

**FINANCING OF RENEWABLE ENERGY PROJECTS BY INDIAN
RENEWABLE ENERGY DEVELOPMENT AGENCY LIMITED**

(BASED ON PERFORMANCE AUDIT REPORT NO.12 OF 2015)

MINISTRY OF NEW AND RENEWABLE ENERGY

**COMMITTEE ON PUBLIC UNDERTAKINGS
(2017-18)**

TWENTY SECOND REPORT

(SIXTEENTH LOK SABHA)



**LOK SABHA SECRETARIAT
NEW DELHI**

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Presented to Lok Sabha on 08.02.2018

Laid in Rajya Sabha on 08.02.2018



**LOK SABHA SECRETARIAT
NEW DELHI**

8 February, 2018/19 Magha,1939(Saka)

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COMPOSITION OF THE COMMITTEE ON PUBLIC UNDERTAKINGS
(2017-2018)

Shri Shanta Kumar - Chairperson

MEMBERS

Lok Sabha

2. Shri L.K. Advani
3. Shri Ramesh Bais
4. Shri G. Hari
5. Shri Rabindra Kumar Jena
6. Dr. Hari Babu Kambhampati
7. Shri Kristappa Nimmala
8. Shri Ajay Nishad
9. Shri B. Vinod Kumar
10. Shri Prahlad Singh Patel
11. Prof. Saugata Roy
12. Adv. Narendra Keshav Sawaikar
13. Shri Ravneet Singh
14. Shri Sushil Kumar Singh
15. Shri Rameswar Teli

Rajya Sabha

16. Shri Narendra Budania
17. Shri Naresh Gujral
18. Shri Shamsheer Singh Manhas
19. Shri Praful Patel
20. Shri A.K. Selvaraj
21. Shri Tapan Kumar Sen
22. Shri Ram Chandra Prasad Singh

SECRETARIAT

- | | | |
|------------------------|---|----------------------|
| 1. Smt. Sudesh Luthra | - | Additional Secretary |
| 2. Smt. Anita B. Panda | - | Director |
| 3. Shri G.C. Prasad | - | Deputy Secretary |
| 4. Smt. Mriganka Achal | - | Under Secretary |

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12. Shri B. Senguttuvan
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14. Shri Kalikesh Narayan Singh Deo
15. Shri Rameshwar Teli

Rajya Sabha

16. Shri Narendra Budania
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| 4. Smt. Mriganka Achal | - Under Secretary |

INTRODUCTION

1. I, the Chairperson, Committee on Public Undertakings (2017-18) having been authorized by the Committee to submit the Report on their behalf, present this Twenty-second Report on "Financing of Renewable Energy Projects by Indian Renewable Energy Development Agency Limited (Based on Performance Audit Report No. 12 of 2015)"
2. The Committee on Public Undertakings (2016-17) had selected the above said subject for detailed examination. However, the examination of the subject could not be completed during the term. The Committee on Public Undertakings (2017-18) reselected the subject to complete the unfinished task.
3. The Committee were briefed about the issues raised in the audit para by the representatives of Office of C&AG on the subject on 8 November, 2016 and subsequently took oral evidence of the representatives of IREDA and Ministry of New and Renewable Energy (MNRE) on 09 January, 2017 and 15 March, 2017 respectively.
4. The Committee considered and adopted the Report at their sitting held on 24 January, 2018.
5. The Committee wish to express their thanks to the representatives of Ministry of New and Renewable Energy and IREDA for tendering evidence before them and furnishing the requisite information in connection with examination of the subject.
6. The Committee would like to place on record their appreciation for the assistance rendered to them in the matter by the Office of Comptroller & Auditor General of India.
7. For facility of reference and convenience, the Observations and Recommendations of the Committee have been printed in bold letters in Part-II of the Report.

**New Delhi;
6 February, 2018
17 Magha, 1939 (S)**

**SHANTA KUMAR
Chairperson
Committee on Public Undertakings**

ACRONYMS

ARN	Application Reference Number
BOD	Board of Directors
BIFR	Board for Industrial and Financial Reconstruction
CERC	Central Electricity Regulatory Commission
CIBIL	Credit Information Bureau (India) Limited
CIIE	Centre for Innovation Incubation and Entrepreneurship
CUF	Capacity Utilisation Factor
DISCOMS	Distribution Companies
DPE	Department of Public Enterprises
DRT	Debt Recovery Tribunal
DSCR	Debt Service Coverage Ratio
EPA	Energy Purchase Agreement
FI	Financial Institutions
GEC	Green Energy Commitments
GOI	Government of India
GW	Giga Watt
IIFCL	India Infrastructure Finance Company Limited
IPO	Initial Public Offer
IREDA	Indian Renewable Energy Development Agency
ISTS	Inter-State Transmission System
JNNSM	Jawaharlal Nehru National Solar Mission
LE	Lenders Engineer
MEITY	Ministry of Electronics and Information Technology
MERC	Maharashtra Electricity Regulatory Commission
MNRE	Ministry of New and Renewable Energy
MSEDCL	Maharashtra State Electricity Distribution Company Limited
MW	Mega Watt
NBFC	Non-Banking Financial Company
NCEF	National Clean Energy Fund
NCPRE	National Centre for Photovoltaic Research and Education
NISE	National Institute of Solar Energy
NIWE	National Institute for Wind Energy
NLDC	National Load Despatch Centre
NOC	No objection Certificate
NPA	Non-Performing Asset
OTS	One time settlement
PDC	Post Dated Cheque
PFC	Power Finance Corporation
PPA	Power Purchase Agreement

