily intended to provide a minimum standard for due diligence to support responsible risk decision-making. Appendix J summarizes the requirements of the 10 Equator Principles.

### ***Ex-Im Bank's policies on environmental risk assessments and monitoring***

In approving long-term transactions, Ex-Im Bank's policies outlined in Chapter 1 of the Loan Manual require an assessment of a transaction's environmental risks. This analysis is conducted by Environmental Analysts within the Bank's Engineering and Environment ("E&E") Division who serve as the primary experts on environmental matters. The environmental risk assessment involves a review of the "transaction's or underlying project's effects on the environment against the Bank's environmental procedures." The assigned Environmental Analyst is responsible for monitoring the environmental aspects of a project.<sup>66</sup>

According to Ex-Im Bank's Procedures and Guidelines, the Bank monitors a project for environmental compliance to mitigate the impact of the project on the environment. Monitoring occurs in-house through the review of information submitted by the Project Sponsor and through site visits carried out by Ex-Im Bank staff. For large projects undertaken as limited recourse project finance transactions, Ex-Im Bank requires the Project Sponsor to retain an independent outside environmental consultant to monitor the project's environmental performance and level of compliance. Pursuant to this policy, Ex-Im Bank required Sasan to engage the services of an independent environmental consultant to monitor the project.

On December 14, 2012, Sasan entered into an agreement by letter with ERM India Private LTD ("ERM") to monitor the project for the sole benefit of Ex-Im Bank and as a

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<sup>64</sup> *Supra* note 62.

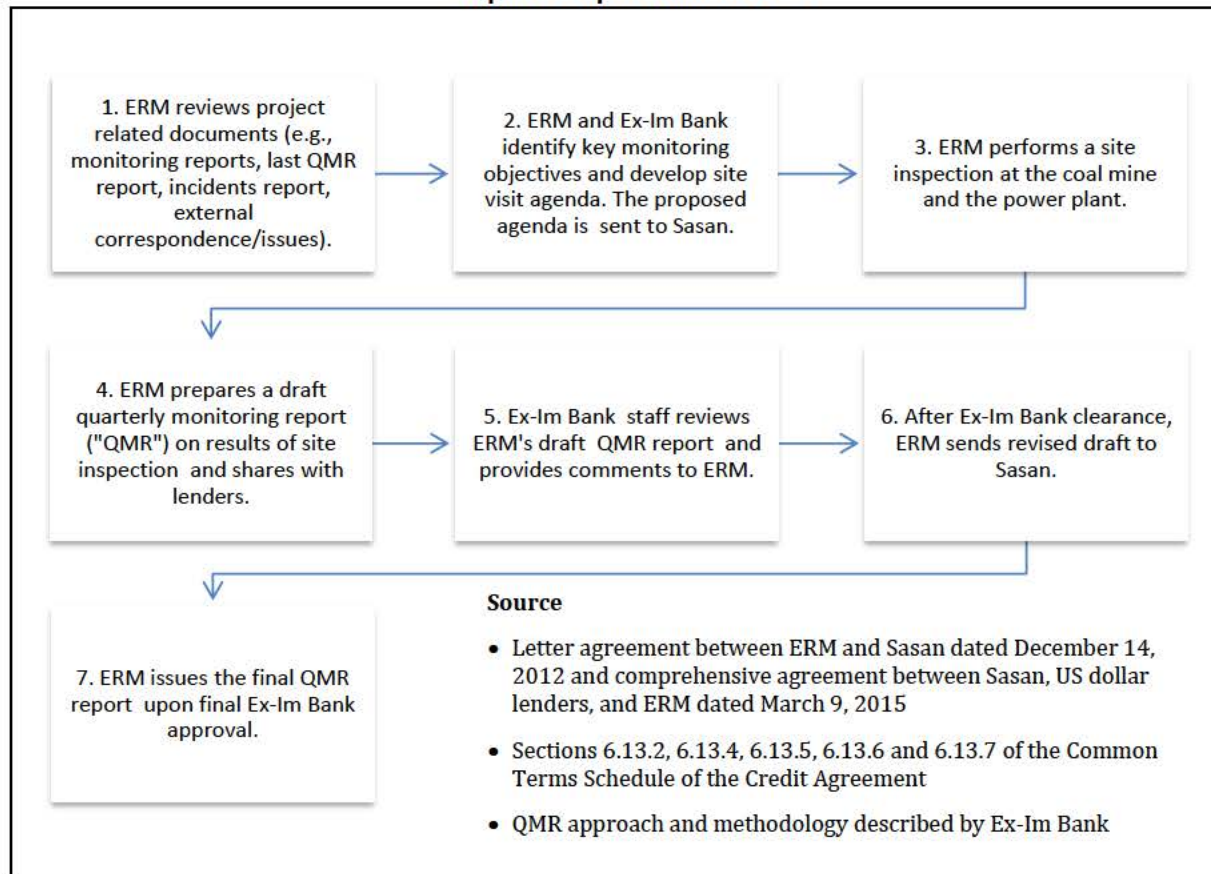
<sup>65</sup> For more information on the Equator Principles, see <http://www.equator-principles.com/>. For the 2006 Equator Principles, see [http://www.equator-principles.com/resources/equator\\_principles\\_II.pdf](http://www.equator-principles.com/resources/equator_principles_II.pdf).

<sup>66</sup> For more information, see Procedures and Guidelines, Section IV, A. General, p. 11, paragraph 4.



condition to providing financing for the project.<sup>67</sup> ERM's scope of work under the agreement includes the following activities: to provide required quarterly monitoring and reporting for the coal mine and power plant during construction, and semi-annual and annual reports following project Commercial Operation Date ("COD") for as long as the Ex-Im Bank loan is outstanding. The steps undertaken to complete the environmental and social quarterly monitoring and reporting ("QMR") appear below in Figure 4.

**Figure 4: Sasan Environmental and Social Monitoring and Report Preparation Process**



Prior to the implementation of the monitoring agreement, ERM was engaged by Sasan to conduct an independent, third party environmental and social appraisal of the Project in accordance with the requirements of Ex-Im Bank's Environmental Procedures and Guidelines, the IFC Performance Standards, and the Equator Principles ("Reference Framework"). The appraisal involved a review of a number of Project-

<sup>67</sup> Sec. II (b). The letter agreement was superseded by a comprehensive agreement dated March 9, 2015 between Sasan, the US dollar lenders and ERM. The comprehensive agreement contains a similar provision (Sec. 4.1) where the services performed by ERM are provided solely for the benefit of the lenders. OIG notes that while Sasan is responsible for paying for ERM's services, ERM acts solely as the lenders' consultant.



related documents for the coal mine and power plant (e.g., Environmental Impact Assessment reports, Environmental and Social Impact Assessments studies, greenhouse gas submission studies, environmental and forest clearances, statements on corporate social responsibility, governmental consents), site visits (e.g., coal mine and power plant, overburden site, water intake points, ash pond, resettlement and township) and consultations with villagers to obtain their views on the Project. The results of the review were documented in separate Environmental and Social Due Diligence (“ESDD”) reports for the coal mine and power plant, dated February 3, 2011, and December 28, 2010, respectively.

Based on its review of the available management structure, ERM concluded that it can be expected that Sasan would comply with the Reference Framework, including local and national requirements. ERM found that Sasan had developed Environmental and Social Impact Assessments along with Environmental and Social Management Plans for the coal mine and power plant. The ESDD reports identified the compliance requirements, addressed the anticipated or actual risks and mitigation measures. The reports also provided recommendations to Sasan on how to comply with the Reference Framework based on deviations identified during the appraisal as part of a “continual improvement approach.”

**Finding 3A: Although an independent monitor was engaged to conduct quarterly monitoring and reporting of the Project’s environmental and social performance, only 7 of 12 required quarterly monitoring visits and related reports had been completed during the period of review. Further, notifications of health and safety incidents at the Project were untimely.**

***Quarterly monitoring and reporting***

In December 2012, Sasan formally engaged ERM to provide quarterly independent monitoring of the coal mine and power plant as required by the action plan recommended in the ESDDs, and specifically required by Ex-Im Bank. Pursuant to the monitoring requirements, ERM should have completed a total of 12 quarterly monitoring visits and related reports by June 30, 2015. However, according to Ex-Im Bank the quarterly monitoring visits and reports were off schedule due to scheduling issues between Sasan and ERM. As of June 2015, only seven monitoring visits and related reports were completed by ERM (see Table 6 below). OIG notes that the reports are cumulative in nature and build on the status of the previous report.



<b>Table 6: Sasan QMRs as of June 30, 2015</b> (Confidential and Proprietary Information)				
<b>#</b>	<b>Period (Report Dated)</b>	<b># of Months Covered</b>	<b>Expected</b>	<b>Completed</b>
QMR-1	Jun 1 – Sep 30, 2012 (October 2012)	Initial Report	2012 - 2	2
QMR-2	Oct 1 - Dec 31, 2012 (March 2013)	3		
QMR-3	Jan 1 - Jun 30, 2013 (October 2013)	6	2013 - 4	2
QMR-4	Jul 1 - Dec 31, 2013 (May 2014)	6		
QMR-5	Jan 1 - Jun 30, 2014 (September 2014)	6	2014 - 4	2
QMR-6	Jul 1 - Oct 31, 2014 (December 2014)	4		
QMR-7	Nov 1, 2014 - Mar 31, 2015 (June 2015)	5	2015 - 2	1
<b>Total</b>			<b>12</b>	<b>7</b>

Source: Ex-Im Bank and QMRs for Sasan UMPP – Coal Mine and Power Plant

(b) (4)

The Borrower is required to provide the lenders and the environment consultant (e.g., ERM) with the necessary information and access to accomplish periodic monitoring and review of the Project and must comply with the consultant's reported recommendations.<sup>71</sup> Further, the Borrower is required to forward copies of relevant periodic environmental and social reports to the lenders' facility agents.<sup>72</sup> (b) (4)

(b) (4)



(b) (4)

As part of our testing, OIG reviewed available quarterly monitoring reports for the coal mine and power plant, with particular focus on QMR-5, for the quarter ended June 30, 2014.<sup>76, 77</sup> The reports were prepared by ERM as part of the ongoing monitoring of the coal mine and power plant for compliance with the IFC's Performance Standards and the Equator Principles. ERM utilized the following categories to assess the Project's compliance as follows:

- Aligned: Information available indicates the Project fulfills the requirement and/or is aligned with intended outcome of the requirement.
- Partially Aligned: Information available indicates the Project partially fulfills the requirement and/or is partially aligned with intended outcome of the requirement.
- Not Aligned: Information available indicates the Project does not fulfill the requirement.

