

## FINANCIAL MANAGEMENT ASSESSMENT REPORT

### A. Introduction

1. **Objectives.** This financial management assessment (FMA) report is prepared to evaluate India Renewable Energy Development Agency Limited (IREDA)'s capacity to technically, managerially, and financially implement the proposed ADB project. Particularly, this FMA report (i) evaluates IREDA's relevant institutional capacity to justify loan approval, (ii) identifies the institution's relevant development needs—both project related and long term, and (iii) confirms that the financial management system is adequate and sustainable.

2. **Financial intermediation loans.** The proposed project is a financial intermediation (FI) loan, in which the ADB fund will be channeled through IREDA to subborrowers for financing eligible renewable energy subprojects. IREDA will bear the subborrowers' credit risk. The borrowing cost to the subborrowers will be market-based to accommodate the required project financing and operational requirements. IREDA is expected to generate a reasonable interest rate spread to cover its costs.

3. **Detail FMA assessment.** In the context of ensuring IREDA's capacity to implement the ADB FI loan, this FMA report reviews the country and macroeconomic environment in which IREDA operates. In addition, this FMA reviews IREDA's: (i) experiences in managing and implementing similar development projects, (ii) governance structure, (iii) accounting procedures, (iv) credit review and disbursement process including recovery and treatment of loan impairment, (v) risk management, (vi) liquidity management, (vii) disclosure and reporting, (viii) fund flows, (ix) information technology system, (x) human resources policy and guidelines to assess general human capacity,

### B. Project Description

4. **IREDA description.** IREDA was incorporated on 11 March 1987 as a 100% Government of India owned public enterprise under the administrative control of the Ministry of New and Renewable Energy (MNRE). IREDA is also a public financial institution and a registered non-banking financial company (NFBC) under the purview of the Reserve Bank of India (RBI), the central bank. IREDA is the only public sector financial institution dedicated to support the new and renewable energy projects in India. Under the Strategic Plan for New and Renewable Energy Sector 2011-2017, renewable energy development contributed to about a total of 30% national installed capacity. IREDA is MNRE's principal financing arm to implement this development agenda. Till 31 March 2013, IREDA had provided Rs118,488 million (\$1,895 million) in wind, solar, small hydropower, bio-mass and energy efficiency projects.

5. **ADB project description.** The Clean Energy Finance Investment Program (the Program) provides a line of credit to IREDA for onlending to eligible subborrowers. The total project cost is \$1 billion, in which ADB finances 50% of total subproject cost in debt (\$500 million). 20% of total subproject cost in debt (\$200 million) is from unrestricted sources. The subborrowers contribute to about 30% of total project cost in equity and other funds (\$300 million). The purpose of the program is to increase India's funding support to renewable energy projects by providing loans up to the 15 years' tenor that commercial banks usually cannot provide. As an ADB multi-tranche financing facility (MFF) and an FI loan, the program is sovereign guaranteed by the Government of India. Subproject selection is based on the proposed eligibility criteria and includes subprojects for generation of renewable energy by using sources such as wind, biomass, hydropower, solar, and cogeneration.

### C. IREDA's Financial Management Capacity

6. First and foremost, ADB needs to ensure that the Government of India is supportive of the proposed project, and IREDA management is fully committed to its successful implementation of the ADB program. This has been confirmed by (i) IREDA's request to Department of Economic Affairs (DEA), Ministry of Finance (MOF), for the \$500 million ADB funding and (ii) DEA's confirmation that it would provide the sovereign guarantee to this transaction. Detailed market, sector, and institutional assessments have been conducted and a concrete subproject pipeline for the 2014 calendar year to benefit from the initial advance has been provided.

#### 1. Overall risk assessment

7. The financial management internal control and risk assessment examines the proposed project on two levels. Under inherent risks, it considers risks that are inherent to projects in India, to financial institutions, and to infrastructure subprojects. Under control risks, it considers risks that are unique to IREDA and the subprojects (Table 1).

**Table 1: Financial Management Internal Control and Risk Assessment**

Risk	Risk Assessment	Risk-Mitigation Measures
<b>Inherent Risk</b>		
1. Country-Specific Risks (India)	M – There is no significant weakness in the budgetary process or in the public sector accounting and reporting system. Public and private sector auditing standards and capacity are adequate. There could be weaknesses in the implementation of incorporating the audit findings. Obstacles on funds flow is restricted by the Reserve Bank of India's requirement that all foreign currency funds must be converted into Indian rupee. As a result, IREDA must set up an offshore account to hold the USD assets. The country has a relatively strong accounting profession comparing to other South Asia nations. India is one of the earliest countries to have adopted International Standards on auditing.	Development assistances from AfD, JICA, and KfW, among others, account for about 70% of IREDA's recent annual funding request. IREDA has the necessary capacity to comply with the national requirements to satisfy the international lenders' requirements. However, these national guidelines may not be fully aligned with the international best practices. For example, the requirements on loan classification and provisioning are yet to be based on international best practices. It is expected that RBI will gradually improve the relevant provisions.  The devaluation of the Indian rupee to USD over 2013-2014 in light of US Federal Reserve Bank's tapering-off the quantitative easing has increased the possible exchange rate risk in the transaction. Nevertheless, IREDA carries out a full foreign currency and interest rate swap that eliminates such an exchange rate risk.  In addition, the government's budgetary position and its support to renewable energy development (reflected in such initiative as feed-in tariff) would impact the sector's development. However, the long-term outlook of the government's support to renewable energy development has

		been positive.
2. Entity-Specific Risks (IREDA)	M – IREDA has about 70% of its recent annual funding request from development assistance. With prior borrowing from ADB, AfD, JICA, and KfW, IREDA should be experienced in handling the compliance requirements of proposed ADB facility. IREDA has the adequate capacity to handle the accounting, finance, credit risk, and related reporting functions. The capacities of accounting staff to manage the financial management function are adequate. Staff retention and turnover rate, and the performance review process are also adequate. As a specialized lender, IREDA has concentrated risk to a narrow renewable energy sector.	IREDA receives support from MNRE's equity contribution. IREDA receives government sovereign guarantees on its borrowing from development assistance. IREDA is well supported by the Indian government. IREDA is yet to implement a business plan to expand its narrow renewable energy portfolio. An associated CDTA (to be processed) will be processed to address the various issues in financial and risk management at an entity level.
3. Project-Specific Risks (Subprojects)	M – IREDA has experience and technical know-how to lend to the renewable energy sector. IREDA has well-defined operating procedures and guidelines. The entity is well structured and should have an acceptable level of misappropriation and asset loss (current IREDA's gross nonperforming asset level is 3.9%). The integrity of project management should be acceptable.	The ADB project will continuously push for better established internal control and operating guidelines for compliance to international best practice. An associated CDTA (to be processed) will be processed to address the various issues in financial and risk management. ADB will also use the CDTA to improve IREDA's environmental and social safeguards during the project processing and implementation.
<b>Overall Inherent Risk</b>	M – Investment in a challenging renewable energy sector in India is safeguarded by strong demand (severe energy shortage), strong government support for renewable energy development, IREDA's specialized sector experience, and the ongoing support from AfD, JICA, and KfW. Subproject credit risk is concentrated and inherent and could affect the ADB portfolio performance.	
<b>Control Risk</b>		
1. Implementing Entity	M – IREDA's capacity in financial management is largely satisfactory. As a large, government-owned nonbank financial institution, IREDA has a structured and competent finance and accounts department. Proper controls are in place concerning the IREDA's financial and risk management. However, as a commercial entity, IREDA's willingness and ability to fully comply with the stringent safeguard and other requirements is uncertain.	Development assistances from AfD, JICA, and KfW, among others, account for about 70% of IREDA's recent annual funding request. Although IREDA agreed to comply with the stringent safeguard and other implementation requirements, they are an administrative burden. The associated CDTA (to be processed) could help IREDA strengthen its capacity in project implementation, operations and management, and environment and social safeguard to ensure smooth project implementation.

2. Funds Flow	M – Fund flows are transparent and simple. ADB would disburse directly to IREDA's USD imprest account in an offshore bank, which in turn conducts a swap transaction and transfer the INR funds to IREDA's local bank. The INR fund would be disbursed directly to the subprojects' dedicated escrow accounts. The swap counterpart bank would be responsible for making the USD repayments to ADB.	The imprest arrangement is straightforward. For FI loans, the advance will be set at less than 6 months' estimated cash flow required for payments to be made to sub-borrowers for eligible subprojects. Both the CDTA and ADB Indian Resident Mission Disbursement Unit will be able to support IREDA on any funds flow-related issue.
3. Staffing	M – IREDA is unlikely to place dedicated staff on the ADB project, along with many other ongoing development assistances it received from AfD, JICA, and KfW. Environmental and social safeguards are of particular concern, including the periodic review and audit of the borrowers' compliance and taking corrective measures when necessary.	IREDA agreed to recruit two designated environment and social safeguard specialists, and a compliance officer. A PPTA and the associated CDTA (to be processed) could help IREDA strengthen their capacity in environment and social safeguards to ensure smooth project implementation. Additional training could support IREDA's existing staff on project implementation and operations and management capacities.
4. Accounting Policies and Procedures	M – IREDA uses accrual accounting and follows the accounting standards of the Institute of Chartered Accountants of India. Subprojects are required to adhere to local accounting standards, report quarterly on contractual expenditures, and provide annual audited financial statements.	India is yet to adopt the IFRS. When implemented, IREDA will need to adopt the same Ind AS as the most current accounting standards. The proposed ADB CDTA could support IREDA's adoption of the new accounting standard when required.
5. Internal Audit	L – The internal audit program is adequate. Internal audit of IREDA is done by an external chartered accountant (currently K.G. Somani & Co.) appointed by the Board of Directors. Internal audit is done every quarter and reported to the board. All internal audit observations are first replied to by the concerned department and any corrective action is then noted. The document is finally submitted to the Board of Directors.	
6. External Audit	L – The Comptroller and Auditor General of Government of India appoints IREDA's external auditor (currently Gianender & Associates, New Delhi) and also conducts supplementary audits. Audits are annual and must be concluded within six months of the end of the fiscal year. The audits are done in accordance with the current Indian accounting standards.	Recent audits have not identified any material concerns.
7. Reporting	H – A comprehensive financial	The proposed ADB CDTA could support