PSE	Public Sector Enterprise
PTC	Production Tax Credit
P&L	Profit and loss
PV	Photovoltaic
RBI	Reserve Bank of India
RD&D	Research Development and Demonstration
REC	Renewable Energy Certificate
REMC	Renewable Energy Management Centre
RGO	Renewable Generation Obligation
RPO	Renewable Purchase Obligation
SAC	Settlement Advisory Committee
SARFAESI	Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest
SCADA	Supervisory Control and Data Acquisition
SEBI	Securities and Exchange Board of India
SECI	Solar Energy Corporation of India
SERC	State Electricity Regulatory Commission
SLDC	State Load Despatch Centre
SNA	State nodal agency
TRA	Trust and Retention Account

REPORT
PART - I
CHAPTER I
INTRODUCTORY

1.1 Renewable energy is an important component of India's energy portfolio. The importance of renewable energy sources in transition to a sustainable energy base was recognised by the Government of India (GOI) and the Department of Non-Conventional Energy Sources was established in 1982. This was upgraded to a Ministry viz. Non-Conventional Energy Sources (MNES) in 1992 and subsequently renamed as Ministry of New and Renewable Energy (MNRE). MNRE's objectives *inter alia* include deployment of grid-interactive renewable power generation projects to augment contribution of renewables in total electricity mix; promotion of renewable energy initiatives for meeting energy needs in rural areas and to supplement energy needs in urban areas and in industry and commercial establishments.

1.2 Indian Renewable Energy Development Agency Limited (IREDA), which operates under the administrative control of the MNRE, was established in March 1987 under the Companies Act, 1956. Subsequently, IREDA was notified as a Public Financial Institution by the GOI in 1995. In 1998, IREDA was registered as a Non-Banking Financial Company (NBFC) with the Reserve Bank of India. IREDA is a fully Government owned company with authorised share capital of ₹ 6,000 crore and paid up capital of ₹ 784.60 crore as on 31 March 2017.

1.3 The objectives of establishment of IREDA are as under:

- To give financial support to specific projects and schemes for generating electricity and/or energy through new and renewable sources and conserving energy through energy efficiency.
- To increase IREDA's share in the renewable energy sector by way of innovative financing.
- To strive to be a competitive institution through customer satisfaction.

- To maintain its position as a leading organisation to provide efficient and effective financing in renewable energy and energy efficiency/conservation projects.
- Improvement in the efficiency of services provided to customers through continual improvement of systems, processes and resources.
- The Company also implements certain programmes on behalf of MNRE, like Central financial assistance in the form of subsidy.

1.4 As on 31 March, 2017, the total installed capacity of renewable energy in the Country is 57260.23 MW which includes 12288.83 MW in Solar energy, 32279.77 MW of Wind energy, 4379.86 MW of small Hydro power, 8181.70 MW of Biomass cogeneration and 130.08 MW of Waste to energy. The GOI has been supporting renewable energy development through a mix of fiscal and financial incentives. These include capital/interest subsidy, accelerated depreciation, concessional excise and customs duties, and generation-based incentives or feed-in-tariff. The growth of renewable energy in India has largely been led by the private sector. IREDA, other public sector agencies and private financial institutions are also actively funding renewable energy projects.

The present report under examination by the Committee on Public Undertaking is Report No. 12 of 2015 (Performance Audit) of the Comptroller and Auditor General which deals with financing of renewable energy projects by IREDA during the period from 2008-09 to 2012-13.

1.5 The performance Audit by the Comptroller and Auditor General was undertaken to assess whether:

- The Company was effective in discharging its role as a leading financial institution for Renewable projects;
- an efficient mechanism existed for expeditious processing of loan requests;
- an effective mechanism existed for review and monitoring of projects with a view to recover its loans;
- projects sanctioned were commissioned/implemented on time; and

- Subsidy released had resulted in achievement of the envisaged objectives of the GOI.

Major Audit Observations

1.6 As per the Audit report, the share of IREDA in the total commissioned capacity of Renewable Energy (RE) sources has declined during the period under review (2008-2009 to 2012-13) and IREDA was not able to sustain its position as a leading financial institution in the renewable energy sector (Para 2.2.3). The other findings included the targets fixed in the Memorandum of Understanding (MoU) did not have any correlation either with the targets indicated in the Corporate Plan or in the Outcome Budget of the Ministry of New and Renewable Energy (MNRE). As per para 3.3.1, Audit found that there is an average delay of 66 days in sanctioning projects beyond the prescribed limit of 90 days.

1.7 Further Audit pointed out that out of 457 loan applications received during 2008-09 to 2012-13, 298 applications (i.e. 65.21 per cent) were dropped by IREDA at different stages viz. before registration, before sanction of loan and after sanction of loan. Thus, only 159 loan applications (34.79 per cent) were finally sanctioned (Para 3.4).

1.8 It was also observed that out of 12 projects selected by Audit (from a total of 123 projects) wherein capital/interest subsidy received (₹ 18.10 crore) from MNRE was passed on (₹ 14.48 crore) by IREDA to the borrowers, in five cases, several irregularities were noticed in implementation of subsidy schemes viz. continued passing on of subsidy to borrowers who became ineligible, non-recovery of subsidy and absence of mechanisms to ensure continuity of the project (Para 5.4).

1.9 It has also been pointed out in Audit report that during 2008-09 to 2012-13, IREDA settled 29 cases under OTS, and recovered an amount of Rs. 208.85 crore against the outstanding dues of Rs. 446.70 crore. Thus, an amount of Rs. 237.85 crore (53.25 per cent) was sacrificed by IREDA on account of write off of principal and waiver of interest. Further, out of the 17 OTS cases selected by Audit for scrutiny, it was observed that in 14 cases IREDA deviated from the OTS/Financing guidelines by

allowing OTS to willful defaulters, non-conducting of physical verification of projects, exceeding the prescribed limits while releasing disbursements, inadequate monitoring of financial condition of borrowers (Para 4.9 and 4.10).