ERM's assessment of compliance with the IFC Performance Standards and the Equator Principles are documented in separate summary tables within the QMR. The tables outline the respective compliance requirement including sub element(s) that have yet to be aligned; ERM's categorical assessment (e.g., "Partially Aligned") with details; the status of compliance, proposed target due date for alignment and responsible department provided by Sasan; and ERM's comments on issues identified in the prior QMR. As mentioned, the reports are cumulative in nature and build on the status of the previous report. Sub elements identified and categorized as "Partially Aligned" or "Not Aligned" continue to be reported in the monitoring report until they are deemed "Aligned" with the respective Performance Standard or Principle. The monitoring reports also include separate tables that document the findings and recommendations made by ERM during the current monitoring review and outstanding actions with respect to findings from the prior QMR(s).

**Coal Mine**: ERM conducted an inspection of the coal mine on June 23 and 24, 2014. Their report, QMR-5, was published in September 2014. All eight of the IFC Performance Standards were found to be either "Aligned" or "Partially Aligned" and to date have been completed or are being addressed as part of an ongoing process.

(b) (4)

<sup>76</sup> ERM's quarterly monitoring visits and related reports, QMR-6 dated December 2014 and QMR-7 dated June 2015, were completed subsequent to the OIG's onsite inspection of the coal mine and power plant in October 2014.

<sup>77</sup> Although OIG is not qualified to assess the validity of the ERM reports, we note that the Bank's assigned Environmental Analyst reviews and approves the reports. Reference Figure 4 above for a depiction of the environmental and social monitoring and reporting process.



Beginning with QMR-4, requirements for compliance with the 10 Equator Principles were deemed “Aligned.”<sup>78</sup>

**Power Plant:** ERM conducted an inspection of the power plant on June 25 and 26, 2014. Their report, QMR-5, was published in September 2014. All eight of the IFC Performance Standards were found to be either “Aligned” or “Partially Aligned” and to date have been completed or are being addressed as part of an ongoing process. Beginning with QMR-4, requirements for compliance with nine of the 10 Equator Principles were deemed “Aligned.”<sup>79</sup>

As of June 23, 2015, Ex-Im Bank reported that Sasan had fulfilled the requirement to remedy the environmental and social deficiencies outlined in QMR-3 and QMR-4, which included outstanding actions relating to findings from QMR-1 and QMR-2.<sup>80</sup> The Bank reported that it would “continue to monitor the results of subsequent QMR reports.”

### ***Notification of health and safety incidents***

In April 2012 there was an incident involving a fatality at the power plant that was brought to Ex-Im Bank’s attention by letter in June 2012 from a third party comprised of multiple stakeholders. The letter included a number of environmental and social allegations relating to the Project. Under the credit agreement, Ex-Im Bank is to be notified by the Borrower, within five business days, of any fatalities, fires or explosions related to the Project.<sup>81</sup> Also, the Bank is to be notified of any environmental or social event resulting in injury or death, any strike or civil unrest and any significant social event connected to the Project. The Borrower is required to ensure compliance with environmental, health, safety and social requirements.<sup>82</sup> (b) (4)

Ex-Im Bank notified Reliance of the June 2012 letter and its contents and reminded the Sponsor of the proper reporting requirements.<sup>84</sup> Reliance provided the Bank with a written response to each of the allegations. ERM was also asked by the Bank to investigate and follow up on the concerns during its on-site monitoring review (i.e.,

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<sup>78</sup> The status of the coal mine continued to be reported as “Aligned” with respect to the Principles in QMR-6 and QMR-7.

<sup>79</sup> The status of the power plant continued to be reported as “Aligned” with respect to nine of the 10 Principles in QMR-6 and QMR-7.

(b) (4)

(b) (4)



QMR-1). In a written response to the third party, Ex-Im Bank advised that inquiries into the accident had been initiated and the Bank had increased its “focus on health and safety practices of the Project owner, Reliance.” Specifically, in August 2014 the Bank retained ERM to conduct an onsite assessment of occupational health and safety (“H&S”) at Sasan. The assessment encompassed two major tasks that entailed performing onsite reviews of (1) “existing incident investigation process in order to assess the quality and shortcomings, if any, in SPL’s current safety practices,” and (2) “SPL’s and its contractors’ and subcontractors’ activities in accordance with the Project construction and operations, H&S plans, relevant standards (including IFC Performance Standards and applicable EHS Guidelines) and applicable Indian H&S regulation.” ERM conducted its site visit in September 2014. The respective reports by task were completed in October 2014 and included recommendations and action plans. ERM continues to monitor the implementation of the action plans as part of the QMR process.

There have been other incidents where Sasan did not notify the Bank of an occurrence within the required five-day period. For example, Ex-Im Bank received notification of another fatality that occurred in September 2014 during a Bank monitoring visit with the Sponsor in October 2014. According to the trip report, Ex-Im Bank staff expressed their concerns regarding the delayed notification of the other incidents to the Sponsor. The trip report noted that notification by the Project was only at the behest of the Bank. In follow up to a November 2014 monitoring visit at the Project site by Bank staff, Ex-Im Bank’s Chairman contacted the CEO of Reliance to discuss and obtain an understanding that the health and safety practices at Sasan would change. The Bank also initiated weekly conference calls with Reliance and other lenders to improve the dialogue and monitoring of the Project.

On February 6, 2015, Ex-Im Bank’s Chairman by letter expressed his continued disappointment to the CEO of Reliance regarding the “poor safety” practices at the Project given an additional four fatalities that occurred during or subsequent to ERM’s H&S site visit and the November 2014 monitoring trip by Bank staff. In particular, the Chairman’s letter stated, “the number of all fatalities at the integrated Project is now 19—which is both tragic and absolutely unacceptable.” The letter emphasized the Bank’s commitment to “the highest standards for health and safety compliance in projects financed by Ex-Im Bank” and that “the alarming number of injuries and fatalities must come to an end.” The Chairman’s letter noted that “rather than improving, the situation appears to be deteriorating.” The Bank required Reliance to submit “detailed action plans to improve the health and safety record at the Project sites by February 15, 2015.”

In response, Sasan provided Ex-Im Bank with information on initiatives they were implementing at the Project such as: (1) establishment of a multidisciplinary task force comprised of middle managers for the purpose of developing a safety-oriented culture and improving training, (2) creation of a new safety manager position at the power plant with hiring efforts focused on expatriates with experience in remediating safety issues, (3) establishment of 47 “Safety Champions/Stewards” representing the various departments at the power plant to safety, and (4) hiring a new safety manager for the coal mine with experience in mining and managing draglines. As of January 15, 2015, no



additional fatalities or major injuries have been reported at the coal mine or the power plant.

In comments to a draft version of this Finding, Ex-Im Bank stated it “has worked diligently to apply increasing amounts of pressure—by tightening financial terms through amendments, facilitating high-level communications” and (b) (4)  
(b) (4)

Further, Bank staff stated “as a transaction identified as high-risk AMD staff will continue to accord special attention to this credit by proactively and closely monitoring both Sasan and its Sponsor.”

To further ensure timely completion of site inspections, submission of monitoring reports and remediation of related findings, Ex-Im Bank should establish an agreed upon timeline between Sasan, Reliance and ERM. Additionally, to ensure compliance with Ex-Im Bank environmental and social policies, the Bank should develop a strategy to take stronger actions against projects, such as Sasan, with serious or repeat health and safety violations. Had the Bank not received the third-party notification or made its own inquiries, there would have been further delay in the correction of health and safety incidents at Sasan as required notification by the Borrower did not occur in a timely manner.

### **RECOMMENDATION 3A**

- Establish an agreed upon timeline between the Borrower, Project Sponsor and independent outside consultant retained to monitor a project’s compliance with environmental and social conditions pursuant to the Bank’s financial support. The agreement should include specific dates for site inspections and due dates for receipt of the monitoring reports.
- Develop a strategy to take stronger actions against a project with serious or repetitive violations with respect to the Bank’s environmental and social policies. This would include establishing formal policies and procedures for enhanced risk-based monitoring and reporting

### **Management Response:**

Please see Appendix A, Management Response and OIG Evaluation.



**Finding 3B: Ex-Im Bank does not have a formal mechanism to resolve complaints by parties who claim to be adversely affected by Bank-funded projects.**

***Environmental and social concerns***

IFC Performance Standard 1 requires the Borrower for projects involving “ongoing risk and adverse impacts” to set up a “timely process for community engagement, including a grievance mechanism” to receive and address complaints from affected communities in relation to environmental and social performance.<sup>85</sup> Similarly, Principle 6 of the Equator Principles requires the Borrower for all Category A and B projects to establish a grievance mechanism. Further, it is Sasan’s responsibility, as Borrower, to implement the grievance process, with ERM as the monitor, on behalf of the lenders (primarily Ex-Im Bank).<sup>86</sup>

Since application for Ex-Im Bank financial support, the Sasan Project has been subject to concerns with respect to the Project’s environmental and social impact. For example, in mid-2010 other print and electronic media reports cited complaints about the pending approval of financial support for the Project that largely focused on environmental issues concerning “carbon emissions.” Thereafter, reports have continued to circulate with respect to environmental and social performance. In October 2014, a non-governmental organization issued a report alleging that Sasan had not established a “meaningful” process for grievance redressal, “leaving complaints levied against the project unaddressed” concerning violations of human rights, labor and indigenous rights.<sup>87</sup>

Although ERM reported the grievance process for land acquisition and compensation (Principle 6) to be “Aligned” beginning with QMR-4, the process with respect to stakeholder engagement for the coal mine (Performance Standard 1) continued to be reported as “Partially Aligned” in QMR-5. Stakeholder engagement for the power plant was reported as “Aligned” in QMR-5.<sup>88</sup> To date, ERM’s primary focus in relation to monitoring has been on health and safety issues at the coal mine and power plant.