and Monitoring	management reporting system is in place for existing project. In addition, a project-specific reporting system will be set up as per ADB's requirements. IREDA submits a number of reports to various regulatory authorities like Reserve Bank of India, Government of India, National Stock Exchange, etc. IREDA is generally compliant in meeting the regulatory requirements. Historically, the monitoring and review report system under the ADB assistance has been weak.	IREDA's improvement on facility implementation and reporting.
8. Information Systems	M to H – IREDA has a comprehensive enterprise resource planning system including financial accounts and loan management systems. The existing IT system is developed and integrated across all departments. The IT system is capable of generating any type of report required. Currently testing of the system is going on for enabling the borrowers to access the system for information relating to their loan. Despite the existence of a working IT system, IREDA could benefit from additional investment to strengthen the current IT system by developing more sophisticated enterprise financial and operating system.	The proposed ADB CDTA could support IREDA's improvement on its enterprise IT system, particularly pertaining to financial and risk management.
9. RBI regulations	L to M – IREDA must comply with all RBI prudential regulations to nonbank financial institutions. IREDA, on its own, adheres to the various prudential guidelines of the RBI including income recognition, asset classifications and provisioning, recoveries, capital adequacy requirements, and single borrower exposure norms.	At the moment, being a PSU, IREDA is exempt from certain prudential norms of RBI such as applicability of certain provisions of the RBI Act relating to maintenance of liquid assets, creation of reserve funds, and exposure limit. RBI has recently issued draft rules indicating that even PSUs would need to meet prudential norms. But these rules are yet to be notified by the RBI. IREDA's compliance with the local financial norms is not perceived as an issue. However, the proposed ADB CDTA could help monitor and support IREDA's compliance with the current and new RBI norms.
<b>Overall Control Risk</b>	M – IREDA is continuously improving its capacity to undertake development assistance programs. As a large financial institution, IREDA is capable of developing sound financial and risk management tools and complying with regulatory supervision, and management information systems.	

ADB = Asian Development Bank, AfD = Agence Française de Développement, CDTA = capacity development technical assistance, H = High, IFRS = international financial reporting standards, Ind AS = India Accounting

Standards, INR = India Rupee, IREDA = Indian Renewable Energy Development Agency, IT = information technology, JICA = Japan International Cooperation Agency, KfW = German development cooperation through KfW, M = Moderate, L = Low, PPTA = project preparatory technical assistance, PSU = Public Sector Undertaking, RBI = Reserve Bank of India, US = United States, USD = United States Dollar.

## 2. Country-level issues

8. **Country policy and institution assessment.** World Bank publishes a country policy and institutional assessment (CPIA) for all its developing member countries. The CPIA attempts to quantify the quality of a country's policies and institutions. Using the CPIA, India ranks higher than other developing member countries in South Asia and higher than the average World Bank developing member country (Table 2). India's institutions achieve these rankings despite higher perceptions of corruption than international and regional averages (Table 3).

**Table 2: Country Policy and Institution Assessment, 2011**

	2011
World	3.11
South Asia	3.35
India	3.60

Note: 1 is the minimum and 6 the maximum score.

Source: World Bank Group, CPIA database. <http://www.worldbank.org/ida>

**Table 3: Corruption Perceptions Index, 2012**

	Corruption Perception Index Score 2012
World	43.3
South Asia <sup>a</sup>	38.4
India	36.0

<sup>a</sup> No score is available for the Maldives.

Note: 0 is "highly corrupt" and 100 "very clean".

Source: Transparency International. <http://www.transparency.org/cpi2012/results>

9. **Accounting standards.** The current accounting standards are formulated by the Institute of Chartered Accountants of India (ICAI) through its accounting standards board. The accounting standards are considered by the National Advisory Committee on Accounting Standards (NACAS) of the Ministry of Corporate Affairs (MCA) constituted under the Indian Companies Act (1956). Thereafter, NACAS recommends the proposed accounting standards to the central government. If approved, the government publishes them on the official gazette. As per Indian Companies Act (1956), all companies need to comply with the India accounting standards.

10. In a move towards convergence with international finance reporting standards (IFRSs), in 2007 ICAI commenced the process of developing a complete set of accounting standards that are converged with IFRSs – known as Indian Accounting Standards (Ind AS).<sup>1</sup> According to IMF financial sector assessment program,<sup>2</sup> the accounting profession in India is well established. RBI is also in the process of preparing prudential guidelines for alignment of Indian accounting standards with international accounting standards by 2013. Convergence with IFRS is even more important, given that a number of Indian banks are expanding globally. More awareness

<sup>1</sup> The Ind AS are named and numbered in the same way as the corresponding IFRS. NACAS recommends these standards to Ministry of Corporate Affairs. Ministry of Corporate Affairs notified 35 Indian Accounting Standards (Ind AS). But it has not notified the date of implementation of these new accounting standards. Neither have they been notified under the Companies Act.

<sup>2</sup> IMF. 2013. *Financial Sector Assessment Program India*. Washington D.C. Available: <http://www.imf.org/external/pubs/ft/scr/2013/cr13267.pdf>

should be created about IFRS among auditors and all others who are involved in the process, as well as to ensure that they are able to put in place systems and procedures to comply with IFRS (footnote 2).

11. **Financial institution regulations.** India's financial sector is diversified, highly interconnected, and expanding rapidly. Public banks dominate the banking sector, and the government plays an active role in banks' asset allocation. According to the same 2013 IMF financial sector assessment program, India has a tightly controlled regulatory and supervisory regime, consisting of higher than minimum capital requirements, frequent, hands-on and comprehensive onsite inspections, a conservative liquidity risk policy and restrictions on banks' capacity to take on more volatile exposures. The Indian banking system remained largely stable during previous global financial crises.<sup>3</sup> Similarly, Indian banks are increasing their risk-management sophistication and RBI has announced its timetable for the move toward the implementation of the Basel II advanced approaches (footnote 2). RBI has set prudent and appropriate minimum capital adequacy requirements and has defined components of capital in accordance with internationally agreed guidelines. However, many challenges remain for migration to the Basel II advanced approaches (footnote 2).

### 3. IREDA Institution and System

12. IREDA is a public sector, nonbank financial institution, specialized in providing financing to renewable energy projects in India. IREDA is able to provide longer-term tenors than commercial banks in similar transactions. Its financing terms are market-based. Due to its deep sector expertise, it is well positioned to support renewable energy development in India.

13. More specifically, IREDA provides loans to its customers for a period ranging from 12 to 14 years including construction period and moratorium. Current interest rates range between 11.50% and 13.75% per annum, depending on the sector and an internal rating system (grade I to grade IV) of the borrower (see table 4). The interest rates are periodically revised (at least once a year) to reflect any changes in borrowing costs of IREDA. IREDA targets a gross margin of about 2.5% over its incremental weighted average cost of capital (WACC). As a public enterprise, IREDA is exempt from some RBI's prudential norms. However, IREDA adopts certain RBI norms, such as single borrower limit of 20% of net worth and group borrower limit at 35%.

14. IREDA has a sound and comprehensive corporate structure. The company consists of technical services, finance and accounts, legal, human resources (HR), company secretarial and corporate services, and vigilance departments. IREDA is guided by a number of regulations, including the memorandum of understanding with the MNRE, guidelines on corporate governance of the "central public sector undertakings," delegation of powers, fair practices code, know-your-customer policy, financing norms and schemes, operational guidelines, operational handbook of foreign exchange and derivatives risk management policy, various HR policies, and prudential norms relating to nonperforming assets.

**Table 4: Current IREDA Financing Norm**

Type of Borrowers	Grade I	Grade II	Grade III	Grade IV
Schedule A, 'AAA' Rated PSUs	11.50%	11.50%	11.50%	11.50%
State Sector Borrowers	11.50%	11.50%	11.75%	11.90%

<sup>3</sup> Although being a macroeconomic issue, during the third quarter of 2013, US government's exit from bond buying has led to the outflow of funds from the emerging markets. India rupee has suffered substantial devaluation.

Wind Energy	11.90%	12.00%	12.25%	12.50%
Solar PV, Co-generation and Hydropower	12.00%	12.15%	12.40%	12.65%
Energy Efficiency, Solar Thermal, etc.	12.50%	12.75%	13.00%	13.25%
Sectors other than above	13.50%	13.50%	13.50%	13.50%
Manufacturing (All Sectors) Brownfield	13.50%	13.50%	13.50%	13.50%
Manufacturing (All Sectors) Greenfield	13.75%	13.75%	13.75%	13.75%

PSU = Public Sector Undertaking, PV = Photovoltaic.