1.10 In Para 6.2 of the Audit Report it was mentioned that the Project Information and Documentation Monitoring System (PIDMOS) database of IREDA lacked data integrity, reliability and completeness. Besides, there was no uniformity in the procedure for registering loan applications in PIDMOS as certain applications for additional loans were treated as a fresh loan.

1.11 In Para 4.2 and 4.3, the Audit observed that the gross NPA to total loans in 2008-09 was 13.34 *per cent* and thereafter showed a decreasing trend and reduced to 3.86 *per cent* in 2012-13 except in the year 2011-12 in which it increased marginally to 5.46 *per cent*. However, the percentage of NPAs were much lower (ranging from 0.02 *per cent* to 1.04 *per cent* during the same period) in case of other power sector financing companies such as Rural Electrification Corporation limited (REC) and Power Finance Corporation Limited (PFC).

CHAPTER II

DEVELOPMENT OF RENEWABLE ENERGY (RE) IN THE COUNTRY

2.1 Promotion of Renewable Energy is one of the responsibilities of IREDA. When asked about the efforts made to promote Renewable Energy (RE) in the Country by IREDA, the following has been submitted by the Company:-

"IREDA was set up with a primary objective of giving financial support to specific projects and schemes for generating electricity or energy through new and renewable sources and conserving energy through energy efficiency. To this extent, IREDA has been able to successfully develop renewable energy through innovative financing schemes / products. It has created awareness about the RE in the Country. IREDA has been instrumental in commercialization of RE in the Country by promoting private sector participation and encouraged other Banks and FIs to finance RE. In order to meet the business challenges and competition, IREDA has been revising its financing guidelines and interest rates and have come up with various financing instruments, both fund based and non-fund based to remain competitive."

2.2 The Company has further submitted:-

"IREDA has been successfully financing renewable energy and energy efficiency sectors for 29 years. The unstinted and pro-active efforts being made by IREDA have enabled commercialization of Renewable Energy sector in India, resulting in active participation from domestic commercial banks, international funding agencies and FDI, enabling the sector to attain a critical mass.

As a result of efforts made by IREDA towards development of the Renewable Energy sector in the Country, the Indian Renewable Energy sector has experienced a year-on-year growth and the sector has grown at a CAGR of 18% during the last 10 years. The current installed RE capacity has reached to more than 50 GW approximately, which is contributing more than 15% in Country's installed capacity of 314 GW."

2.3 IREDA have informed that the Renewable Energy projects in India are being mainly financed by Commercial Banks/ Financial Institutions including IREDA, Power Finance Corporation (PFC), Rural Electrification Corporation (REC), IIFCL, L&T Finance, PTC – India Financial Services, SBI, Yes Bank etc. They have been a pioneer in financing renewable energy projects and strived to offer most competitive

terms/interest rates to renewable energy sector. Since inception, they have approved financial assistance to more than 2382 clean energy projects supporting green capacity addition of more than 7525 MW, with loan commitment of ₹ 48,832 crore (as on March, 2017) and disbursements of ₹ 27,790 crore making it the single largest “Green Financier” in the Country. This has helped in supporting the growth of Renewable Energy sector in India.

2.4 As per MNRE - Report on Status of implementation of Green Energy Commitments (GECs) for financing of Renewable Energy Projects, the following are the leading financial institutions in the Country indicating the total amount sanctioned and the total amount disbursed between 15 February, 2015 to 30 September, 2016 :-

Sl. No.	Name of the Bank/FI	(15.02.2015-30.09.2016)	
		Total Amount Sanctioned (₹ in Crs)	Total Amount Disbursed (₹ in Crs)
1	Indian Renewable Energy Development Agency Limited (IREDA)	12,035.25	6,608.28
2	Power Finance Corporation Ltd. (PFC & PFC Green Energy Ltd.)	6,237.88	3,197.84
3	Rural Electrification Corporation Limited (RECL)	4975.43	548.21
4	India Infrastructure Finance Company Ltd (IIFCL)	4,950.89	2,551.98
5	L & T Infrastructure Finance Company Ltd.	17,856.70	8,150.10
6	PTC India Financial Services Ltd.	8,016.05	3,097.36

I. TECHNOLOGICAL ADVANCEMENT THROUGH RESEARCH AND DEVELOPMENT

2.5 The Committee have been informed that MNRE has a major R&D Programme for supporting research, development and demonstration (RD&D) for technology development which has a provision for associating industry sharing 50 per cent cost of the project for technology development leading to commercialization. The RD&D efforts

are continued with emphasis on cost reduction and efficiency improvement. A total amount of ₹ 584.0 crore has been spent on RD&D as support for R&D projects to various R&D/academic institutions, industry in the area of solar thermal, SPV, Biogas, Wind , Biofuel by hydrogen and fuel cell, and to MNRE institutes, namely, NISE, NIWE during the 12th Plan Period. The RD&D effort has resulted into development and manufacture of solar water heating systems, solar cookers, biogas plants, gasifiers, solar lighting system, solar pumping system, etc. However, for promoting indigenous technology, industry should be encouraged starting from product/process development for indigenous technology development and standardization of the technology/process to maintain quality and reliability. The industry should be supported with incentives for the purpose.