<sup>85</sup> Additional grievance mechanism requirements specific to labor, affected communities relating to security personnel, land acquisition, and adverse impact on indigenous peoples are cited in Performance Standards 2, 4, 5, and 7, respectively. For more information, see <http://www.ifc.org/wps/wcm/connect/cbe7b18048855348ae6cfe6a6515bb18/IFC%2BGrievance%2BMechanisms.pdf?MOD=AJPERES&CACHEID=cbe7b18048855348ae6cfe6a6515bb18>.

<sup>86</sup> *Supra* note 67.

<sup>87</sup> The report referenced herein is not offered for the accuracy or truth of its content. Rather to illustrate that information about Sasan is publicly available at times relevant to the Project. OIG notes that Ex-Im Bank had ERM review the allegations in the report during QMR-6 for the coal mine and power plant. The subject report is viewable at [http://action.sierraclub.org/site/DocServer/Sasan\\_report\\_final\\_web.pdf?docID=16701](http://action.sierraclub.org/site/DocServer/Sasan_report_final_web.pdf?docID=16701).

<sup>88</sup> For QMR-6 and QMR-7, the reported status for stakeholder engagement at the coal mine did not change. Conversely, the status with respect to the power plant changed to “Partially-Aligned.”



However, OIG understands that the Bank plans to have ERM focus its monitoring efforts on Sasan's grievance mechanism.

As observed by the OIG in meetings with non-governmental entities and project-affected persons, there continues to be concern about Sasan's process for addressing grievances and the responsiveness of the Bank in addressing the Project's environmental and social performance. In October 2014, OIG inspectors met with representatives of non-governmental entities in New Dehli, India and Singrauli, Madhya Pradesh, India.<sup>89, 90</sup> During these discussions, the representatives conveyed their concerns about Sasan and those of project-affected persons and the inability to meet with Bank staff to discuss their complaints.

The concerns expressed by the representatives from the non-governmental entities to the OIG covered a variety of issues about the Sasan Project, including documentation (e.g., public availability of the ESIA for Sasan and translation of the related terms of reference into a local dialect), rehabilitation and resettlement issues (e.g., adequacy of compensation, loss of land and livelihood, size of resettlement houses, mistreatment of residents, retaliation for protests), violation of labor standards and safety (e.g., unreported accidents and deaths at the Project), and contamination of the environment (e.g., a leaking ash pond that is polluting drinking water). The representatives also questioned the expertise and monitoring performed by the Government of India's Central Pollution Control Board of the concentration of various power plants, cement and other projects in Madhya Pradesh. Further, the representatives alleged that the cumulative effects of other coal-fired projects in the area of the Sasan Project violated the IFC's environment and social principles (i.e., Performance Standards).

Although the OIG visited sites in India and met with representatives of the non-governmental entities, the representatives were either unwilling to provide or did not have evidence to substantiate their grievances. For example, the OIG asked the representatives if testing of water near the ash pond had occurred in support of the assertion that the pond was polluting potable water sources. The representatives stated that they had not conducted testing and proceeded to avoid further discussion on the matter. In regards to allegations that project-affected persons had not received proper compensation from the Project, the OIG explained its understanding of the process that land prices are controlled, set and implemented by the District Collector of the State of Madhya Pradesh. The representatives did not want to discuss or confirm the process for land acquisition and pricing for resettlement.

The OIG agreed to meet with project-affected persons individually to hear their concerns about the Project and conduct site visits, such as that of the two resettlement

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<sup>89</sup> The meeting in New Delhi on October 10th was attended by five representatives of non-governmental entities. The meeting in Singrauli on October 15th was attended by two of the representatives from New Dehli, a representative from a local non-governmental entity, and three project-affected persons. Translation of Hindi to/from English was provided by one of the representatives from New Delhi.

<sup>90</sup> Prior to the meetings in India, the OIG met with representatives of non-governmental entities in Washington, DC to discuss Project related environmental and social concerns.



villages and the ash pond. In planning the meeting with the non-governmental entities, the OIG advised the representatives that it was not appropriate for OIG to participate in large-scale community meetings that appeared to be planned as political rallies or protests, but that the OIG was willing to meet with persons individually to discuss their concerns and conduct site visits. The OIG also explained that in its oversight role of the Bank it does not have the administrative authority to adjudicate claims or mediate grievances. The OIG explained that it can make recommendations to improve the Bank's policies and processes with respect to environmental and social matters.

The representatives made arrangements with the OIG to meet in Singrauli and selected the three project-affected persons that were in attendance at the meeting on October 15, 2014. However, the representatives did not arrange individual meetings as requested by the OIG and had scheduled community events. OIG again advised the representatives that to maintain independence they could not participate in community meetings (i.e., perceived as protest rallies), but were willing to meet with project-affected persons individually and conduct the planned site visits. The OIG asked those in attendance at the meeting to discuss their grievances. After consultation with the representatives from the non-governmental entities, the three project-affected persons decided not to discuss their concerns with the OIG. They also cancelled the site visits at the resettlement villages and the ash pond.

Due to the constraints of our institutional role as an Office of Inspector General and the lack of cooperation we received from persons in India, the OIG was not able to substantiate the specific grievances about violations of environmental and social policies that have been raised by non-governmental groups.

### ***Strategies to address complaints***

Ex-Im Bank lacks a formal process for receiving, processing and tracking the resolution of complaints. According to Bank staff, complaints are received to the attention of different individuals and departments including the Office of the Chairman, Office of General Counsel and the Engineering and Environment ("E&E") Division. The Bank only responds to direct complaints. A response is prepared by the designee and reviewed by the Office of General Counsel and then, generally, signed by the Vice President of the E&E Division.

For the Sasan Project, Ex-Im Bank staff reported receiving three to four direct complaints, which the Bank acknowledged was more than typically received for a project. One of those complaints received involved the incident at the power plant in April 2012 that was brought to the Bank's attention by a third party in June 2012, not the Borrower as required. It was unclear to the OIG under the current complaint process that the Bank had received and addressed all complaints with respect to Sasan. Hence, additional complaints beyond the three to four reported by the Bank could have been received.

OIG assessed the practices of various US federal agencies, export credit agencies, and development financial institutions to identify common practices with respect to addressing complaints. Our review disclosed a range of strategies being employed by the various entities, such as having an ombudsman to a web portal specific to complaint processing.



The websites reviewed provided guidance to the public on how to submit a complaint, including information required, how a submission is processed, and a timeline for the process (e.g., registering, acknowledging, forwarding and responding to the complaint). OIG notes the Bank's website contains a "Contact Us" page with information on how to get in touch by mail, fax, and chat.<sup>91</sup> The page also includes a fillable form with a drop-down list by subject where questions can be submitted to the Bank by email. However, the list of subjects available for selection is general in nature (i.e., relating to Ex-Im Bank operations and information), and not specific to addressing complaints. The Bank's website also contains a "Pending and Approved Project" page with a link to an email box administered by the E&E Division. Interested parties can submit requests for available environmental reports and submit information on projects via the email link provided.<sup>92</sup> However, the page is not specific to addressing complaints or easily accessible on the Bank's website. Table 7 below provides a summary of complaint filing options.

<b>Table 7: Export Credit Agency and Development Financial Institution Complaint Filing Options</b>					
<b>Web Address</b>	<b>Complaint Must Be in Writing</b>	<b>Specific Person/ Department</b>	<b>Timeline</b>	<b>Detailed Instructions</b>	<b>Fillable Form Option</b>
Economic Development Canada ("EDC")					
<a href="http://www.edc.ca">www.edc.ca</a>	Yes	Compliance Officer	N/A	Yes	Yes
Overseas Private Investment Corporation ("OPIC")					
<a href="http://www.opic.gov">www.opic.gov</a>	Yes	Director, Office of Accountability	N/A	Yes	Yes
Asian Development Bank ("ADB")					
<a href="http://www.adb.org">www.adb.org</a>	Yes	Complaints Receiving Officer	Yes	Yes	Yes
Inter-American Development Bank ("IADB")					
<a href="http://www.iadb.org">www.iadb.org</a>	Yes	Director of the Independent Consultation and Investigative Mechanism	Yes	Yes	No

Source: See applicable Web address provided

Based on the foregoing, Ex-Im Bank should establish a more formal process for receiving and responding to complaints for projects, such as Sasan. During the life of a transaction, receiving information from outside sources helps the Bank to identify emerging risks and allows the Bank to understand and address their impact on the

<sup>91</sup> Ex-Im Bank's "Contact Us" page is accessible at <http://www.exim.gov/contact>.

<sup>92</sup> The E&E Division's page is accessible at <http://www.exim.gov/policies/ex-im-bank-and-the-environment/pending-and-approved-transactions>.



transaction earlier. A centralized complaint mechanism would provide for greater transparency and credibility to the Bank's complaints processes. It would also facilitate systematic identification of developing issues and trends, and help to ensure the appropriate disposition of complaints.

### **RECOMMENDATION 3B**

OIG recommends that Ex-Im Bank:

- Establish a formal process for responding to complaints. Guidelines detailing how to submit a complaint should be in writing and include what information is required, how the submission is processed and a timeline for the process. The timeline should include registering, acknowledging, forwarding and responding to complaints. The complaint should be addressed to a specific person designated as an overall coordinator for the Bank. In the interest of transparency and ease of filing complaints, OIG suggests that the complaint process be posted on the Ex-Im Bank's website reflecting best practices outlined above.