Source: IREDA. <http://www.ireda.gov.in/forms/contentpage.aspx?lid=740>

### (i) Experience in development assistance

15. IREDA has extensive experience in managing and implementing donor-funded development assistance to promote renewable energy projects in India. The table 5 below provides a list of past and ongoing lendings from various development partners. Due to the strict compliance requirements from the development finance institutions, IREDA has an acceptable financial management capacity needed to satisfactorily implement the ADB project.

**Table 5: Status of the IREDA Development Assistance – Foreign Currency Loans**  
As of 31 March 2013

Lender	Approval	Tenor	Maturing	Currency	Principal in Respective Currencies	USD Balance as of March 2013
ADB	1997	25	2022	USD	100,000,000	20,292,065
NIB	2009	10	2019	USD	50,000,000	30,277,460
KfW1	1999	40	2039	Euro	61,350,000	32,293,357
KfW2	2008	12	2020	Euro	50,000,000	42,422,297
KfW3	2009	40	2049	Euro	19,970,000	20,908,380
KfW4	2011	11	2022	Euro	200,000,000	25,584,421
IBRD	2000	20	2020	USD	54,000,000	22,192,903
AfD	2010	20	2030	Euro	93,000,000	81,430,780
JICA	2011	30	2041	JPY	252,000,000	270,459,757
IDA	2000	35	2035	USD	50,000,000	38,427,654

ADB = Asian Development Bank, AfD = Agence Française de Développement, IBRD = International Bank for Reconstruction and Development, IDA = International Development Association, JICA = Japan International Cooperation Agency, KfW = German development cooperation through KfW, NIB = Nordic Investment Bank, SIDBI = Small Industries Development Bank of India.

Source: Indian Renewable Energy Development Agency.

### (ii) Corporate governance

16. IREDA has a corporate governance policy, guided by the corporate governance guidelines issued by Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises (MHPE). IREDA's Board of Directors should comprise a minimum of 3 Directors and a maximum of 12 directors. Currently IREDA's board consists of six directors, including two from the government and one independent director. Three corporate committees report to the IREDA Board of Directors: (i) internal audit, (ii) audit committee board, and (ii) committee of directors (which was delegated powers to approve all loan proposals from Rs100 million to Rs700 million, up to a maximum of Rs1400 million in a financial year).

17. IREDA produces a corporate governance report, published in its annual reports detailing (i) code of conduct, (ii) board composition and activities, (iii) audit, (iv) board committees, (v)



remuneration, (vi) compliances to applicable laws, (vii) disclosure policy, and (viii) whistleblower policy. The report provides a level of confidence that the corporate governance system in IREDA is functioning. The company secretaries also issues a corporate governance compliance certificate that IREDA complies with the government corporate governance guidelines. However, IREDA's corporate governance is probably not exceptional, as it does not voluntarily comply with the international best practice such as Sarbanes–Oxley Act of 2002 for US-listed companies, for example.

### **(iii) Accounting and auditing**

18. The basis of IREDA's accounting is accrual. The current India accounting standards have 28 standards, of which 16 are applicable to IREDA. New Ind AS standard is yet not mandatory to comply. IREDA has implemented an extensive enterprise resource planning (ERP) system based on Microsoft Axapta, which includes financial accounting system, loan management system, payroll system and credit information bureau (India) limited (CIBIL) reporting system.

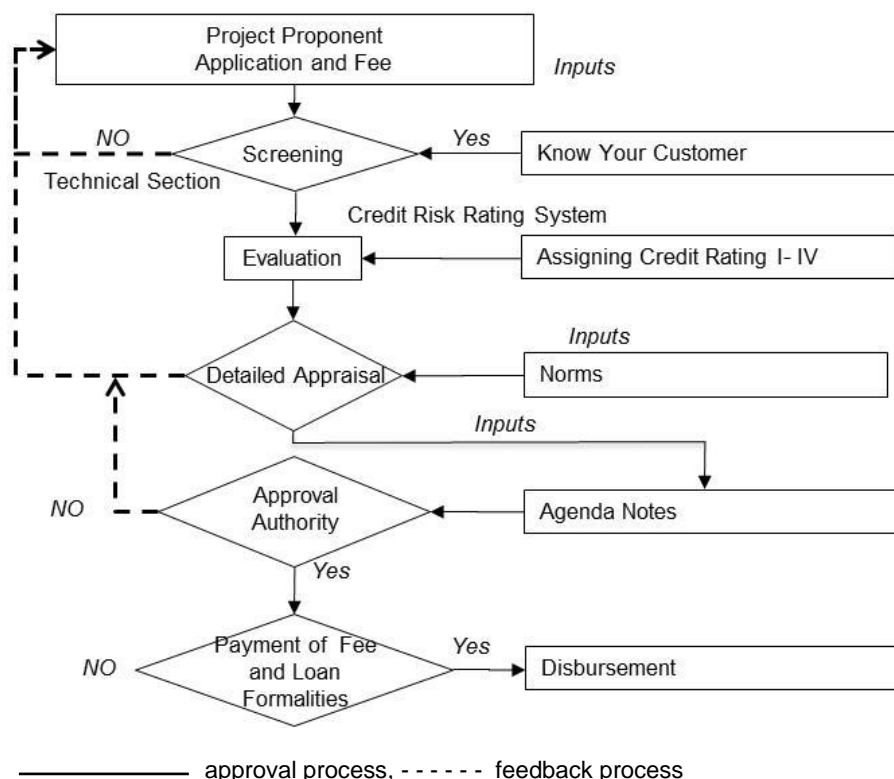
19. Internal audit of IREDA is carried out by an external accounting firm (currently K.G. Somani & Co.) appointed by the IREDA Board of Directors. Internal audit is carried out every quarter and reported to the board. The internal audit report for the period ending 31 December 2012 was reviewed and all points have been addressed by the management of IREDA.

20. External audit of IREDA is carried out by an accounting firm (currently Gianender & Associates), appointed by Comptroller and Auditor General of India (CAG) as a statutory auditor. After the audited accounts are approved by the IREDA Board of Director, it is sent to CAG. If CAG gives any comment, IREDA needs to give its reply and/or address the issue. IREDA does not however issue management letter to the statutory auditor. In the past few years, no significant adverse audit opinion has been given by the statutory auditor.

### **(iv) Credit review**

21. The entire loan approval and disbursement process is managed by the technical services (TS) department except for the purpose of internal rating of the project and financial concurrence, the proposal is sent to the finance and accounts (F&A) department. IREDA has incorporated stringent know-your-customer (KYC) norms before taking up proposals for appraisal. IREDA also does a credit check of the project sponsors (borrowers) with credit information bureau (India) limited (CIBIL).

22. The potential borrower first files an application with IREDA and pays the application fees. TS department does the initial screening. The application is then sent to the credit risk rating information system (CRRS) division of F&A department for credit rating. The CRRS division evaluates the proposal and then assigns any of the four categories of ratings (Grade I, II, III, and IV) for the project. The proposal rated Category I is of the highest credit quality and therefore charged with the lowest interest while the proposal rated Category IV is of the lowest credit quality and therefore charged with the highest interest. If the application is below investment grade, the application is rejected. The application is then sent back to TS department for detailed appraisal.

**Figure 1: IREDA Credit Approval and Disbursement Process**

23. After TS conducts detailed appraisal, it is sent to the credit (screening) committee, which consists of heads of all relevant departments (finance, legal, technical, and technical group heads in each sector such as solar or hydropower) for final approval before submission to approving authority. All loan proposals above Rs700 million or whichever deviates from the norms are required to be approved by the IREDA Board of Directors. The cumulative limits for a financial year within each of the above delegated powers are given in the delegation of powers (DOP). The summary of delegation of authority for loan approval (only in case of fully compliant proposal) is provided in Table 5 below.

**Table 6: Delegation of Powers**

Approval Authority	Approval amount per proposal
Director (F&A) and Director (TS)	INR20,000,000
Chairman & Managing Director	INR100,000,000
Committee of Directors	INR100,000,000 to INR700,000,000
Board of Directors	INR700,000,000

F&A = finance and accounts, INR = Indian Rupee, TS = technical services.

24. The lending terms including pricing are determined by, among others, IREDA's financing norms and internal credit rating system, which provide a band of interest rate (table 4). After loan approval, TS department issues the approval letter to the applicant. On payment of upfront fees and on completion of various other requirements, loan agreement is signed. On completion of security requirements and requirement of funds, first loan installment is released. For disbursement, disbursement note is initiated by TS, approved by legal department and then chairman/managing director, before going to F&A department for payment.