2.6 The Committee have further been informed that the Ministry of New and Renewable Energy has three dedicated institutions as autonomous bodies namely National Institute of Solar Energy, Gurugram for Solar Energy; National Institute of Wind Energy, Chennai for wind energy and National Institute of bio-energy for bio energy that are functioning as research demonstrations, standardization and testing centres. Further, Ministry has sanctioned 4 Centers of Excellence in Solar Energy which are as follows:-

1. National Centre for Photovoltaic Research and Education (NCPRE) at IIT, Bombay.
2. Indian Institute of Engineering Science and Technology (IEST), Kolkata.
3. Center for Environmental Planning and Technology (CEPT), Ahmedabad.
4. Center of Excellence in Solar Thermal Research and Education, IIT, Jodhpur, Rajasthan.

2.7 Similarly, Alternate Hydro Energy Centre at IIT, Roorkee is also involved for testing, and evaluation of Small Hydro power.

2.8 Ministry has also supported creation of a Centre of Excellence for innovation, incubation and entrepreneurship in the area of renewable energy at Centre for Innovation Incubation and Entrepreneurship (CIIE) IIM Ahmedabad by providing / committing a grants-in-aid of ₹ 24 crore. CIIE IIM Ahmedabad through this grant has

created 'Indian Fund for Sustainable Energy' to support start up with innovative ideas besides providing them training and hand holding support.

2.9 Regarding progress of work done so far under 'Indian fund for sustainable energy, the Ministry has submitted as below :-

"The CIIE, Ahmadabad has undertaken multiple initiatives to support and mobilize resources to support new innovations and entrepreneurs in the renewable sector. As on date out of ₹ 24 crore of MNRE Grant-in-Aid sanctioned to CIIE Initiatives, a total of ₹15.20 crore has been disbursed. So far no borrower has approached IREDA for financing RE projects."

2.10 When the Committee desired to know the actions which have been initiated to acquire the latest technology in the field, the Company has stated as under :

"Renewable Energy projects are mostly installed by private sector investments. The developers are free to use indigenous technology or technology imported from other Countries for improving efficiency and reducing the cost of the power on mutually agreed terms and conditions."

II. TARGET V/S ACHIEVEMENT TO PROMOTE RENEWABLE ENERGY IN THE COUNTRY

2.11 As per the information furnished by IREDA, during the 12th Plan period, IREDA has sanctioned 257 projects with a total project cost of ₹ 49647.29 crore for the capacity addition of 7558.64 MW against which 2466.73 MW has been commissioned.

2.12 With regard to milestones in physical terms which have been set to increase substantially the share of renewable energy in the total energy mix, the Company has submitted as below :-

"Government has up-scaled the target of renewable energy capacity to 175 GW by the year 2022 which includes 100 GW from solar, 60 GW from wind, 10 GW from bio-power and 5 GW from small hydro-power. To achieve this, Government has recently approved amendments in Tariff Policy in January, 2016 which envisages prescription of long term trajectory of RPO prescribing minimum purchase of solar energy to promote the renewable energy, from

the date of notification of the policy, which shall be such that it reaches up to 8% of the total electricity consumption excluding Hydro power by March 2022. Ministry of Power vide their order no 23/3/2016- R&R dated 22nd July 2016 has also issued guidelines for long term RPO growth trajectory of Renewable Purchase obligation(RPO) for non-solar as well for solar upto the year 2018-19.”

2.13 It has been stated that Government of India has fixed target of 175 GW for Renewable Energy till 2022. When asked about the efforts made to achieve the target, the Company has stated as follows :-

"To achieve the target, various new initiatives and policies undertaken by Government for the overall development of renewable energy sources in the Country included incentives in the forms of generation based incentives/subsidies, fiscal incentives such as accelerated depreciation, concessional customs duty, excise duty exemptions, income tax holiday for 10 years and viability gap funding from NCEF, amendments in the Tariff Policy for strong enforcement of Renewable Purchase Obligation (RPO) and for providing Renewable Generation Obligation (RGO), setting up of exclusive solar parks, development of power transmission network through Green Energy Corridor project, repowering policy in order to optimally utilize the wind energy resources, identification of large Government complexes/ buildings for rooftop projects, infrastructure status for solar projects, raising tax free solar bonds etc. A total of 11319 MW of renewable energy capacity addition has been achieved from various renewable sources during 2016-17 against the target of 16660 MW under Grid Interactive renewable power which is 62.5% higher than last year’s achievement of 6965 MW.

III. ESTIMATED POTENTIAL AND CAPACITY ADDITION

2.14 The Ministry of New and Renewable Energy has estimated various RE potential and targets of various sectors as given below :-

Sector (RE)	Potential (GW)
Wind	302*
Solar	750
Small Hydro	20
Biomass incl. bagasse Cogen.	23
Total	1095

*At 100m height estimated by NIWE

2.15 In reply to a query whether the capacity creation required to provide the universal access to affordable, reliable and modern energy services has been assessed, the MNRE submitted that :-

"a potential of over 1096 GW have been estimated from various renewable energy sources in the Country which includes 750 GW from Solar, 302 GW from Wind, 20 GW from Small Hydro power and 23 GW from Bio-power. Further, renewable energy sources and appliances are clean in nature. Several programmes such as bio power, decentralized solar power, gassifiers etc are being implemented in the rural and remote areas for providing cooking, min & micro grid, moving power, lighting, heating, pumping and decentralized electrification.

2.16 The Audit noted that though IREDA's share in absolute term is increasing, and achievement has exceed targets, yet IREDA's share has decreased from 25%, during 10th plan to 12% by the end of 11th plan. When asked about the reasons, IREDA submitted as below :-

"Earlier, IREDA used to be the only major lender funding RE projects since very few lenders were willing to support RE. However, with the rapid commercialization of RE technologies particularly Solar and Wind and slow growth in conventional energy financing, other lenders are now willing to participate in RE financing resulting in increase of their share in RE financing. However, IREDA share is continuously increasing in absolute terms and IREDA has registered compounded growth rate of more than 20% in sanctions and disbursements in the last 5 years."