### **Management Response:**

Please see Appendix A, Management Response and OIG Evaluation.

## **V. CONCLUSION**

The Sasan Project involves the construction and operation of a 3,960 MW coal-fired power plant and a captive coal mine in the state of Madhya Pradesh, India. Ex-Im Bank provided a 16-year financing commitment of \$650 million for the export of US mining equipment and services and over \$150 million in local costs for the Project. Although the Project has achieved commercial operation, the Project experienced a \$1.45 billion cost overrun and did not meeting certain affirmative covenants provided in the credit documentation. OIG's review of the Sasan Project found that Ex-Im Bank pro-actively monitored and restructured the Sasan transaction in response to the cost overruns and construction delays and continues its close and proactive management in light of the significant exposure and related risk. As of the date of this Report, Sasan is current in its debt repayment obligations to Ex-Im Bank.

With the benefit of hindsight, we found that certain project risks described in the 2010 Board Memorandum may not have been correctly represented and aligned in the Risk Rating Worksheet used to determine the risk rating of the Sasan transaction. OIG notes that certain legal risks associated with co-lending with Indian banks in India under the SARFAESI Act were not vetted in the Board Memorandum nor reflected in the transaction risk rating. In the event of foreclosure, these risks potentially subject Ex-Im Bank to a more protracted legal process with additional delays and uncertainty in the recovery of proceeds.

In addition, we found that although the Bank's Loan Manual Chapter 14, Project Finance, was updated in 2015 and addressed many risk determination issues, the update did not provide specific guidance or criteria for the bench marks and characteristics associated



with each Risk Classification (i.e., Low, Moderate or High). This may result in an overly subjective application of risk factors, limiting the ability to replicate results and perform independent verification.

Concerning the Project's compliance with Ex-Im Bank's social and environmental policies, OIG found that while an independent monitor was engaged by Sasan to conduct quarterly monitoring of the Project's environmental and social performance as required by Ex-Im Bank, only 7 of 12 required monitoring visits and related reports had been completed during the period of review. Finally, we note that Ex-Im Bank's process for receiving, processing and tracking the resolution of complaints is more informal and lags best practices.

Our inspection produced several key findings related to the Points of Inquiry:

**Point of Inquiry 1:** Did Ex-Im Bank conduct sufficient due diligence of the key project risks, parties involved, exposures, and red flags in accordance with Bank policies and project finance best practices? Were the relevant risks identified, evaluated, and mitigated accordingly? Did the assigned rating reflect the risks of the transaction?

**Finding 1A:** Under Indian law, Ex-Im Bank has fewer foreclosure rights and may be subject to a more protracted process than the other lenders participating in the Sasan transaction. Although Ex-Im Bank made contractual arrangements to mitigate this risk, the legal effectiveness of this approach is untested and may result in additional delays and uncertainty in the recovery of proceeds. Moreover, OIG found that the legal risks were not discussed in the Board Memorandum nor accounted for in the risk rating analysis of the transaction, apart from the status of the overall legal system.

**Recommendation 1A:** OIG recommends that Ex-Im Bank:

- Continue to apply for notification (i.e., inclusion) under the SARFAESI Act.
- Ex-Im Bank's reauthorization expired as of June 30, 2015. In the event that the Bank were to be reauthorized, OIG recommends the following:

For future transactions in India, Ex-Im Bank should ensure that the SARFAESI risks are appropriately presented in the Board Memo and reflected in the risk rating analysis when co-lending with SARFAESI lender banks on a secured basis.

**Finding 1B:** The risk rating of the Sasan transaction did not adequately address the risks of foreign currency exchange fluctuations. Although Ex-Im Bank implemented a currency hedging program seeking to mitigate these risks during the operational period of the project, these risks were not included in the financial model during the Project's four year construction period, resulting in unrepresentative credit ratios used to inform the risk rating and financial structure of the transaction.



**Recommendation 1B:** In the *Report on PNG LNG Project Financing* (OIG-INS-14-01),<sup>93</sup> OIG made a recommendation to the Bank to evaluate and mitigate FX exposure during construction as a separate risk factor, and if deemed material, to include FX volatility in the financial model as a relevant variable subject to stress testing and sensitivity analysis. In its management response, Ex-Im Bank agreed with the recommendation.

Finding 1B of this Report supports a similar recommendation. . OIG notes that the Sasan transaction closed several years prior to the issuance of the PNG LNG recommendations. Management’s actions to address the recommendation will be responsive to both the previous report, including the consideration of FX exposure during operation, and this one.

Ex-Im Bank’s reauthorization expired as of June 30, 2015. In the event that the Bank were to be reauthorized, OIG recommends the following:

- In an effort to improve the accuracy of its financial modeling, the Bank should evaluate and account for foreign exchange risk and attendant costs during construction as well as operation. Further, the Bank should provide guidance on the formulation of assumptions for the financial model used in the credit and risk rating analysis and consider additional skill building in evaluating and modeling financial projections.

**Finding 1C:** Several transaction risks described in the 2010 Board Memo were not adequately accounted for in the Risk Rating Worksheet used to calculate the risk rating. The Bank has not documented the criteria and characteristics used to translate narrative risk descriptions into quantitative assessments that can be used in risk rating calculations. As a result, the risk rating for a transaction is potentially vulnerable to subjective interpretation and cannot be independently verified and replicated.

**Recommendation 1C:** Ex-Im Bank’s reauthorization expired as of June 30, 2015. In the event that the Bank were to be reauthorized, OIG recommends the following:

- To enhance transparency and to ensure a systematic approach to the risk rating methodology, the Bank should provide written criteria or benchmarks as to what constitutes a “Low, Moderate or High” risk rating for each factor considered in developing the risk rating for a transaction.

#### **Management Response:**

Please see Appendix A, Management Response and OIG Evaluation.

**Point of Inquiry 2:** Did Ex-Im Bank proactively monitor and manage the Sasan transaction in consideration of the project risks, parties involved, and exposures in accordance with Ex-

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<sup>93</sup> For more information, see Ex-Im Bank OIG’s *Report on PNG LNG Project Financing* (OIG-INS-14-01, June 18, 2014), available for review at <http://www.exim.gov/oig/reports/upload/PNG-LNG-INSPECTION-REPORT-508-Final-Redacted.pdf>.



Im Bank policies? Were the relevant repayment risks identified, evaluated, and mitigated accordingly? Was the risk rating reviewed and confirmed after a construction cost overrun and financial restructuring of the transaction?

**Finding 2A:** Ex-Im Bank's AMD proactively restructured the Sasan transaction following a construction cost overrun, effectively shifting the risk of non-payment to Reliance Power, the Sponsor and 100 percent owner of Sasan.

**Recommendation 2A:** OIG recommends that Ex-Im Bank:

- Continue to closely and proactively manage the Sasan transaction and its Sponsor, Reliance Power given Ex-Im Bank's \$650 million exposure, (b) (4)

As part of the Bank's annual BCL review process, AMD should perform a full stand-alone analysis of the Reliance Power holding company including its projected cash flows and financial obligations related to Sasan and other projects under development and in operation.

- Improve its financial modeling capabilities for the purposes of ongoing scenario analysis, re-assessment of the BCL risk rating, and stress testing (e.g., individual obligor/names, occurrence of exogenous events in the market) for a transaction.

**Management Response:**

Please see Appendix A, Management Response and OIG Evaluation.

**Point of Inquiry 3:** Did Ex-Im Bank staff observe the Bank's environmental policies and procedures in accordance with internal guidelines and the credit documents? Are these policies and procedures being adequately monitored for compliance?

**Finding 3A:** Although an independent monitor was engaged to conduct quarterly monitoring and reporting of the Project's environmental and social performance, only 7 of 12 required quarterly monitoring visits and related reports had been completed during the period of review. Further, notifications of health and safety incidents at the Project were untimely.

**Recommendation 3A:** OIG recommends that Ex-Im Bank:

- Establish an agreed upon timeline between the Borrower, Project Sponsor and independent outside consultant retained to monitor a project's compliance with environmental and social conditions pursuant to the Bank's financial support. The agreement should include specific dates for site inspections and due dates for receipt of the monitoring reports.
- Develop a strategy to take stronger actions against a project with serious or repetitive violations with respect to the Bank's environmental and social policies. This would include establishing formal policies and procedures for enhanced risk-based monitoring and reporting.



**Finding 3B:** Ex-Im Bank does not have a formal mechanism to resolve complaints by parties who claim to be adversely affected by Bank-funded projects.

**Recommendation 3B:** OIG recommends that Ex-Im Bank:

- Establish a formal process for responding to complaints. Guidelines detailing how to submit a complaint should be in writing and include what information is required, how the submission is processed and a timeline for the process. The timeline should include registering, acknowledging, forwarding and responding to complaints. The complaint should be addressed to a specific person designated as an overall coordinator for the Bank. In the interest of transparency and ease of filing complaints, OIG suggests that the complaint process be posted on the Ex-Im Bank's website reflecting best practices outlined above.

**Management Response:**

Please see Appendix A, Management Response and OIG Evaluation.



## APPENDIX A: MANAGEMENT RESPONSE AND OIG EVALUATION



EXPORT-IMPORT BANK  
OF THE UNITED STATES

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September 23, 2015

Michael McCarthy  
Deputy Inspector General  
Office of the Inspector General  
Export-Import Bank of the United States  
811 Vermont Avenue NW  
Washington, DC 20571

Dear Deputy 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 the Project Financing of Sasan Power Limited" (September 2015). Management continues to support the OIG's work which complements 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 that the OIG noted that "the Bank pro-actively monitored and restructured the Sasan transaction, effectively shifting repayment risk to the Sponsor, Reliance Power" and that the Bank "revised the risk assessment process outlined in the Loan Manual in April 2015 and requires the Loan Officer to document the supporting rationale for evaluating specific risks". The Bank is committed to full cooperation with the OIG and will work with staff on implementing all recommendations that resulted from this audit.