## (v) Risk management

25. **Credit risk.** Any financial institution faces credit risk from the borrowers. Renewable energy sector is particularly risky in comparison to the conventional consumer or business lending due to the nature of the sector. Solar and wind projects depend on past historical resource available and might not be reliable. Comparing to conventional power generation, renewable power projects often require government subsidies to achieve commercial viability. To reduce its credit risk, IREDA could leverage the available partial risk guarantee fund (PRGF) and venture capital fund (VCF) under the government initiatives. In terms of loan recovery and treatment of impaired loans, IREDA relied on debt rescheduling, one-time settlements, action under the SARFAESI Act, 2002, and recovery proceedings through the Debts Recovery Tribunals. Finally, IREDA gives a rebate for prompt payment of principal and interest on or before due date. These efforts improved IREDA's asset quality.<sup>4</sup>

26. **Market risk.** IREDA is the only specialized nonbank financial institution solely devoted to the financing of renewable energy projects. The IREDA portfolio is undiversified and imposes a high risk in a concentrated market, which is characterized with heavy reliance on policy support and financial subsidies. Change in global financial market and policy changes could easily lead to deterioration in public finance and a cut back on environmental subsidies. IREDA has clearly identified such a risk in its latest corporate plan. IREDA intends to venture into transmission and evacuation infrastructure projects, working capital loans to solar panel and wind turbine manufacturers, gas-based tri-generation projects, and renovation and modernization of thermal and hydropower stations. These are positive steps to reduce the market risk.

27. **Financing risk.** IREDA has been able to mobilize adequate financing resources to fund its operations through equity (government contribution or its own equity raising), internal accruals, domestic borrowing (commercial bank loans and local currency bond issuance) and external borrowings (commercial borrowing and development assistance). The long-term capital IREDA obtained from development assistance account for about 70% of recent annual funding request and is above the usual 12-15 years tenor required for renewable energy projects. IREDA's financing risk is adequate. There is no asset and liability mismatch.

28. In terms of converting the foreign currency borrowings from development assistance to Indian rupee, IREDA signed an international swap and derivatives association (ISDA) master agreement with a number of banks. The swap (usually for about 5 years, as beyond 5 years the cost of swap increases substantially) is for both interest rate and foreign currency swap. IREDA also appoints a foreign exchange consultant on an annual basis to advise it on various matters relating to foreign exchange matters, including swap transactions. Foreign currency loans are usually significantly longer than the 12-15 years required for most renewable energy projects. When the swap transaction expires, the foreign currency loan is usually still outstanding. In such a case, IREDA would enter into a fresh swap transaction.<sup>5</sup> The repricing risk can be passed through to subborrower during the interest reset. More specifically, for long-term lending, IREDA

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<sup>4</sup> The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI) empowers financial institutions to recover their non-performing assets without the intervention of the court.

<sup>5</sup> IREDA's intention to borrow foreign currency loans is as follows: (i) the cost of rupee loans from local banks is more costly while borrowing foreign currency loans and converting them to local currency is more cost-effective; (ii) the tenor of IREDA's local currency borrowings is about 10 years and not sufficient to cushion implementation and other delays; (iii) bond issuance (taxable interest bearing bonds) and foreign currency loans cost almost the same at about 8.5% per annum (in case of FX borrowings, this cost includes Swap costs and all other costs) but bond repayment structure with a bullet payment causes mismatch to IREDA's capital structure.

has a policy of interest rate reset on outstanding borrowing every two years. Interest rate on all its advances are revised based on the then prevailing interest rate fixed by IREDA. In case the borrower does not agree on the revision, it can repay the entire balance of the outstanding loan.

#### **(vi) Liquidity management**

29. As a nonbank financial institution, IREDA does not have the kind of short-term liquidity requirement as commercial banks. IREDA, based on its budget and resource requirement for the year, reviews cash flow requirement on a monthly basis. As IREDA does not raise short term borrowings, except for new disbursements, all its cash flows are relatively certain (payment of interest and principal of its advances (inflow) and IREDA's debt servicing of its own borrowings (outflow). Consequently, on a monthly basis IREDA invests any short term surplus as deposits in various banks. The liquidity management forms a part of the wider asset and liability management strategy. In IREDA, relevant practices are adequate.

#### **(vii) Disclosure and reporting**

30. IREDA does not have a public policy disclosure similar to that of ADB. Being a wholly government-owned enterprise, IREDA does not have public disclosure requirement as for listed companies. IREDA has a public information officer, held by Assistant General Manager (Legal). IREDA's disclosure requirements are guided by the (i) Companies Act, 1956, such as the publication of annual reports; (ii) Securities and Exchange Board of India/ Stock exchanges, such as the publication of half-year results (unaudited) when IREDA's bonds are listed in the National Stock Exchange of India; (iii) Reserve Bank of India, such as the financial disclosure for nonbank financial institutions and sharing of borrowing activities with CIBIL; and (iv) Right to Information Act, such as any information that may be requested by the general public. In addition, in the current Indian accounting standards, IREDA is also required to disclose its accounting policies. IREDA also needs to disclose those required under the Indian accounting standards on its accounting policy and those required under the corporate governance guidelines. In summary, IREDA discloses its operations through the publication of its annual reports. IREDA's corporate website is fairly comprehensive, including most information required by the public. It does not appear to be a problem if ADB requires IREDA to disclose project information.

#### **(viii) Fund flow mechanism**

31. The mission notes that IREDA's has solid and extensive foreign currency risk management experience. The mission discussed the envisaged funds flow arrangement with IREDA as follows: An imprest account in USD will be established at IREDA's offshore bank—Canara Bank (London).<sup>6</sup> A sub-imprest account in INR will be established at IREDA's commercial bank in India (e.g., Vijaya Bank).<sup>7</sup> The imprest ceiling will be set at six months estimated cash flow. IREDA has the option to choose a lesser amount. ADB's first tranche advance will be transferred from ADB to Canara Bank (London)'s ADB USD imprest account. IREDA has signed an International Swaps and Derivatives Association (ISDA) agreement with a number of banks to carry out currency swap transactions.<sup>8</sup> IREDA will select the lowest bid from

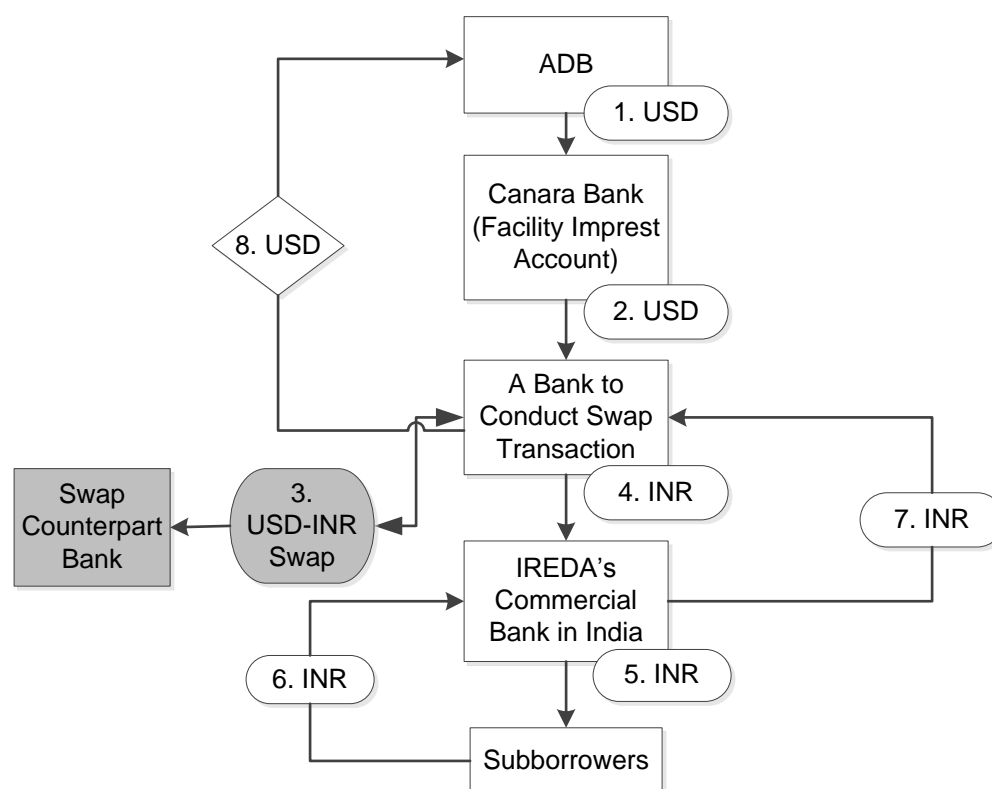
<sup>6</sup> The purpose of using an off-shore bank is because of the Reserve Bank of India's requirement of converting all incoming foreign currencies into Indian rupee when funds flow into an Indian local bank.

<sup>7</sup> IREDA's commercial banking partners include: Vijaya Bank, Union Bank of India, State Bank of Hyderabad, Bank of Baroda, Canara Bank, and State Bank of India.

<sup>8</sup> The swap transaction counterpart banks include: ICICI Bank, Axis Bank, Yes Bank, IndusInd Bank, State Bank of India, Bank of Baroda, Union Bank of India, Standard Chartered Bank, Deutsche Bank, and BNP Paribas.

the swap counterpart banks. Upon signing the USD-INR swap agreement, the initial advance (e.g. an estimated six months' cash flow) will be transferred from Canara Bank's ADB USD imprest account to the designated account at the selected swap counterpart bank (e.g., ICICI Bank), which conducts the swap transaction. ICICI Bank will then transfer the Indian rupee equivalent under the swap transaction to Vijaya Bank. IREDA (through Vijaya Bank) will be responsible for making the Indian rupee interest and principal repayment to ICICI Bank, while ICICI Bank will be responsible for making the US dollar loan interest and principal repayment directly to ADB (in US dollars). IREDA pays a swap transaction (hedging) cost to ICICI Bank in Indian rupees.<sup>9</sup> This margin will be added to IREDA's total funding cost.