2.17 As per the Audit report (Para 2.2.3), the share of IREDA in the total commissioned capacity of RE sources of the Country, which was 52.83 per cent at the beginning of the Tenth five Year Plan (2002-07) period declined to 19.21 per cent at the end of the Tenth Five Year Plan and further to 7.66 per cent at the Eleventh Five Year Plan and IREDA was not able to sustain its position as a leading financial institution in the renewable energy sector. Regarding the measures taken by IREDA to improve its market share in the total commissioned capacity, the Company has submitted as below:-

"IREDA has been constantly bringing out innovative financial products in the market to retain its market share. The rates of interest are also reviewed time

to time to remain competitive. Keeping in view the peculiar nature of RE Projects having sessional operations, longer/structured repayments are being considered for financing. In addition, IREDA has also started providing finance to other lending institutions for financing RE Projects, financing under consortium/ co-financing mode for large size projects. As a result of these steps, it is expected that IREDA shall be able to improve its market share. In the recent past, IREDA has introduced following new schemes keeping in view the requirement of the sector:-

1. Bridge loan against generation based incentive / capital subsidy
2. Bridge loan against pending bills with State Power Utilities
3. Credit Enhancement Scheme
4. Loan against Securitisation for future receivables etc.
5. Financing of Rooftop Solar PV Projects for Commercial, Industrial and Institutional Sectors."

2.18 When asked about the present wind energy potential of the Country and future capacity additions, IREDA has submitted as below :-

"As per recent assessment conducted by NIWE, there exists wind power potential of about 302 GW @ 100 m in the Country. Most of this potential exists in 8 windy states. State wise present wind power potential at 100 m height vis-à-vis installed capacity as on March, 2017 is given below:-

S. No.	State	Wind Power Potential in MW	Wind Installed Capacity in MW	Power %
1.	Andhra Pradesh	44229	3619	8
2.	Gujarat	84431	5341	6
3.	Karnataka	55857	3751	6
4.	Kerala	1700	52	7
5.	Madhya Pradesh	10484	2498	2
6.	Maharashtra	45394	4771	1
7.	Rajasthan	18770	4282	2
8.	Tamil Nadu	33800	7861	2
9.	Telangana	4244	101	2
10.	Odisha	3093	0	0
11.	Others	249	4	
	Total	302251	32280	

2.19 The Company further added that :-

“there is a plan for capacity addition target of 60 GW wind energy by 2022. To achieve the target, Ministry is working towards providing an enabling environment for the new capacities to materialise. Initiatives taken by the Ministry to achieve the target includes announcement of National Offshore

Wind Energy Policy, 2015; launch of wind Atlas having information at 100 m height; implementation of Green Energy Corridors; introduction of bidding in wind sector through Scheme for setting up 1000 MW capacity ISTS connected wind power projects; Repowering of old and small capacity wind turbines; draft Wind-Solar Hybrid Policy; and draft Guidelines for procurement of wind power through bidding process as required under Section 63 of the Electricity Act, 2003. As per provisions of amended Tariff Policy the Ministry of Power has issued long-term RPO trajectory. Further, to facilitate the inter-state sale of renewable power ISTS charges and losses have been waived off for wind and solar.

2.20 When asked about the major issues for wind sector in achieving the target and exploiting wind power energy in the Country IREDA stated the following problems/suggestion:

- Timely creation of power evacuation and transmission infrastructure.
- Delay in land allotment and clearance, particularly in case of forest land.
- Development of accurate forecasting and scheduling system.
- Delayed payment to wind power generators.
- 'Must-Run' status not being complied.
- Backing down of wind power by Utilities.
- Non-compliance of RPOs by Obligated Entities
- Delay in signing of PPA with renewable energy projects.

2.21 During the evidence, Secretary, MNRE, informed the Committee as under:-

“There are 8 regions where electricity can be produced on commercial rate, we have 302 GW potential in which 297GW are in these regions. Due to which development of Wind Energy is limited to this regions only since last 14-15 years. One big development in Wind Energy is that development in Wind manufacturing and achievement of 70% of indigenisation by the manufacturers has been achieved. All manufacturing are done in India due to which capacity addition in Winds sector has been stable. This year the capacity will reach 30-31GW. As I said, availability of Wind is only in 5-6 regions so projects have come only there. The system of feed in tariff in the regions is the electricity is taken on the basis of SERC and CERC determined rates by the DISCOMS. Due to which development in this sector has been on identified speed. Now the need is we should take Wind Energy of this region to another region because wind plans cannot be installed everywhere so we should strengthen the system of transmission. The Green Energy corridors for which planning has been done 2-3 years before we have to strengthen in 8 region of intrastate and interstate electricity transfer. The work of Interstate electricity is done by PGCIL.”

2.22 He further added that :

“We aimed to increase 4 GW in wind energy this year, if we do so every year then only we can achieve target of 60 GW in the year 2022. We have a big target of 100 GW solar energy and 60 GW wind energy on which we have to expend 4.5- 5 crore per MW. For this we need investment of 6-7 lakh crore in which we will take loan of 70-75% and equity of 25-30%. We need financing and in this context role of IREDA becomes very important.”

2.23 In reply to a query regarding the process of selection of area for installing turbines, the Secretary, MNRE further stated as under: -

“it is generally the developer who selects the place and takes feed-in-tariff. When we do tender we do not tell them where to install rather we say we need 200 MW electricity, tell us where you will install your plant. They have full discretion to do so. Normally they go the places where wind speed is good”.