Recommendation 1A: OIG recommends that Ex-Im Bank:

- Continue to apply for notification (i.e., inclusion) under the SARFAESI Act.
- Ex-Im Bank's reauthorization expired as of June 30, 2015. In the event that the Bank were to be reauthorized, OIG recommends the following:

For future transactions in India, Ex-Im Bank should ensure that the SARFAESI risks are appropriately presented in the Board Memo and reflected in the risk rating analysis when co-lending with SARFAESI lender banks on a secured basis.



Management Response: Management agrees with this recommendation, for implementation in the event the Bank is reauthorized. Ex-Im Bank recognizes the benefit of becoming a SARFAESI lender in order to have a direct vote on initiating and implementing the expedited enforcement process under SARFAESI. Since 2005, the Bank has engaged in a process, unrelated to any specific Indian transaction, to obtain recognition as a SARFAESI lender through the Indian administrative notification process. This effort continues.

Ex-Im Bank's SARFAESI efforts have been appropriately diligenced and carried out with full knowledge of senior management within the Bank. Prior to the expiration of the Bank's full authority, when an application for a project finance loan to an Indian borrower was filed with the Bank, the Country Risk and Economic Analysis Division (CREA) was notified as part of the application processing. CREA considered and analyzed SARFAESI and included the analysis as part of the country risk perspective. This analysis was also included when considering the ICRA rating for India. As with many of the factors considered, SARFAESI was not specifically named.

The Bank applies lessons learned from past transactions to future transactions. In the event the Bank is reauthorized, Management will ensure that the SARFAESI risks are specifically identified in the Board memo and the risk rating analysis when co-lending with SARFAESI lender banks on a secured basis.

As previously advised to OIG, the Bank considers the implications of SARFAESI for the Bank's secured lending to Indian borrowers as having no impact on its substantive recovery rights and remedies. This includes the right to recover proceeds from the sale of collateral and whether or not Ex-Im Bank acts as a sole lender or co-finances a loan with SARFAESI lenders. SARFAESI is solely a procedural and facilitative statute, which does not create any substantive rights in favor of SARFAESI lenders. The only effect on the Bank's ability to recover is one of timing.

The Bank has required a security sharing agreement (SSA) in every transaction with multiple lenders (both SARFAESI and non-SARFAESI). Pursuant to the SSA, the lenders agree to share recovery proceeds with each other, notwithstanding whether such recovery is obtained under SARFAESI out-of-court or outside of the SARFAESI process, in order to ensure that no secured party receives more than its pro rata share of any recovered amount. Such agreements are recognized under both SARFAESI and Indian substantive law, viz., the Transfer of Property Act, 1882. Finally an Indian Ministry of Law Opinion recognizes that inter-creditor recovery sharing arrangements would enable non-SARFAESI lenders to benefit from the expedited enforcement process under SARFAESI.

Recommendation 1B: Ex-Im Bank's reauthorization expired as of June 30, 2015. In the event that the Bank were to be reauthorized, OIG recommends the following:

- In an effort to improve the accuracy of its financial modeling, the Bank should evaluate and account for foreign exchange risk and attendant costs during construction as well as operation. Further, the Bank should provide guidance on the formulation of assumptions



for the financial model used in the credit risk rating and analysis and consider additional skill building in evaluating and modeling financial projections.

Management response: Management agrees with this recommendation, for implementation in the event the Bank is reauthorized. The Bank has typically focused on the operational phase of project financings due to the longer period of time represented by the operational phase and the availability of risk mitigants during the construction/completion phase in the form of guarantees from creditworthy corporate sponsors. In the event the Bank is reauthorized, in future project finance analyses, the Bank will evaluate and account for foreign exchange risk and attendant costs during construction and provide guidance on the formulation of assumptions for financial model use in the credit risk rating and analysis. The Bank will update the Loan, Guarantee and Insurance Manual to reflect enhancements in the evaluation of the construction/completion phase.

In regard to the findings cited in this report, Ex-Im Bank management notes that for project financings involving multiple currencies, Ex-Im Bank assesses and underwrites such projects to address two key considerations: (1) is there adequate matching of currencies of the sources of project capital to the uses of project capital, as and when capital expenditures are incurred and (2) is the economic currency of the project's operational cash flows which form the basis of the cash flow available for debt service (CFADS) adequately aligned with the currency or currencies of the project's debt capital.

For the Sasan transaction, Ex-Im Bank actively addressed these foreign exchange considerations, both at the time of the initial assessment of the transaction in August 2010 and in subsequent modifications to the loan structure driven by the changing circumstances of the loan. The facility as contemplated by the August 2010 Board Memorandum reflected the anticipated capital structure of matched U.S. dollar (USD) sources to USD uses (62% to 64%) and Indian rupee (INR) sources to INR uses (38% to 36%). As a result, the project was structured with a natural hedge against currency movements during the construction period.

As noted in the report, events did overtake the anticipated matched funding arrangement as a large portion of the USD-based financing was replaced by INR-sources. Although this resulted in a misaligned currency mix in the capital structure, it did result in the beneficial effect of reducing the portion of USD-denominated debt capital that would need to be hedged against the INR-denominated tariff revenue. Furthermore, in agreeing to a revised capital structure as a result of the change in circumstances, Ex-Im Bank required a significant improvement in support from Reliance Power, thus shifting the burden of the construction phase INR devaluation impacts onto Reliance Power.



Ex-Im Bank further worked to assess and structure adequate protection against unfavorable foreign exchange movements affecting the economic currency of the project's cash flow available for debt service versus the servicing requirements of the debt capital not denominated in the same economic currency (in this case the Indian rupee). The August 2010 Board Memo stated the project would be required to enter into agreed minimum interest rate and currency hedging programs for specifically this risk and Ex-Im Bank staff identified the on-going due diligence of the "vulnerability of project economics to changing inflation rates and related interest rates and INR:USD exchange rates which may result in modifications to the Model assumptions and the level of Sponsor support." An INR:USD hedging program was implemented with the first disbursement of the USD loan facilities, taking into account the resulting changes to the debt capital structure (which featured less USD-denominated debt than originally anticipated and thus less misaligned exposure to the project's INR revenues) and on-going changes to currency hedging market conditions.

Recommendation 1C: Ex-Im Bank's reauthorization expired as of June 30, 2015. In the event that the Bank were to be reauthorized, OIG recommends the following:

- To enhance transparency and to ensure the risk rating methodology, the Bank should provide written criteria or benchmarks as to what constitutes a "Low, Moderate or High" risk rating for each factor considered in developing the risk rating for a transaction.

Management Response: Management agrees with this recommendation, for implementation in the event the Bank is reauthorized. Bank staff will provide greater detail as to what constitutes a "Low, Moderate or High" risk rating for each factor considered in developing the risk rating for a transaction, and this methodology will be documented in the Loan, Guarantee and Insurance Manual.

Recommendation 2A: OIG recommends that Ex-Im Bank:

- Continue to closely and proactively manage the Sasan transaction and its Sponsor, Reliance Power given Ex-Im Bank's \$650 million exposure, the on-going issues with Sasan covenant compliance, and the remaining 12-year life of the transaction. As part of the Bank's annual BCL review process, AMD should perform a full stand-alone analysis of the Reliance Power holding company including its projected cash flows and financial obligations related to Sasan and other projects under development and in operation.
- Improve its financial modeling capabilities for the purposes of ongoing scenario analysis, re-assessment of the BCL risk rating, and stress testing (e.g., individual obligor/names, occurrence of exogenous events in the market) for a transaction.



Management Response: Management agrees with this recommendation. Given the large aggregate Ex-Im Bank exposure to Reliance Power Limited sponsored credits and the existence of varying ongoing Reliance obligations to Ex-Im Bank-financed projects, the Bank decided in January 2015 to monitor Reliance both more closely and as a stand-alone entity. Staff finished its inaugural Reliance Power risk rating on July 2015.

The Bank is actively leveraging resources in support of ongoing improvement of financial modeling capabilities by tasking portfolio managers and analysts with financial modeling analysis, engaging financial consultants to develop, maintain and enhance financial models and providing ongoing training to staff for the same.

Recommendation 3A: OIG recommends that Ex-Im Bank:

- Establish an agreed upon timeline between the Borrower, Project Sponsor and independent outside consultant retained to monitor a project's compliance with environmental and social conditions pursuant to the Bank's financial support. The agreement should include specific dates for site inspections and due dates for receipt of the monitoring reports.
- Develop a strategy to take stronger actions against a project with serious or repetitive violations with respect to the Bank's environmental and social policies. This would include established formal policies and procedures for enhanced risk-based monitoring and reporting.

Management Response: Management agrees with this recommendation. Based on the experience developed in the process of monitoring Sasan, such procedures or measures established to improve the caliber and timeliness of project monitoring will be documented and formally conveyed to the project sponsor together with an explanation of potential consequences associated with any violations of environmental monitoring or other related Conditions referenced in the Credit or Common Terms Agreement. Management will evaluate the need for establishing formal policies and procedures with project sponsors to improve and enhance the caliber of risk-based monitoring and reporting to EXIM in order to manage serious or repetitive violations of the Bank's environmental and social guidelines including non-compliances and performance issues and will update the Loan, Guarantee and Insurance manual to reflect any policies and procedures developed.

Recommendation 3B: OIG recommends that Ex-Im Bank:

- Establish a formal process for responding to complaints. Guidelines detailing how to submit a complaint should be in writing and include what information is required, how

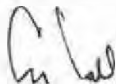


the submission is processed and a timeline for the process. The timeline should include registering, acknowledging, forwarding and responding to complaints. The complaint should be addressed to a specific person designated as an overall coordinator for the Bank. In the interest of transparency and ease of filing complaints, OIG suggests that the complaint process be posted on the Ex-Im Bank's website reflecting best practices outlined above.