**Figure 2: Flow of Funds**



ADB = Asian Development Bank, INR = Indian Rupee, IREDA = India Renewable Energy Development Agency, USD = United States dollar.

### (ix) Information technology system

32. For a large nonbank financial institution, IREDA relies critically on the information technology (IT) system for its continued operation. In the past decade, IREDA has significantly improved its IT system functionality, security, and stability. Technical, financial, human resources, and legal departments have been fully computerized. During the period from 2007/2008–2011/2012, IREDA implemented a comprehensive enterprise resource planning (ERP) software, which was designed to assist project management, interest rate calculation, financial adjustments, and control of nonperforming assets. The system is tightly integrated with the Microsoft Axapta system, which is a business solution for global enterprises that supports

<sup>9</sup> Currently at about 8% of total transaction cost per annum.

industry-specific and operational business processes, along with comprehensive, core ERP functionality for financial and human resources management. The ERP system incorporates IREDA's loan management system, finance and accounting system, payroll system, CIBIL, project information and documentation monitoring system, and a human resources system (including online job applications). The ERP system has the necessary security features to ensure proper protection of data.

**(x) Human resource policy and guidelines**

33. In terms of human resource (HR) policy, IREDA has a structured guideline on recruitment, remuneration, promotion, performance review, training and staff development. However, the vacancy in the executive rank is a continuous concern (see table 7 below). The executive level staff is defined in technical, financial, HR, vigilance, law, and corporate affairs. They are the core technical rank of the corporation. Furthermore, being an Indian public enterprise, IREDA needs to comply with government wage policy (e.g., industrial dearness allowance pattern of pay scale), which is generally considered less competitive than those of private sector businesses. However, public sector employees also enjoy the benefits of better job security. In summary, there is a small risk in the recruitment and retention of highly qualified staff.

**Table 7: IREDA Headcount**

Cadre	Sanctioned	Staff in position	Recruitment in progress	Vacant
Directors	3	3	0	0
Executives	116	84	2	30
Non-Unionized Supervisors	14	14	0	0
Non Executives	37	21	0	16
Management Trainees / Executive Trainees	12	6	4	2
<b>TOTAL</b>	<b>182</b>	<b>128</b>	<b>6</b>	<b>48</b>

Source: Indian Renewable Energy Development Agency Finance and Accounts Department.

**D. Agreed Action Plan and Conditions**

34. IREDA's financial management capacity is generally satisfactory. ADB proposes to further enhance IREDA's financial management by going beyond the Indian national best practices (including RBI, MCA, MHIPE, and MNRE norms) and move toward the international best practices, particularly in light of its significant borrowing from development assistance in foreign currencies other than Indian rupee. The financial management action plan is as follows:

**Table 8: Financial Management Action Plan**

Agreed Action	Responsible Party	Agreed Completion Date
Strengthen IREDA financial management practice by updating its credit risk rating system.	IREDA	Within six months of loan effectiveness.
Introduce liquidity gap reporting and interest rate risk gap reporting, separate credit and treasury functions, and obtain major credit rating agencies' rating such as CRISIL, ICRA, etc.	ADB and IREDA	Prior to facility closure.
Compliance with the new Indian accounting standards when notified for adoption.	IREDA	When the new Indian accounting standards are notified by Ministry of Corporate Affairs.

Enhance its existing corporate-wide information technology system to upgrade the credit review and recovery system.	IREDA	Ongoing process to be accomplished by December 2017.
Develop an institution risk and market risk monitoring and review system.	ADB and IREDA	Ongoing process to be accomplished by December 2017.

ADB = Asian Development Bank, CRISIL = Credit Rating Information Services of India Limited, ICRA = Indian Credit Rating Agency, IREDA = Indian Renewable Energy Development Agency,

## **E. Financial Covenants**

35. ADB and IREDA have agreed to the following financial covenants. IREDA will:

- (i) The Borrower shall, at all times, comply with the prudential regulations which the Guarantor has made applicable to Borrower including capital adequacy, income recognition, classification, and provisioning of nonperforming assets.
- (ii) The Borrower shall (a) maintain positive profitability and (b) comply with the relevant Reserve Bank of India capital adequacy ratios for nonbank financial institutions.
- (iii) Within 180 days of the Effective Date, the Borrower shall adopt a quarterly loan provision reporting mechanism in order to improve its financial management and reporting system.

## **F. Monitoring Plan**

36. The monitoring criteria of the facility include (i) details of the subloans that receive the ADB financing, including their eligibility, technical, credit, risk assessments, and share of ADB financing; (ii) facility performance evaluation by using the targets, indicators, assumptions, and risks in the DMF, including how subborrowers are involved in the facility monitoring; (iii) compliance monitoring by verifying with which facility's regulatory, technical, environmental, social, financial, and other covenants are complied; (iv) safeguards monitoring by verifying with which the activities identified in the ESMS are complied; and (v) procurement procedures undertaken by borrowers and subborrowers that are complied with Section VI.

37. The above mentioned monitoring are carried out at three distinct levels:

- (i) IREDA,
- (ii) IREDA's Board of Directors, and
- (iii) ADB.

38. IREDA will prepare monitoring and review (progress) reports to ADB on a regular basis (see Section D). ADB has the discretion to conduct its own independent assessments to verify the results of the monitoring reports submitted by IREDA. A tripartite review meeting will be held among the Government of India, ADB and IREDA at least twice during each tranche disbursement. The timing of the completion of the monitoring reports will be the 10<sup>th</sup> day of the month following the completion of the operation of the previous six months.

### Financial Management Assessment Questionnaire

Topic	Response	Remarks
<b>1. Implementing Agency</b>		
1.1 What is the entity's legal status / registration?	Registered under the section "4A" of the Companies Act, 1956.	IREDA was incorporated on 11 March 1987 as a 100% Government of India owned public enterprise under the administrative control of the Ministry of New and Renewable Energy (MNRE). IREDA is also a public financial institution under the section "4A" of the Companies Act, 1956 and a registered non-banking financial company (NFBC) with Reserve Bank of India (RBI).
1.2 Has the entity implemented an externally-financed project in the past (if so, please provide details)?	IREDA has availed loans from various international agencies such as ADB, World Bank, NIB, AFD, KfW, JICA, etc and has financed Renewable Energy and Energy Efficiency projects under the same.	IREDA is very familiar with the process requirements of multilateral agencies for granting and management of loans.
1.3 What are the statutory reporting requirements for the entity?	Statutory compliance reports are being submitted to various authorities within the required time frame IREDA submits compliance reports to Government of India, RBI, Securities and Exchange Board of India, Registrar of Companies, Income Tax department, etc. for various purposes. A list of compliance reports being submitted is available separately.	Relevant compliance reports have been submitted to Reserve Bank of India, Ministry of New and Renewable Energy, and Securities and Exchange Board of India.



Topic	Response	Remarks
1.4 Is the governing body for the project independent?	IREDA's shareholder is Ministry of New and Renewable Energy (MNRE) of the Government of India, and regulated by the Reserve Bank of India (RBI). Government of India has issued various guidelines for the public sector companies. Within these guidelines IREDA is free to act independently on an operational level. Policy guidelines are set by MNRE.	At the moment, being a PSU, IREDA is exempt from certain prudential norms of RBI such as applicability of certain provisions of the RBI Act relating to maintenance of liquid assets, creation of reserve funds, and exposure limit. However, IREDA, on its own, adheres to the various prudential guidelines of the RBI including income recognition, asset classifications and provisioning, recoveries, capital adequacy requirements, and single borrower exposure norms. RBI has recently issued draft rules indicating that even PSUs would need to meet prudential norms. But these rules are yet to be notified by the RBI.
1.5 Is the organizational structure appropriate for the needs of the project?	Yes. IREDA's organization structure is comprehensive and appropriate for the needs of the project. The corporate governance structure and management structure from the IREDA Board of Directors to line managers are adequate to execute the control functions. Past development assistance programs have been implemented successfully.	IREDA is a large and comprehensive public sector nonbanking financial institution with extensive experience in the new and renewable energy area.
<b>2. Funds Flow Arrangements</b>		
2.1 Describe (proposed) project funds flow arrangements and explanation of the flow of funds from ADB, government and other financiers.	Total project cost is \$1 billion: \$500 million from ADB, \$200 million from IREDA's capital, and \$300 million from borrowers' equity. ADB fund (in tranches) will go directly to IREDA and then be onlent to subborrowers.	The ADB fund will not go through Ministry of Finance or the Reserve Bank of India.
2.2 Are the (proposed) arrangements to transfer the proceeds of the loan (from the government /Finance Ministry) to the entity satisfactory?	The ADB loan will go directly to IREDA (see remarks of 2.1 above)	

Topic	Response	Remarks
2.3 What have been the major problems in the past in receipt of funds by the entity?	None. IREDA has been borrowing from development financial institutions for the past decades and has managed the implementation of these projects well.	
2.4 In which bank will the Imprest Account be opened?	Canara Bank, London or any other bank outside of India.	All foreign currency borrowings of IREDA are approved by the Reserve Bank of India (RBI). IREDA has opened accounts with banks outside India (with the approval of RBI) for receipt of foreign currency funds until these funds are swapped into Indian rupees. In case the funds are deposited into an account in India, the foreign currency fund would be converted into Indian rupees first and then IREDA would not be able to enter into foreign currency swap transactions to protect its foreign exchange risk.
2.5 Does the (proposed) project implementing unit (PIU) have experience in the management of disbursements from ADB?	IREDA has such a capacity. ADB provided a loan to IREDA in 1996, where IREDA financed 318 megawatts (MW) of cogeneration and wind generation capacity against a target of 125 MW. The project was rated successful, efficacious in achieving the project objectives, and leveraged additional investments up to 2.13 times.	IREDA has extensive experience in implementing development assistance project, including those from ADB, World Bank, International Development Association, Agence Française de Développement, Nordic Investment Bank, German development cooperation through KfW, and Japan International Cooperation Agency
2.7 Does the entity have/need a capacity to manage foreign exchange risks?	Yes, IREDA has managed foreign currency and interest rate swaps, and is experienced in hedging foreign exchange risk.	IREDA has signed a Master International Swaps and Derivatives Association (ISDA) agreement with certain banks to enable foreign exchange swaps. By signing a specific currency and interest rate swap (CIRS) agreements with selected counterpart banks, IREDA is able to drawdown on foreign currency loans.