2.24 During examination of the subject, the issue of installation of small second hand units was discussed by the Committee. Regarding a query on installing small second hand units that were closed down in other countries as new units in India without any clearance, the Secretary, MNRE stated as under :-

“...in regard to small wind plants and second hand plants, I won't be able to answer now as no case of this type has come up in my personal notice. The other issue which was raised here that in the year 1994 when the programme was started, turbines of 200kw or 100 KW were used, while today we are talking about installing 3-4 MW turbines in one site. We want people should use big turbines in place of small turbines already installed. The best sites have small turbines. We have made a policy- repowering of old turbines. We will support, help in transmission in windy states so that they will remove small turbines and place big turbines there. Actually small turbines were installed at best sites of winds now we are encouraging to place new turbines. We should improve our scheme as people don't see enough incentive in this area.”

CHAPTER III

SANCTION AND DISBURSEMENT OF LOANS

3.1 As per the Twelfth Plan (2012-17) of the Government of India, the annual average growth rate of the total energy requirement is expected to accelerate from 5.10 per cent per year in the Eleventh Plan (2007-12) to 5.70 per cent per year in the Twelfth Plan and the supply from renewable is expected to increase rapidly from 24,503 Megawatt (MW) by the end of the Eleventh Plan to 54,503 MW by the end of the Twelfth Plan. This underlined the need for investments in renewable energy.

3.2 In this backdrop, Audit took up the performance Audit of IREDA to assess how the Company was discharging its role. The performance Audit covered a period of five years from 2008-09 to 2012-13 and involved examination of selected samples of renewable energy projects. Based on their study, the CAG made their observations. The Audit observations were examined by the Committee and are dealt with in succeeding paragraphs.

I. LOAN AND DISBURSEMENT

3.3 As per Para 3.3.1 and 3.4 of Audit on loan and disbursement process of IREDA it is stated that out of 211 projects sanctioned during the period 2008-09 to 2012-13, 83 projects (39.34 *per cent*) were sanctioned after an average delay of 66 days, beyond the prescribed limit of 90 days. Besides, in two cases, the projects were registered after the loans were sanctioned / disbursed. Out of 457 loan applications received during 2008-09 to 2012-13, 298 applications (65.21 *per cent*) were dropped by IREDA at different stages *viz.* before registration, before sanction of loan and after sanction of loan. Thus, only 159 loan applications (34.79 *per cent*) were finally sanctioned.

3.4 With regard to the time taken to sanction loan and the procedure adopted in sanction of loan, IREDA clarified that the average time taken for sanction was within the prescribed norms of 90 days. The delays wherever observed were mainly on account of pending information from the applicants. However, this time period is under review and IREDA endeavors to reduce the time of sanction by way of improvement in the systems and procedures. The Company further, stated that they had carried out complete due

diligence before going to the BOD. The process of registration has now been revised and such instances may not occur in future.

3.5 Details of the loans sanctioned by various sanctioning authorities during the 11th and 12 Five Year Plans are as follows:-

Sanctioning authority	Total No. of Projects		Amount of loan sanctioned (₹ in Lakhs)		Amount of loan disbursed (₹ in Lakhs)		Amount of loan recovered in (₹ in Lakhs)	
	11 th Plan (FY 2007-08 to FY 2011-12)	12 th Plan (FY 2012-13 To FY 2016-17)	11 th Plan (FY 2007-08 to FY 2011-12)	12 th Plan (FY 2012-13 To FY 2016-17)	11 th Plan (FY 2007-08 to FY 2011-12)	12 th Plan (FY 2012-13 To FY 2016-17)	11 th Plan (FY 2007-08 to FY 2011-12)	12 th Plan (FY 2012-13 To FY 2016-17)
Dir(T) / Dir(F)	18	30	1420	6795	524	5674	371	5480
CMD	30	52	57156	36480	12573	20795	9018	8504
Committee of Directors	57	96	150867	318892	100601	152422	57160	23806
Board of Directors	98	157	857794	2446446	518050	1314654	329352	456043
Total	203	335	1067237	2808613	631748	1493545	395901	493833

3.6 It may be noted from the above data that although the amount of loan sanctioned disbursed and recoveries made has been increased to in absolute term during 12th Five Year Plan as compared to 11th Five Year Plan, the percentage of loan disbursed as compared to loan sanctioned has declined from 59% to 53%. The percentage of recovery as compared to loan disbursed which was 62% during 11th Five Year Plan has declined to 33%.

3.7 When the Committee desired to know the reason for the huge gap between the amount of loan sanctioned and the amount of loan disbursed. The Company submitted as below:-

"Loan sanction becomes effective only after the loan documents are executed and disbursement is effected once security is created and 30% equity is brought in by the promoter. The last 3 years figures for sanction, execution and disbursement is given below which indicates that the difference in executed projects and disbursed is reasonable.

Year	Total main loan	LA Executed during same year	% of LA execution	Disbursement effected during same year	% of Disbursement effected from execution of loan agreement
2016-17	86	46	53%	42	91.30%
2015-16	74	46	62%	38	82.60%
2014-15	60	25	42%	20	80%

3.8 On the methodology adopted by IREDA while selecting projects for financing, IREDA submitted as under:-

"On receipt of Loan proposals detailed due diligence is carried out on various aspects of project proposal such as technical, financial, entity, promoters and policy. Accordingly, the draft appraisal is finalized after completing all procedural requirements and the note is put up to the Credit Committee for deliberation. Based on the comments/ suggestions of the Credit Committee, the final Appraisal Note is prepared and put up to the respective competent authority viz. Director(Finance), Director(Technical), Chairman and Managing Director, Committee of Directors and Board of Directors depending upon the quantum of loan assistance requested for the project. Once the project is sanctioned, the Loan amount is disbursed commensurate to the physical and financial progress of the project and the final 5% disbursement is released only after commissioning of the project."