Management Response: Management's response to this recommendation assumes that the formal complaint process referenced in Recommendation 3B relates to the Bank's environmental and social performance of projects and the Bank's handling of issues related to its environmental policies. Management agrees with this recommendation. The Bank will establish a team to work with the Office of the General Counsel and the Bank's web team to develop and launch a formal and more effective EXIM process for addressing and responding to outside complaints associated with the environmental and social performance of projects. The web site will contain formal instructions, placed at strategic and prominent locations on the various environmental pages of its web pages directing interested parties and stakeholders as to whom to contact and how to file a complaint. The Loan, Guarantee and Insurance Manual will be updated to reflect this process.

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 23, 2015, Ex-Im Bank provided its management response to a draft of this Report, agreeing with the six recommendations. The response identified the Bank's actions to address the recommendations. OIG considers the Bank's actions sufficient to resolve the report recommendations, which will remain open until OIG determines that the agreed upon corrective actions are completed and responsive to the reported recommendations. The Bank's management response to the reported recommendations and OIG's assessment of the response are as follows:

### RECOMMENDATION 1A

**Recommendation 1A:** OIG recommends that Ex-Im Bank:

- Continue to apply for notification (i.e., inclusion) under the SARFAESI Act.
- Ex-Im Bank's reauthorization expired as of June 30, 2015. In the event that the Bank were to be reauthorized, OIG recommends the following:

For future transactions in India, Ex-Im Bank should ensure that the SARFAESI risks are appropriately presented in the Board Memo and reflected in the risk rating analysis when co-lending with SARFAESI lender banks on a secured basis.

**Management Response:** Management agrees with this recommendation, for implementation in the event the Bank is reauthorized. Ex-Im Bank recognizes the benefit of becoming a SARFAESI lender in order to have a direct vote on initiating and implementing the expedited enforcement process under SARFAESI. Since 2005, the Bank has engaged in a process, unrelated to any specific Indian transaction, to obtain recognition as a SARFAESI lender through the Indian administrative notification process. This effort continues.

Ex-Im Bank's SARFAESI efforts have been appropriately diligenced and carried out with full knowledge of senior management within the Bank. Prior to the expiration of the Bank's full authority, when an application for a project finance loan to an Indian borrower was filed with the Bank, the Country Risk and Economic Analysis Division (CREA) was notified as part of the application processing. CREA considered and analyzed SARFAESI and included the analysis as part of the country risk perspective. This analysis was also included when considering the ICRAS rating for India. As with many of the factors considered, SARFAESI was not specifically named.

The Bank applies lessons learned from past transactions to future transactions. In the event the Bank is reauthorized, Management will ensure that the SARFAESI risks are specifically identified in the Board memo and the risk rating analysis when co-lending with SARFAESI lender banks on a secured basis.

As previously advised to OIG, the Bank considers the implications of SARFAESI for the Bank's secured lending to Indian borrowers as having no impact on its substantive recovery rights and remedies. This includes the right to recover proceeds from the sale of collateral and whether or not Ex-Im Bank acts as a sole lender or co-finances a loan with SARFAESI lenders. SARFAESI is solely a procedural and facilitative statute, which does not create any substantive rights in favor of SARFAESI lenders. The only effect on the Bank's ability to recover is one of timing.



The Bank has required a security sharing agreement (SSA) in every transaction with multiple lenders (both SARFAESI and non-SARFAESI). Pursuant to the SSA, the lenders agree to share recovery proceeds with each other, notwithstanding whether such recovery is obtained under SARFAESI out-of-court or outside of the SARFAESI process, in order to ensure that no secured party receives more than its pro rata share of any recovered amount. Such agreements are recognized under both SARFAESI and Indian substantive law, viz., the Transfer of Property Act, 1882. Finally an Indian Ministry of Law Opinion recognizes that inter-creditor recovery sharing arrangements would enable non-SARFAESI lenders to benefit from the expedited enforcement process under SARFAESI.

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

### RECOMMENDATION 1B

**Recommendation 1B:** Ex-Im Bank's reauthorization expired as of June 30, 2015. In the event that the Bank were to be reauthorized, OIG recommends the following:

- In an effort to improve the accuracy of its financial modeling, the Bank should evaluate and account for foreign exchange risk and attendant costs during construction as well as operation. Further, the Bank should provide guidance on the formulation of assumptions for the financial model used in the credit risk rating and analysis and consider additional skill building in evaluating and modeling financial projections.

**Management Response:** Management agrees with this recommendation, for implementation in the event the Bank is reauthorized. The Bank has typically focused on the operational phase of project financings due to the longer period of time represented by the operational phase and the availability of risk mitigants during the construction/completion phase in the form of guarantees from creditworthy corporate sponsors. In the event the Bank is reauthorized, in future project finance analyses, the Bank will evaluate and account for foreign exchange risk and attendant costs during construction and provide guidance on the formulation of assumptions for financial model use in the credit risk rating and analysis. The Bank will update the Loan, Guarantee and Insurance Manual to reflect enhancements in the evaluation of the construction/completion phase.

In regard to the findings cited in this report, Ex-Im Bank management notes that for project financings involving multiple currencies, Ex-Im Bank assesses and underwrites such projects to address two key considerations: (1) is there adequate matching of currencies of the sources of project capital to the uses of project capital, as and when capital expenditures are incurred and (2) is the economic currency of the project's operational cash flows which form the basis of the cash flow available for debt service (CFADS) adequately aligned with the currency or currencies of the project's debt capital.

For the Sasan transaction, Ex-Im Bank actively addressed these foreign exchange considerations, both at the time of the initial assessment of the transaction in August 2010 and in subsequent modifications to the loan structure driven by the changing circumstances of the loan. The facility as contemplated by the August 2010 Board



Memorandum reflected the anticipated capital structure of matched U.S. dollar (USD) sources to USD uses (62% to 64%) and Indian rupee (INR) sources to INR uses (38% to 36%). As a result, the project was structured with a natural hedge against currency movements during the construction period.

As noted in the report, events did overtake the anticipated matched funding arrangement as a large portion of the USD-based financing was replaced by INR-sources. Although this resulted in a misaligned currency mix in the capital structure, it did result in the beneficial effect of reducing the portion of USD-denominated debt capital that would need to be hedged against the INR-denominated tariff revenue. Furthermore, in agreeing to a revised capital structure as a result of the change in circumstances, Ex-Im Bank required a significant improvement in support from Reliance Power, thus shifting the burden of the construction phase INR devaluation impacts onto Reliance Power.

Ex-Im Bank further worked to assess and structure adequate protection against unfavorable foreign exchange movements affecting the economic currency of the project's cash flow available for debt service versus the servicing requirements of the debt capital not denominated in the same economic currency (in this case the Indian rupee). The August 2010 Board Memo stated the project would be required to enter into agreed minimum interest rate and currency hedging programs for specifically this risk and Ex-Im Bank staff identified the on-going due diligence of the "vulnerability of project economics to changing inflation rates and related interest rates and INR: USD exchange rates which may result in modifications to the Model assumptions and the level of Sponsor support." An INR: USD hedging program was implemented with the first disbursement of the USD loan facilities, taking into account the resulting changes to the debt capital structure (which featured less USD-denominated debt than originally anticipated and thus less misaligned exposure to the project's INR revenues) and on-going changes to currency hedging market conditions.

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

## RECOMMENDATION 1C

**Recommendation 1C:** Ex-Im Bank's reauthorization expired as of June 30, 2015. In the event that the Bank were to be reauthorized, OIG recommends the following:

- To enhance transparency and to ensure the risk rating methodology, the Bank should provide written criteria or benchmarks as to what constitutes a "Low, Moderate or High" risk rating for each factor considered in developing the risk rating for a transaction.

**Management Response:** Management agrees with this recommendation, for implementation in the event the Bank is reauthorized. Bank staff will provide greater detail as to what constitutes a "Low, Moderate or High" risk rating for each factor considered in developing the risk rating for a transaction, and this methodology will be documented in the Loan, Guarantee and Insurance Manual.



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

## RECOMMENDATION 2A

**Recommendation 2A:** OIG recommends that Ex-Im Bank:

- Continue to closely and proactively manage the Sasan transaction and its Sponsor, Reliance Power given Ex-Im Bank's \$650 million exposure, the on-going issues with Sasan covenant compliance, and the remaining 12-year life of the transaction. As part of the Bank's annual BCL review process, AMD should perform a full stand-alone analysis of the Reliance Power holding company including its projected cash flows and financial obligations related to Sasan and other projects under development and in operation.
- Improve its financial modeling capabilities for the purposes of ongoing scenario analysis, re-assessment of the BCL risk rating, and stress testing (e.g., individual obligor/names, occurrence of exogenous events in the market) for a transaction.

**Management Response:** Management agrees with this recommendation. Given the large aggregate Ex-Im Bank exposure to Reliance Power Limited sponsored credits and the existence of varying ongoing Reliance obligations to Ex-Im Bank-financed projects, the Bank decided in January 2015 to monitor Reliance both more closely and as a stand-alone entity. Staff finished its inaugural Reliance Power risk rating on July 2015.

The Bank is actively leveraging resources in support of ongoing improvement of financial modeling capabilities by tasking portfolio managers and analysts with financial modeling analysis, engaging financial consultants to develop, maintain and enhance financial models and providing ongoing training to staff for the same.

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

## RECOMMENDATION 3A

**Recommendation 3A:** OIG recommends that Ex-Im Bank:

- Establish an agreed upon timeline between the Borrower, Project Sponsor and independent outside consultant retained to monitor a project's compliance with environmental and social conditions pursuant to the Bank's financial support. The agreement should include specific dates for site inspections and due dates for receipt of the monitoring reports.
- Develop a strategy to take stronger actions against a project with serious or repetitive violations with respect to the Bank's environmental and social policies. This would include established formal policies and procedures for enhanced risk-based monitoring and reporting.