Topic	Response	Remarks
2.8 How are the counterpart funds accessed?	IREDA generates equity and excess funds from government (MNRE) contribution and internal accruals. At a subproject level, IREDA will contribute its own share of debt in accordance with the project facility (and/or project) administration agreement.	ADB will ensure that on a subproject level, IREDA contributes its own share in accordance with sound banking practices through project audit and ADB review missions.
2.9 How are payments made from the counterpart funds?	IREDA will contribute its own share of subproject debt financing.	
2.10 If part of the project is implemented by communities or NGOs, does the PIU have the necessary reporting and monitoring features built into its systems to track the use of project proceeds by such agencies?	Not applicable as IREDA only lends to commercial projects in renewable energy.	
2.11 Are the beneficiaries required to contribute to project costs? If beneficiaries have an option to contribute in kind (in the form of labor), are proper guidelines formulated to record and value the labor contribution?	Under a typical financing transaction, the subborrowers (entrepreneurs) have to contribute at least 30% of the total project cost in equity.	This is in line with a sound credit practice.
<b>3. Staffing</b>		
3.1 What is the (proposed) organizational structure of the accounting department? Attach an organization chart.	The proposed finance & accounts department is adequate to handle complex lending and financial markets activities.	See appendix 2.
3.2 Identify the (proposed) accounts staff, including job title, responsibilities, educational background and professional experience. Attach job descriptions and CVs of key accounting staff.	See appendix 2.	The finance and accounts department is headed by Director (Finance) and has one Deputy General Manager and one Assistant General Manager heading independent functions. The Deputy General Manager heads the team handling loans and advances and also financing resources.

Topic	Response	Remarks
3.3 Is the project finance and accounting function staffed adequately?	The project finance team in IREDA is the technical services department. Accounting function is done by the Finance & Accounts Department. While both the departments are reasonably well staffed, there are still some vacancies which are in the process of being filled.	
3.4 Is the finance and accounts staff adequately qualified and experienced?	The finance and accounting staff qualification and experience is adequate.	
3.5 Is the project accounts and finance staff trained in ADB procedures?	Limited. IREDA is on the list of ADB training program for project implementation, and there is one IREDA finance staff recently being trained by the ADB workshop.	The first ADB loan to IREDA in 1996 was too early to provide any useful institutional capacity on ADB procedures. However, the extensive development assistance to IREDA provides it substantial capacity in implementing donor-funded projects.
3.6 What is the duration of the contract with the finance and accounts staff?	The finance and accounting staff is permanently in place and this provides sustainability and continuity on ADB project implementation.	
3.7 Indicate key positions not contracted yet, and the estimated date of appointment.	Not applicable.	
3.10 Does the project have written position descriptions that clearly define duties, responsibilities, lines of supervision, and limits of authority for all of the officers, managers, and staff?	To a certain degree, the ADB project implementation guideline (facility and/or project administration manuals), or FAM and/or PAM, provides detailed description on the roles of relevant positions.	
3.11 At what frequency are personnel transferred?	Not too frequent.	
3.12 What is training policy for the finance and accounting staff?	There is a training policy on finance and accounting staff, including the attendance to ADB training programs.	

Topic	Response	Remarks
<b>4. Accounting Policies and Procedures</b>		
4.1 Does the entity have an accounting system that allows for the proper recording of project financial transactions, including the allocation of expenditures in accordance with the respective components, disbursement categories, and sources of funds? Will the project use the entity accounting system?	IREDA has a comprehensive enterprise resource planning system based on Microsoft Axapta, including financial accounting system, loans management system, and payroll system.	
4.2 Are controls in place concerning the preparation and approval of transactions, ensuring that all transactions are correctly made and adequately explained?	Yes, proper controls are in place concerning IREDA's enterprise risk management system and internal control.	Credit approval process is discussed in the main text. Other key control measures include disbursement of loans: for every disbursement, the TS department initiates the note, legal department and then the accounts department approves the disbursement and then the note goes to chairman and managing director for approval. Only then the accounts department releases the disbursement. Within each department, multiple levels of scrutiny takes place, from the executive dealing with the accounts to the heads of the department.
4.3 Is the chart of accounts adequate to properly account for and report on project activities and disbursement categories?	IREDA has a well integrated loan management system and financial accounting system. Loan applications, sanctions, disbursements, repayments are all tracked and are available on the intranet for officials at various levels. Financial accounting system has various cost and asset heads for accounting purposes. As the system is well integrated, reports can be generated as per the requirement of any manager.	
4.4 Are cost allocations to the various funding sources made accurately and in accordance with established agreements?	Yes	
4.5 Are the General Ledger and subsidiary ledgers reconciled and in balance?	Yes	

<b>Topic</b>	<b>Response</b>	<b>Remarks</b>
4.6 Are all accounting and supporting documents retained on a permanent basis in a defined system that allows authorized users easy access?	Yes, all accounting and supporting documents are aggregated sequentially and bound and stored by financial years in a designated storage area of the F&A department to enable any access for reference and verification. While the Companies Act, 1956, prescribes that the books of account (together with vouchers) shall be preserved for at least 8 years prior to the current year, IREDA has stored these documents for all the years since inception.	For all payments, paid stamp is put on the base document. Bank reconciliation is done every month and it is signed off by the manager or assistant general manager. Most of the payments are now received by Real Time Gross Settlement (RTGS) (an electronic funds transfer mechanism) and whenever check payments are received, they are immediately deposited in the banks. IREDA's offices in other locations do not carry out any financial transactions. All original back up documents for all vouchers are stored from the time the company was formed.
<b>Segregation of Duties</b>		
4.7 Are the following functional responsibilities performed by different units or persons: (i) authorization to execute a transaction; (ii) recording of the transaction; and (iii) custody of assets involved in the transaction?	Yes.	
4.8 Are the functions of ordering, receiving, accounting for, and paying for goods and services appropriately segregated?	Yes.	
4.9 Are bank reconciliations prepared by someone other than those who make or approve payments?	Yes.	
<b>Budgeting System</b>		
4.10 Do budgets include physical and financial targets?	Being a financial institution, only financial targets.	
4.11 Are budgets prepared for all significant activities in sufficient detail to provide a meaningful tool with which to monitor subsequent performance?	Yes.	
4.12 Are actual expenditures compared to the budget with reasonable frequency, and explanations required for significant variations from the budget?	Yes, budget vs. actual expenditure comparison is submitted to the Board with reasonable frequency.	

Topic	Response	Remarks
4.13 Are approvals for variations from the budget required in advance or after the fact?	Mostly approvals for variation from the budget are taken in advance but on rare occasion, it is taken post facto.	
4.14 Who is responsible for preparation and approval of budgets?	IREDA's F&A department prepares the financial budget once in a year (usually in September) for the following financial year commencing April (along with the revised estimates for the current financial year) following an assessment of funds requirement for various activities. The budget estimates along with the revised budget estimates for the current financial year is sent to MNRE after the same is approved by the IREDA Board	
4.15 Are procedures in place to plan project activities, collect information from the units in charge of the different components, and prepare the budgets?	The business projections forming part of the budget for the year is primarily based on the Memorandum of Understanding which IREDA signs with the Government of India every year. The funds requirement and sources for funding are prepared based on this. Revised budget estimates for the current year and actual expenditures incurred up to date for the year are prepared to partly serve such a purpose.	

Topic	Response	Remarks
4.16 Are the project plans and budgets of project activities realistic, based on valid assumptions, and developed by knowledgeable individuals?	The budget document (as explained above), which is prepared by the F&A department, is however an assimilation of information from other departments like TS department (which manages loans and advances portfolio) and resources team (which manages the borrowings portfolio), etc. After review by the chairman/managing director, the budget is then approved by the Board of Directors. Therefore, the budget is realistic and prepared by knowledgeable individuals.	
<b>Payments</b>		
4.17 Do invoice-processing procedures provide for: (i) Copies of purchase orders and receiving reports to be obtained directly from issuing departments? (ii) Comparison of invoice quantities, prices and terms, with those indicated on the purchase order and with records of goods actually received? (iii) Comparison of invoice quantities with those indicated on the receiving reports? (iv) Checking the accuracy of calculations?	Yes, invoice processing procedures provide for substantially similar controls. However, as IREDA is a financing company, each of these requirements may not be directly applicable.	
4.18 Are all invoices stamped PAID, dated, reviewed and approved, and clearly marked for account code assignment?	Yes	
4.19 Do controls exist for the preparation of the payroll and are changes to the payroll properly authorized?	Yes	
<b>Policies And Procedures</b>		
4.20 What is the basis of accounting (e.g., cash, accrual)?	Accrual accounting.	
4.21 What accounting standards are followed?	Indian accounting standards issued by the Institute of Chartered Accountants of India (ICAI).	