3.9 The Committee have further been informed about the process of sanctioning of loan after receipt of application from the project developers which involves following steps:-

- (i) **“Internal Due Diligence:-** The complete due diligence of the project is made by IREDA technical team. This due diligence covers KYC, CIBIL Status of promoter, directors, financial statement of the applicant company/proposed guarantor of the company, net worth of the promoter/directors, source of bringing in promoter contribution and other technical parameters relating to specific sector.
- (ii) **Internal Credit Rating:-**The documents are sent to internal credit rating department for assessment of broadly three parameters namely promoters profile, project profile and state profile.
- (iii) **External Credit Rating:-**The borrowers are advised to get external rating from any of the 6 rating agencies registered with RBI/SEBI viz CRISIL, ICRA, India Rating, CARE, Brickwork and SAMERA. These agencies provide the rating of the project in IREDA module develop for RE project assessment. This rating module also assess the various parameters viz. project profile, promoter profile and state profile, status of contracts etc.
- (iv) **Credit Committee:-**After the aforesaid due diligence by the technical team the project proposal is put up before the credit committee for its

perusal and making further suggestion to strengthen the viability of the project/security structure.

- (v) **Final Approval:**-After the recommendation of the credit committee only the proposals are placed before the sanctioning authority viz. Director (Finance)/ Director(Technical) /Chairman & Managing Director/Committee of Directors/Board of Directors.”

3.10 Regarding steps which have been taken by IREDA to ensure timely sanction of loans. The Company submitted that :-

“As per the Service Standard in Citizen Charter of IREDA, response time from ARN to Sanction is 90 days and efforts are made to sanction the projects as per the above standards. Monthly Reviews at the level of Director (Technical) are also conducted to monitor the applications and take timely action.”

II. DISCRIPANCIES IN VARIOUS PROJECTS

3.11 During examination of the subject, the Committee observed that financial guidelines were not adhered to by IREDA in financing various renewable energy projects as pointed out by C&AG. From the information provided to the Committee noted deviations like exceeding credit exposure limits, non-creation of mortgage before disbursement, promoter’s contribution not brought in time, trust and retention account not created in some projects, longer repayment period permitted to some projects, required inspection not conducted and nominee directors/lender’s engineer not appointed in various projects. As pointed out by Audit in some of the projects the Committee found that deviations were within the limits and were needed at the time of sanction. But in some of the projects, the Committee too noted that the deviations were serious and should be addressed promptly. When the Company was asked about these deviations in various projects the following was submitted to the Committee:-

“Financing norms/guidelines of IREDA are only indicative for financing RE projects. As per project requirement, technology change and if there is a case for relaxing the same is considered by competent authority/BoD. Guidelines are reviewed/revised/modified from time to time in line with changing scenario. The deviations from the guidelines wherever considered are duly approved by the Board of Directors. The deviations are considered on project to project basis depending upon the credit worthiness and risk profile of the

project. As regards, observation of C&AG, the details with justification are indicated in **Annexure-I.**”

3.12 In agreement with CAG observations the Committee desired to know the reasons for sanction of loans before/without registration of the projects in violation of the laid down guidelines in case of Tata Power Company Limited and Maharashtra State Power Generation Company Limited and whether any responsibility was fixed for such violations, IREDA in their reply submitted as under :-

"The loan proposed to Tata Power Generation Company Limited by way of Line of Credit was first of its kind to grade-I customer and the registration process of application is an exercise to a lot a specific number for an application for the purpose of monitoring the process of sanction. Since, the proposal was a line of credit to Tata Power Generation Company Ltd, it did not fit into the normal registration norms and was not registered by the dealing official. However, IREDA had carried out complete due diligence of the proposals before going to the Board and the Board after deliberation had approved the sanction as well as the registration of the proposal. Similarly, the proposal of Maharashtra State Power Company Ltd also could not be registered in the normal process and the same was taken to Board for approval after complete due diligence. The Board had approved the proposal for sanction as well as registration after deliberation. The registration process has also been simplified and no such instance of sanction date being prior to registration is envisaged in future.

3.13 In case of M/s SCI India Ltd as observed by Audit, different conditions for obtaining security against the loan were imposed in the sanction letter and the loan agreement. IREDA raise objections even though Project Technical Sanction Department of IREDA recommended for disbursement of loan with proper justification. In this regard, IREDA had to submit that :-

"The Company could not create mortgage of the project assets as security and therefore, the borrower was not eligible for disbursement. Further, no disbursement was recommended, rather change in project parameters as observed during the pre-disbursement visit were examined. In the meantime the Company decided not to avail disbursement."

3.14 Further, Audit observed that IREDA exceeded its own exposure norms in cases of M/s Tata Power Company Limited and M/s Vaayu India Power Corporation Limited. In reply to Committee's query on this, the Company stated as below:-

"IREDA being a dedicated institution for financing RE Projects, the exposure limit were exceeded selectively for Grade I borrower as no risk of credit concentration was envisaged and this would help IREDA to increase its top and bottom line. The borrower is very regular in payment of IREDA dues. As on date the exposure is well within norms. Full and proper justification was provided for exceeding our exposure limit, sanction of loan. All the loans were approved after thorough due diligence. The exposure limit of Vaayu India Power Corporation as on date, is within the exposure norms of IREDA."