**Management Response:** Management agrees with this recommendation. Based on the experience developed in the process of monitoring Sasan, such procedures or measures established to improve the caliber and timeliness of project monitoring will be documented and formally conveyed to the project sponsor together with an explanation of potential consequences associated with any violations of environmental monitoring or other related Conditions referenced in the Credit or Common Terms Agreement. Management will evaluate the need for establishing formal policies and procedures with project sponsors to improve and enhance the caliber of risk-based monitoring and reporting to EXIM in order to manage serious or repetitive violations of the Bank's environmental and social guidelines including non-compliances and performance issues and will update the Loan, Guarantee and Insurance manual to reflect any policies and procedures developed.

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

### RECOMMENDATION 3B

**Recommendation 3B:** OIG recommends that Ex-Im Bank:

- Establish a formal process for responding to complaints. Guidelines detailing how to submit a complaint should be in writing and include what information is required, how the submission is processed and a timeline for the process. The timeline should include registering, acknowledging, forwarding and responding to complaints. The complaint should be addressed to a specific person designated as an overall coordinator for the Bank. In the interest of transparency and ease of filing complaints, OIG suggests that the complaint process be posted on the Ex-Im Bank's website reflecting best practices outlined above.

**Management Response:** Management's response to this recommendation assumes that the formal complaint process referenced in Recommendation 3B relates to the Bank's environmental and social performance of projects and the Bank's handling of issues related to its environmental policies. Management agrees with this recommendation. The Bank will establish a team to work with the Office of the General Counsel and the Bank's web team to develop and launch a formal and more effective EXIM process for addressing and responding to outside complaints associated with the environmental and social performance of projects. The web site will contain formal instructions, placed at strategic and prominent locations on the various environmental pages of its web pages directing interested parties and stakeholders as to whom to contact and how to file a complaint. The Loan, Guarantee and Insurance Manual will be updated to reflect this process.

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



Table 8: Summary of Management's Comments on the Recommendations				
Rec. No.	Corrective Action: Taken or Planned	Expected Completion Date <sup>94</sup>	Resolved: Yes or No <sup>95</sup>	Open or Closed <sup>96</sup>
1A	The Bank will continue to pursue recognition as a SARFAESI lender through the Indian administrative notification process.	Subject to Bank reauthorization	Yes	Open
1B	The Bank will account for foreign exchange risk and attendant costs during construction in future project analysis. Further, the Bank will provide guidance on the formulation of assumptions for financial model use and update its Loan Manual with respect to the construction/completion phase.	Subject to Bank reauthorization	Yes	Open
1C	The Bank will provide greater detail as to what constitutes a "Low, Moderate or High" risk rating. Methodology will be included in the Loan Manual.	Subject to Bank reauthorization	Yes	Open
2A	The Bank began to closely monitor Reliance Power in January 2015 and completed a risk rating of the Sponsor in July 2015. Further, the Bank is "actively leveraging resources" to improve its financial modeling capabilities.	No target completion date provided	Yes	Open
3A	The Bank will document and formally convey to the Sponsor its procedures /measures with respect to the "caliber and timeliness of project monitoring." The communication will include an explanation of "potential consequences" for violations (e.g., environmental, Credit or CTA). Regarding risk-based monitoring and reporting, the Bank agreed to evaluate further the need for establishing formal policies and	No target completion date provided	Yes	Open

<sup>94</sup> Ex-Im Bank OIG has requested target completion dates for each of the outstanding recommendations.

<sup>95</sup> "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.

<sup>96</sup> Upon determination by Ex-Im Bank OIG that the agreed upon corrective action has been completed and is responsive to the recommendation, the recommendation can be closed.



Table 8: Summary of Management's Comments on the Recommendations				
Rec. No.	Corrective Action: Taken or Planned	Expected Completion Date <sup>94</sup>	Resolved: Yes or No <sup>95</sup>	Open or Closed <sup>96</sup>
	procedures and will update the Loan Manual accordingly.			
3B	The Bank will establish a team to develop a "formal and more effective" web-based process for receiving and responding to complaints concerning a project's environmental and social performance. The Loan Manual will be updated accordingly.	No target completion date provided	Yes	Open



## APPENDIX B: INSPECTION METHODOLOGY

As part of its review, the OIG's Office of Inspection and Evaluation ("OIE") employed a combination of quantitative and qualitative techniques. The OIE team utilized the following techniques during the research and fieldwork phases:

1. Reviewed and analyzed the transaction's legal documents, internal Ex-Im Bank reports, tapes of the Board approval, and correspondence related to the transaction;
2. Interviewed Ex-Im Bank staff including representatives from Project Finance, Asset Management, Operations, Policy, Engineering, Environment and Legal;
3. Reviewed and analyzed the transaction's financial statements, financial projections, disbursement requests, and invoices;
4. Reviewed public and open source documents, press releases and network analysis
5. Interviewed external parties including the borrower, the Sponsor Reliance Power, other lenders, engineering consultants, legal advisors, rating agencies, US embassy personnel, Indian government officials, environmental and social Non-Governmental Organizations ("NGOs"), and personnel at the project site itself; and
6. Conducted onsite inspections in October 2014 of the Sasan Project, coal mine and power plant, ash pond, coal conveyor belt, resettlement villages, schools and medical facilities.

For additional details on interviews conducted during the fieldwork phase of the inspection see Table 9 below.

Table 9: Ex-Im Bank OIG Interview Schedule		
Entity	Contacts	Timeline
Ex-Im Bank	Bank Staff	July 2014 – August 2015
Borrower	Sasan Power and Reliance Power	October 2014
Lenders	State Bank of India, India Infrastructure Finance Company, Standard Chartered Bank, Deutsche Bank	September 2014 – October 2014
Consultants	Portland Advisors (Financial Advisor), ERM (Environment), Lahmeyer (Power Plant) Golder (Coal Mine)	September 2014 – October 2014
Local Legal Counsel	Luthra and Luthra	October 2014
Local Rating Agencies	ICRA (for Reliance Power) and Crisil Ltd. (for power and transmission market research)	October 2014
US Embassy in Mumbai and New Delhi	Embassy Staff	October 2014



Table 9: Ex-Im Bank OIG Interview Schedule		
Entity	Contacts	Timeline
Ministry of Environment & Forests, Government of India	Joint Secretary	October 2014
Environmental and Social NGOs	Staff from BIC, Delhi Forum, National Alliance of People's Movements, and the Program for Social Action	October 2014



## **APPENDIX C: FINANCIAL CLOSINGS, AMENDMENTS AND WAIVERS**

(b) (4)



(b) (4)

4. (b) (4), (b) (5)

(b) (4)

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(b) (4)



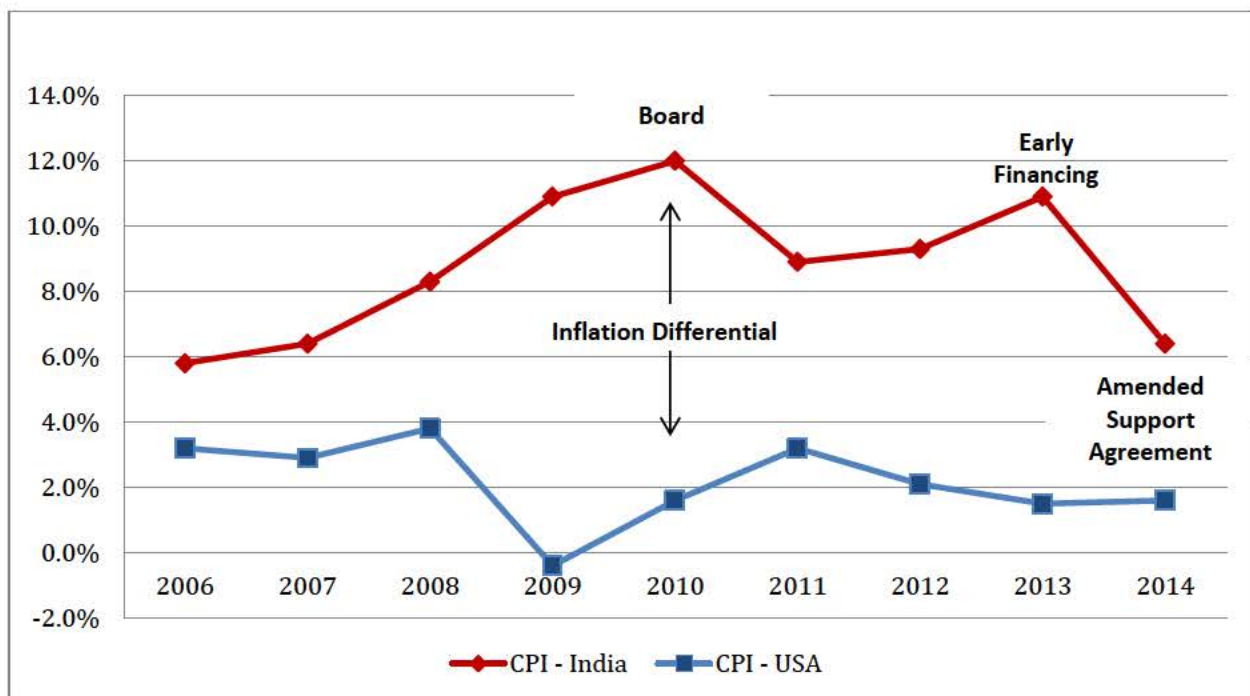
(b) (4), (b) (5)



## APPENDIX E: Devaluation and Hedging Analysis

(b) (4), (b) (5)