Topic	Response	Remarks
4.22 Does the project have an adequate policies and procedures manual to guide activities and ensure staff accountability?	The project provides detailed FAM and possibly PAM in order to guide the loan's implementation. The implementation manuals define the lines of responsibilities. The IREDA corporate internal manual will guide the rest of individual accountability.	While there is no manual for accounting, there is a chart of accounts and along with the delegation of powers (DOP), the activities are well established. The DOP has set financial limits for various activities. For example, for loan approvals, Director (finance) and Director (technical services) together can approve loan to a borrower up to Rs20 million, the chairman/managing director can approve a loan up to Rs100 million and so on. Similarly, even for incurring of expenditure, limits have been set for various levels of executives. The adherence to these levels of approvals is audited by the internal auditor on a quarterly basis and reports are submitted to IREDA board if there are any discrepancies or violations.
4.23 Is the accounting policy and procedure manual updated for the project activities?	IREDA has a comprehensive accounting policy and procedure and over the years IREDA has taken loans from various multilateral agencies and accounting procedures have been found adequate. Hence the project activities would also be covered in the existing accounting policy and procedures.	
4.24 Do procedures exist to ensure that only authorized persons can alter or establish a new accounting principle, policy or procedure to be used by the entity?	Yes. The alteration of the accounting and other financial manuals and policies need to be approved by the Board of Directors.	
4.25 Are there written policies and procedures covering all routine financial management and related administrative activities?	IREDA has prepared a number of manuals to ensure that its personnel are guided accordingly. A list of these manuals is available and can be provided upon requests.	

Topic	Response	Remarks
4.26 Do policies and procedures clearly define conflict of interest and related party transactions (real and apparent) and provide safeguards to protect the organization from them?	Conflict of interest issues and related party transactions are primarily governed by Sections 297 and 301 of the Indian Companies Act 1956 which deal with transactions involving a director and also accounting standard 18 which deals with disclosures of such transactions in the IREDA's annual report.	
4.27 Are manuals distributed to appropriate personnel?	Yes.	
<b>Cash and Bank</b>		
4.28 Indicate names and positions of authorized signatories in the bank accounts.	D Majumdar, chairman and managing director SK Bhargava, director (finance) RC Sharma, deputy general manager (F&A department) Surender Suyal, assistant general manager (F&A department) Punnu Grover, Manager (F&A department) Deepak Garg, Manager (F&A department) Vikram Singh Yadav, Manager (F&A department) SL Burman, Dy. Manager (F&A department)	
4.29 Does the organization maintain an adequate, up-to-date cashbook, recording receipts and payments?	Yes	
4.30 Do controls exist for the collection, timely deposit and recording of receipts at each collection location?	All physical checks are received only at the head office. Most of the inward remittances in recent years are all through direct bank transfer. (Offices of IREDA outside Delhi do not handle monetary transactions). All physical receipts are deposited in the banks as soon as possible (if possible the same day) and the same is recorded in the voucher. Quarterly audit by the internal audit checks these activities and reports to the IREDA board in case of any major lapse.	

Topic	Response	Remarks
4.31 Are bank and cash reconciled on a monthly basis?	Bank reconciliation is done on a monthly basis. Cash is managed on a daily basis. In the absence of an accounting manual, these practices are as per past practice and the quarterly internal audit reports any deviations.	
4.32 Are all unusual items on the bank reconciliation reviewed and approved by a responsible official?	Yes, the bank reconciliation statement prepared every month is approved by either a manager or assistant general manager (F&A department).	
4.33 Are all receipts deposited on a timely basis?	Yes, all physical receipts are deposited in the bank as soon as possible, on the same day if possible. Any major lapse is reported by the internal audit as part of its quarterly internal audit to the IREDA Board of Directors.	
<b><i>Safeguard over Assets</i></b>		
4.34 Is there a system of adequate safeguards to protect assets from fraud, waste and abuse?	There is a system of adequate safeguards to protect assets from fraud, waste and abuse. IREDA has a system of monitoring, periodic review of physical assets by a team of officials which ensures the protection of assets from waste and fraud. Also IREDA has a proper security system in place. The disclosure requirements as per Indian Companies Act also stipulate the auditor to confirm whether the fixed assets have been physically verified during the year under audit.	
4.35 Are subsidiary records of fixed assets and stocks kept up to date and reconciled with control accounts?	Yes, all records of fixed assets are kept up to date and reconciled with control accounts. Being a finance company, apart from fixed assets, IREDA does not have significant physical assets.	
4.36 Are there periodic physical inventories of fixed assets and stocks?	The physical verification of fixed assets is done at the end of each fiscal year ending March.	
4.37 Are assets sufficiently covered by insurance policies?	Yes.	

Topic	Response	Remarks
<b>Other Offices and Implementing Entities</b>		
4.38 Are there any other regional offices or executing entities participating in implementation?	IREDA headquarter and other offices will work together and help implement the project by originating, processing, disbursing, and monitoring the subprojects.	
4.39 Has the project established controls and procedures for flow of funds, financial information, accountability, and audits in relation to the other offices or entities?	Yes. The control and procedure for funds flow is provide in the FAM and possibly PAM.	
4.40 Does information among the different offices/implementing agencies flow in an accurate and timely fashion?	Yes. As most of the internal information is available on the company intranet and shared electronically, information flow within offices is accurate and timely.	
4.41 Are periodic reconciliations performed among the different offices/implementing agencies?	Not applicable	
<b>Other</b>		
4.42 Has the project advised employees, beneficiaries and other recipients to whom to report if they suspect fraud, waste or misuse of project resources or property?	Yes. There is a vigilance cell headed by a central vigilance officer appointed by the Government of India. However, IREDA has not adopted any separate whistle blower policy. Per its annual report, IREDA has not denied access to any personnel to approach the management on any whistleblowing issues.	
<b>5. Internal Audit</b>		
5.1 Is there a internal audit department in the entity?	IREDA gets it internal audit done by a chartered accountant (currently K.G. Somani & Co.). The firm has adequate experience in the field of audit. Internal audit is done every quarter and report (along with the action taken) is submitted directly to IREDA Board of Directors.	

Topic	Response	Remarks
5.2 What are the qualifications and experience of audit department staff?	The internal audit is done by a chartered accountant. In India, charter accounting firms are set up based on the guidelines of the Institute of Chartered Accountants of India, the Governing Body of Accountants in India. The chartered accountants need to pass the Indian Chartered Accountancy Course provided by Institute of Chartered Accountants of India (ICAI). The examination is considered rigorous. Hence the qualifications and experiences of most accounting firms are adequate.	
5.3 To whom does the internal auditor report?	The internal auditor reports directly to the Board of Directors.	
5.4 Will the internal audit department include the project in its work program?	Yes.	
5.5 Are actions taken on the internal audit findings?	Yes. The internal audit report is initially reviewed by the respective department, which either provides an explanation for the observation made or takes appropriate corrective action. Subsequently, the internal audit report and the action taken thereon are reported to the IREDA Board of Directors	
<b>6. External Audit</b>		
6.1 Is the entity financial statement audited regularly by an independent auditor? Who is the auditor?	Yes, the Statutory Audit as required by the Companies Act, 1956 is done annually by Gianender & Associates - Chartered Accountants.	
6.2 Are there any delays in audit of the entity? When are the audit reports issued?	No, audit reports are finalized by July/August for year ending March 31.	

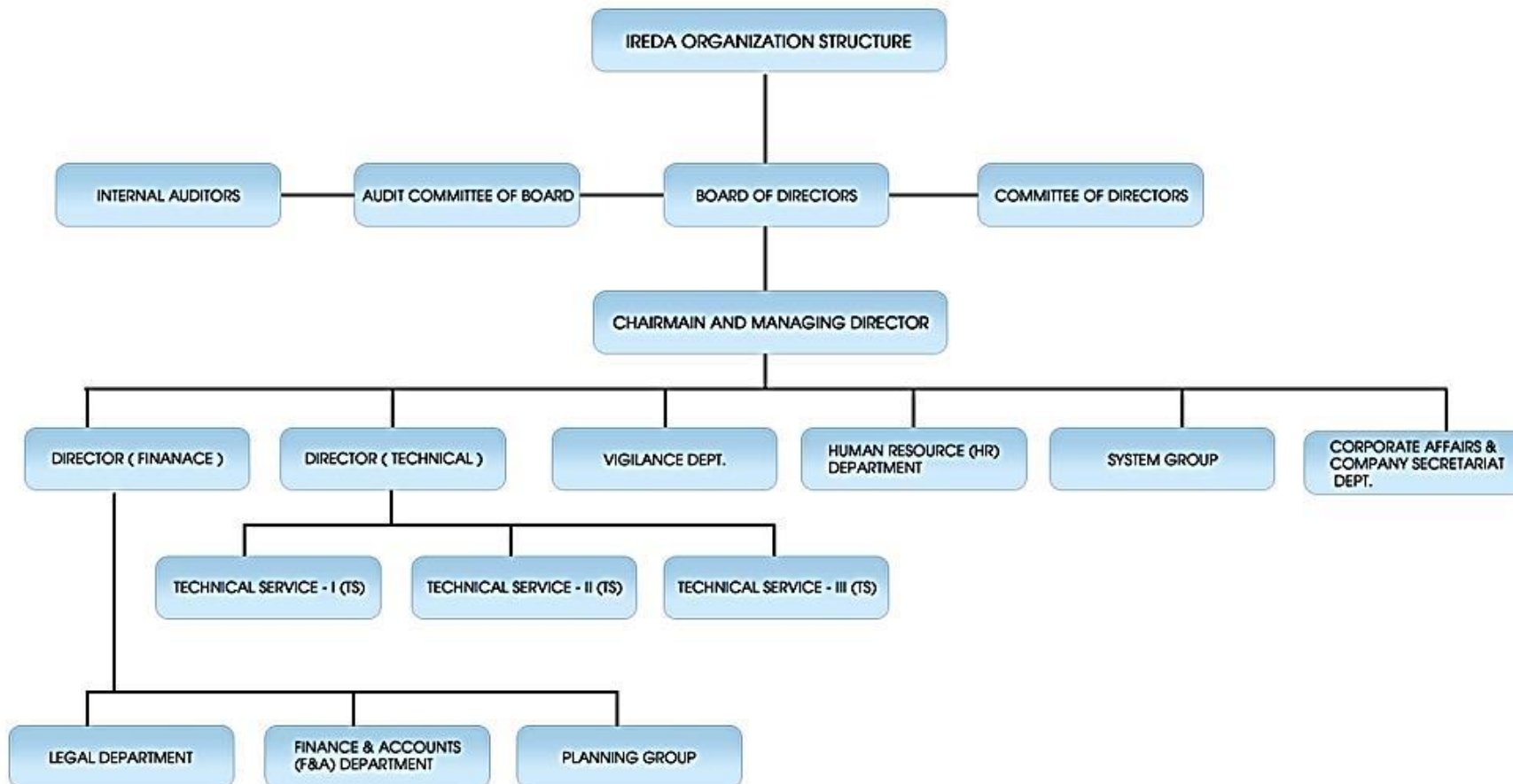
Topic	Response	Remarks
6.3 Is the audit of the entity conducted according to the International Standards on Auditing?	The audit is done in accordance with the accounting standards as applicable to India and/or notified by the Government of India. Draft Indian Accounting Standards aligning with IFRS have been prepared but are yet to notified by the Government of India	
6.4 Were there any major accountability issues brought out in the audit report of the past three years?	None.	
6.5 Will the entity auditor audit the project accounts or will another auditor be appointed to audit the project financial statements?	Independent auditor appointed by the Comptroller and Auditor General of India (CAG), GOI, audits the financial accounts of IREDA.	
6.6 Are there any recommendations made by the auditors in prior audit reports or management letters that have not yet been implemented?	The statutory auditors report to the shareholders may have made certain observations on the company accounts. While it is not necessary for IREDA to revise accounts based on these observations, it is the responsibility of the IREDA management to explain to the Board of Directors and MNRE on such observations and in the Annual Report. Such audit observations and the company's position do occur in the annual reports for the years 2009-10, 2010-11 and 2011-12.	
6.7 Is the project subject to any kind of audit from an independent governmental entity (e.g., the supreme audit institution) in addition to the external audit?	Yes, the project will be audited by the statutory auditor. After acceptance by the IREDA Board of Directors, the audit report is then sent to the Comptroller and Auditor General of India, which also conducts a review of IREDA's accounts. A note on this matter is elaborated in para. 21 in the main text.	
6.8 Has the project prepared acceptable terms of reference for an annual project audit?	Yes. This is provided under FAM and possibly PAM.	

Topic	Response	Remarks
<b>7. Reporting and Monitoring</b>		
7.1 Are financial statements prepared for the entity? In accordance with which accounting standards?	Yes, and in Indian accounting standards issued by the Institute of Chartered Accountants of India (ICAI).	
7.2 Are financial statements prepared for the implementing unit?	No. All activities are tracked by the separate accounts.	
7.3 What is the frequency of preparation of financial statements? Are the reports prepared in a timely fashion so as to be useful to management for decision making?	Accounts are prepared on daily basis but audited profit & loss account and balance sheet are prepared only at the end of the financial year. IREDA is also preparing profitability statement (unaudited) on half yearly basis under limited review audit to meet the requirement of the National Stock Exchange where IREDA's bonds are listed. The Budget vs Actuals report is prepared periodically and reported to IREDA Board of Directors.	
7.4 Does the reporting system need to be adapted to report on the project components?	As IREDA is a financial institution, this issue is not applicable.	
7.5 Does the reporting system have the capacity to link the financial information with the project's physical progress? If separate systems are used to gather and compile physical data, what controls are in place to reduce the risk that the physical data may not synchronize with the financial data?	As IREDA is a financial institution and the project is a financial intermediation loan to be channeled through IREDA, the subloan financial information is not directly linked to the subproject's physical progress. IREDA loan officers will monitor and review the subproject implementation on an individual basis, not directly linked to the ADB disbursement, for example.	
7.6 Does the project have established financial management reporting responsibilities that specify what reports are to be prepared, what they are to contain, and how they are to be used?	The project FAM and/or PAM will provide detailed instruction on the financial management reporting, usually in the form of quarterly, semi-annual, or annual reporting requirement. The details are provided in the FAM and/or PAM.	

Topic	Response	Remarks
7.7 Are financial management reports used by management?	Yes, financial management reports are used by the management. These reports are used to (i) decide on strategy to improve business, (ii) review profitability (adjust interest rates based on the same) and (ii) raise additional resources (bonds, rupee loans, foreign currency loans, and so forth).	Information as to what reporting is done to its board is yet to be provided by IREDA.
7.8 Do the financial reports compare actual expenditures with budgeted and programmed allocations?	Yes. Budget reports comparing budget estimates to actuals are prepared in terms of periodical profit and loss statement (at least twice a year - unaudited for reporting), budget vs. actual report is prepared (once a year).	These reports are reported to IREDA Board of Directors periodically. IREDA board monitors this report as it also has a bearing on its performance vis-à-vis the MOU signed by IREDA with the Government of India.
7.9 Are financial reports prepared directly by the automated accounting system or are they prepared by spreadsheets or some other means?	Automated accounting system.	
<b>8. Information Systems</b>		
8.1 Is the financial management system computerized?	Yes.	
8.2 Can the system produce the necessary project financial reports?	Yes. As the system has a comprehensive database of all expenditures and also loan details, a number of reports as per various requirements can be generated.	
8.3 Is the staff adequately trained to maintain the system?	Yes. The employees of the MIS department are trained in maintaining the system and all the employees of IREDA are trained in using the system according to their needs, subject to certain hierarchical access controls.	
8.4 Does the management organization and processing system safeguard the confidentiality, integrity and availability of the data?	Yes, adequate safeguards have been provided in the system to prevent unauthorized access to confidential data in the system.	



### IREDA Organization Chart



Source: IREDA website at <http://www.ireda.gov.in/forms/contentpage.aspx?lid=730>

### IREDA Finance & Accounts Department Structure

<b>Employee</b>	<b>Designation</b>	<b>Qualification</b>
Satish KR. Bhargava	Director (Finance)	Cost Accountant and Company Secretary
Dr RC Sharma	Deputy General Manager (Finance)	B.Com (Hons), M.Com, Ph.D., AICWA
Mr Surender Suyal	Assistant General Manager and Company Secretary	B.Com, AICWA, ACS
Ms Punnu Grover	Manager (Finance)	B.Com (Hons), M.Com, AICWA
Mr Deepak Garg	Manager (Finance)	B.Com (Hons), AICWA, ACA
Mr Vikram Singh Yadav	Manager (Finance)	B.Com (Hons), ICWA (Inter), PGDBM
Mr Ishwar N Madiwal	Deputy Manager (Finance)	B.Com, MBA, LLB
Mr SL Burman	Deputy Manager (Finance)	B.A., MBA (Finance & Marketing)
Mr KS Talwar	Assistant Manager (Finance)	B.Com
Ms Manjusha Shukla	Assistant Manager (Finance)	BBA, MBA
Mr Rangin Basu	Assistant Accounts Officer	B.Com, MBA
Ms Ankita Gupta	Assistant Accounts Officer	B.Com (Hons), CA
Ms Jyoti Yadav	Assistant Accounts Officer	B.Com, ICWA
Mr Sridhar Madishetti	Assistant Accounts Officer	BBA, MBA(Finance)
Mr Prashant Kumar Yadav	Assistant Accounts Officer	B.Com, ICWA

B = bachelor's degree, Com = commerce, Hons = honors, MBA = master of business administration, BBA = bachelor of business administration, ICWA = Institute of Cost and Works Accountants of India, ACA = Associate of Institute of Chartered Accountants of India. LLB = Bachelor of Law, PGDBM = Post Graduate Diploma in Business Management, ACS = Associate of Company Secretaries of India Ph.D = Doctor of Philosophy, Inter = Intermediate Examination pass.

Source: Indian Renewable Energy Development Agency