Figure 5: India – USA Inflation Differential 2006-2014



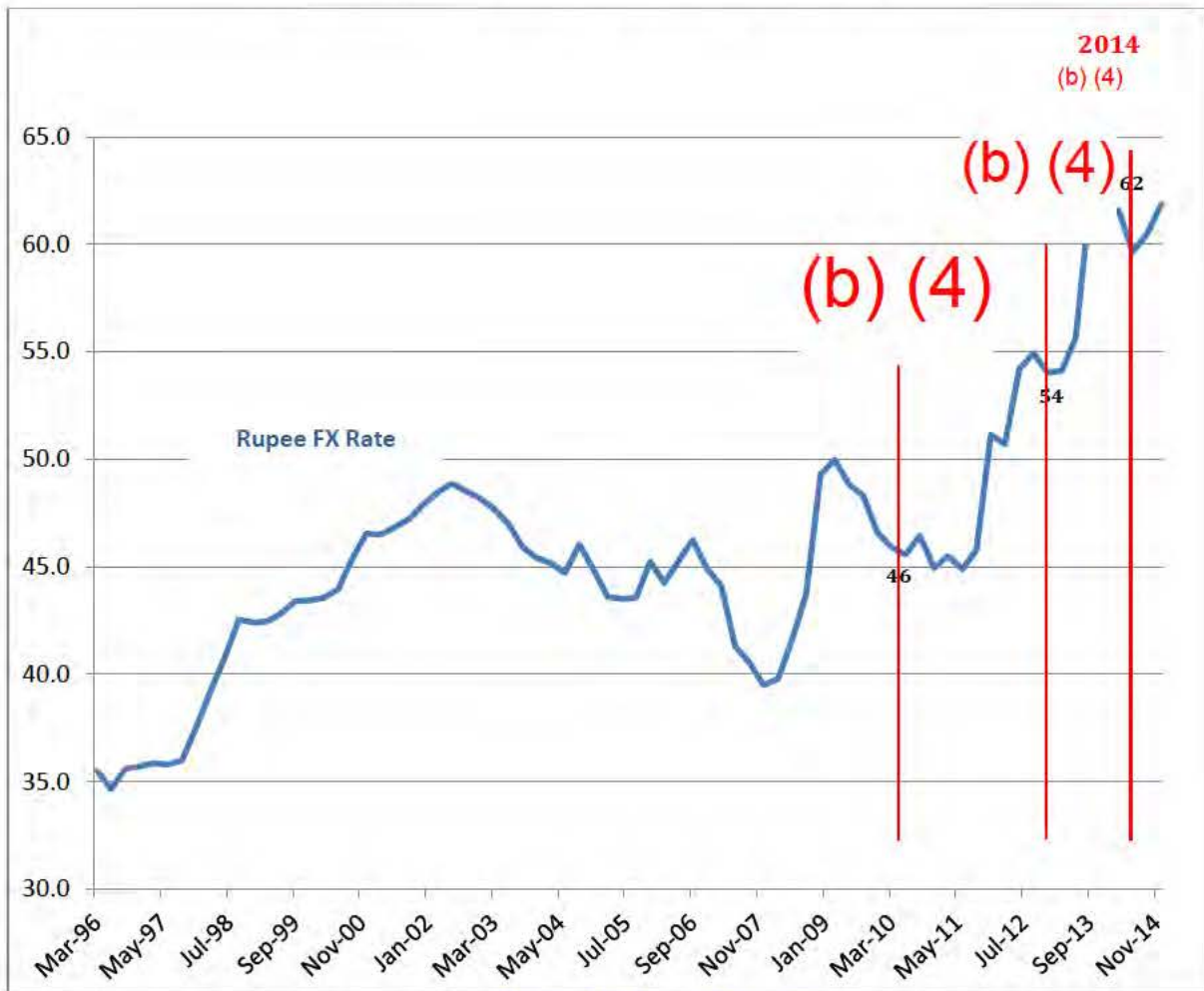
Source: OECD.StatExtracts at <http://stats.oecd.org/Index.aspx?querytype=view&queryname=221#>

(b) (4)



(b) (4)

Figure 6: Rupee - USD Foreign Exchange Rate 1996 – 2014

Source: <http://www.oanda.com/>

(b) (4), (b) (5)



(b) (4), (b) (5)

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99 (b) (4)

100 (b) (4), (b) (5)



(b) (4), (b) (5)

Table 12: Foreign Currency ("FX") Exposure		
Exposure Type	Description	Examples
<b>Translation</b>	Reflects changes in income statement items and book value of balance sheet assets and liabilities. Translation exposure creates "paper" losses and gains.	Book value of Property plant and equipment held in a foreign subsidiary.
<b>Transaction</b>	Reflects changes in the value of future foreign currency denominated, contractually binding cash flows resulting from FX fluctuations. Gains and losses derive from the difference between the historical value of cash inflow /outflow and the value determined when settled. Retrospective and prospective in nature, they generate cash losses and gains.	Accounts receivable representing sales denominated in a foreign currency. Obligation to pay foreign currency denominated debt.
<b>Operating</b>	Reflects changes in the value of future revenues and costs deriving from currency fluctuations. Prospective in nature.	Currency fluctuations effect future foreign currency income and costs.

Source: Shapiro, Alan, *Multinational Financial Management*, 2013.



## APPENDIX F: SASAN RISK RATING

Table 13 below provides a comparison of risks described in the Ex-Im Bank's Board Memo for Sasan and their inconsistent mapping to the Risk Rating Worksheet. The worksheet was utilized by the Bank to determine the risk rating for transaction.

(b) (4), (b) (5)



(b) (4)



(b) (4), (b) (5)



(b) (4), (b) (5)



## APPENDIX H: RELIANCE POWER BUSINESS AND FINANCIAL OVERVIEW

(b) (4), (b) (5)

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<sup>101</sup> (b) (4)

<sup>102</sup> (b) (4), (b) (5)



(b) (4), (b) (5)

(b) (4)

In summary, Reliance Power as the current joint and primary source of repayment for Sasan has a number of major business and financial challenges within the context of

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<sup>103</sup> Lender names are from Sasan's March 31, 2014 financials.

<sup>104</sup> (b) (4)



(b) (4), (b) (5)



## APPENDIX I: IFC'S EIGHT PERFORMANCE STANDARDS

The IFC has established a comprehensive set of environmental and social Performance Standards designed to achieve positive development outcomes through the application of the environmental and social sustainability of these Standards. They consist of the following: Insert a summary statement(s) about the IFC performance standards (purpose, etc.).

- Social and Environmental Assessment and Management Systems: Conduct an Environmental and Social Impact Assessment ("EIA") appropriate to the nature of the Project's environmental and social risks and potential impacts. Establish Environmental and Social Management Plans commensurate with the findings of the EIA and consultation with affected communities.
- Labor and Working Conditions: Establish and maintain a Human Resources Policy designed to promote fair treatment and equal opportunity for workers and provide a safe and healthy work environment.
- Pollution Prevention and Abatement: Avoid or minimize pollution from the Project activities on the environment and human health. Apply pollution prevention and control technologies and practices consistent with good industry practice,
- Community Health, Safety & Security: Ensure that the safeguarding of personnel and property is carried out in a legitimate manner that avoids or minimizes risks to the community's safety and security.
- Land Acquisition and Involuntary Resettlement: Mitigate adverse social and economic impacts by providing compensation for loss of assets at replacement cost and ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation and informed participation of those affected.
- Biodiversity Conservation and Sustainable Natural Resource Management: Protect and conserve biodiversity by promoting sustainable management and the use of natural resources through the adoption of practices that integrate conservation needs and development priorities.
- Indigenous Peoples: Identify, through the EIA process, all communities of indigenous peoples who may be affected by the project within the project's area of influence as well as the nature and degree of the expected social, cultural and environmental impact on them.
- Cultural Heritage: Protect cultural heritage from the adverse impacts of project activities and support its preservation.



## APPENDIX J: THE EQUATOR PRINCIPLES

The following provides a summary of the 10 Equator Principles (“Principles”). The Principles are a risk management framework for determining, assessing and managing environmental and social risk in projects and is primarily intended to provide a minimum standard for due diligence to support responsible risk decision-making. The Sasan transaction was assessed and monitored for compliance with the Principles even though the Ex-Im Bank had not yet adopted the Principles as of the authorization date for the transaction.

- Review and Categorization: Projects will be reviewed and categorized based on the magnitude of its potential environmental and social risks and impacts.
- Environmental and Social Assessment: Client will be required to conduct an assessment of the relevant environmental and social risks and impacts of the proposed project.
- Applicable Environmental and Social Standards: The assessment should address compliance with the host country’s laws, regulations and permits that pertain to environmental and social issues.
- Environmental and Social Management System and Equator Principles Action Plan: Client will be required to develop or maintain an Environmental and Social Management System and an Equator Principles Action Plan.
- Stakeholder Engagement: Client will be required to demonstrate effective stakeholder engagement as an ongoing process in a structured and culturally appropriate manner with affected communities and other stakeholders.
- Grievance Mechanism: Client will establish a grievance mechanism designed to receive and facilitate resolution of concerns and grievances about the project’s environmental and social performance.
- Independent Review: An independent environmental and social consultant will carry out an independent review of the assessment documentation.
- Covenants: Any financing documentation will contain covenants to comply with all relevant host country environmental and social laws, regulations and permits in all material respects.
- Independent Monitoring and Reporting: An independent environmental and social consultant will be appointed to assess compliance with the Equator Principles and ensure ongoing monitoring and reporting over the life of the loan.
- Reporting and Transparency: Client will ensure that a summary of the ESIA is accessible and available online and will report publicly GHG emission levels, if applicable.



## APPENDIX K: SITE PHOTOGRAPHS

3,960 MW Power Plant – 6 Units



Turbine



Switch Yard



Water Cooling Units



Coal Yard



12 Mile Coal Conveyor Belt



Site Overview



Removing Coal Overburden



Dust Suppression



Coal Seam



Caterpillar Dump Truck



Caterpillar Coal Shovel






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