3.15 In another case also, the Committee observed that Audit had objected to issuance of NOC to M/s Venkateshwara Sponge & Power Private Limited without creation of additional security by them, though it was a co-financed project and Andhra Bank was able to recover more amount from the borrower than IREDA in spite of having a *pari passu* arrangement. In a written reply, IREDA submitted in this regard, as under:-

"the collateral security stipulated by IREDA has been mortgaged. As regard the NOC, for sale of induction furnace, it is stated that Andhra Bank is the main lender for the borrower company and they had also financed the power plant under *pari passu* arrangement with IREDA. Since the project implementation was delayed, the promoters have found a buyer for the induction unit which was financed by Andhra Bank so as to reduce the term loan liability of Andhra Bank. Due to *pari passu* arrangement with IREDA, Andhra Bank sought NOC from IREDA for sale of the unit. It was mutually agreed between IREDA and Andhra Bank to issue NOC upon payment of ₹3.5 crores to IREDA and remaining amount to Andhra Bank so as to facilitate Andhra Bank to release satisfaction of charge on the induction furnace in favour of the purchaser. In the same meeting, it was further agreed that Andhra Bank would sanction additional loan for completion of power project and the promoters will bring in additional contribution for completing the power project. Though Andhra Bank accorded in principle approval for sanction of additional loan of ₹ 5 crores subject to the condition that the same shall be disbursed upon bringing in equivalent promoter contribution by the promoters to complete the power plant. The promoter could bring in only ₹ 2 crores and deposited the same with Andhra Bank but due to their inability to bring further funds, no further release by Andhra Bank took place and the project remained unimplemented. Later the amount of ₹ 2

crores was proportionately distributed between Andhra Bank and IREDA and IREDA received ₹ 66 lakhs.”

3.16 IREDA further added that:-

“The borrower was in default with both Andhra Bank as well as IREDA and the accounts were NPA with both the institutions. Jointly, Andhra Bank and IREDA initiated action under SARFAESI Act and put the plant for auction to realize the dues of both the lenders. The plant was sold in 2012-13 and the sale proceeds were received in April, 2013 by Andhra Bank which were proportionately distributed among the two lenders and an amount of ₹ 28.47 crores was received in April, 2013 leaving an outstanding dues of ₹ 2.15 Crores which has been received. Later IREDA invoked the collateral security which was exclusively charged to it and initiated recovery proceeding before DRT, and IREDA realised balance outstanding amount against the loan without any sacrifice and concession.”

3.17 Regarding the discrepancies in case of Sri Vasavi Group, Audit had observed that IREDA allowed OTS even though the borrower was a wilful defaulter and net worth of the personal guarantor was not monitored periodically for ensuring security of the loan. Further the Committee desired to know if any action was taken by IREDA against the delinquent officials who wrongly apprised to the BOD that the 3 other companies of the group were regular in payment of dues. The Committee were surprised that how guarantee of a single person was accepted for five projects as pointed out by Audit, on this, IREDA submitted as under :-

"The subject borrower was classified as willful defaulter on account of non-implementation/partial implementation of the project out of the funds disbursed by IREDA. Therefore, no tangible assets were created so as to effect recovery from the assets of the project. After such default on the part of borrower, IREDA has initiated recovery proceedings in DRT as well as winding up petition in the High Court of Andhra Pradesh but in due course, the borrower approached for settlement of the dues by way of OTS. It was felt that recovery through legal recourse would not only be time consuming but may not result in recovery of full dues since the assets towards the project were not created by the borrower. Consequently, OTS was sanctioned strictly as per the guidelines of IREDA and the same was approved by the Competent Authority after the Settlement Advisory Committee (SAC) of IREDA in their meeting of September 2008 deliberated that in the interest of speedier recovery of principal amount and other charges from the loss assets, the OTS can be considered subject to approval of the BOD.

As far as the periodically monitoring of net worth of the personal guarantor, it is submitted that as per prevailing usual practice in any institution, the net worth of the personal guarantor, duly certified by a Chartered Accountant is obtained before disbursement and the same was also followed by IREDA in the instant case. In the present case, the personal guarantee of Shri G. Eswara Rao, promoter/director was accepted by IREDA for the loan sanctioned in five out of the above eight cases. As per the Chartered Accountant's Certificate, the personal guarantor was having the net worth of ₹ 16.55 Crores as on 31 March 1999."

3.18 On a specific objection raised by Audit regarding taking action against delinquent officials who wrongly apprised the Board about the irregularity of payment made by three companies, IREDA in their response submitted that :-

"...the first installments of all the three projects were due on 30 September 1999, however the BOD meeting was held on 17 September 1999 and there was no default rather no question of default arose because the due date did not approach by that time, therefore wrong information was not apprised by the officials of IREDA.

As per IREDA guidelines, personal guarantee is an additional security. Personal guarantee is being obtained to ensure involvement of promoter in the project. In the present case also, the personal guarantee of Shri G. Eswara Rao was obtained in five projects to ensure the involvement of promoter. Net worth of the guarantor was found positive at the time of accepting his personal guarantee. It is worth mentioning that the settlement proposal for all the loans availed by the group were moved by the guarantor only."

3.19 The Committee desired to know the reasons for financing a project by Sandur Manganese & Iron Ores Ltd. which was later referred to BIFR and what factors compelled IREDA to continue its financial association with this project. In this regard, the Company stated that :-

"During the implementation phase of the project when IREDA had already released part of the disbursement the Company eroded 50% of its net worth and was referred to BIFR as potentially sick company. If at that stage, an adverse decision not to disburse the loan had been taken, then the commissioning of the project would have jeopardized and it would have been possible that for a partly completed project the recovery of the part disbursement would have become completely remote. As may be seen that after commissioning of the project, a company already under BIFR, IREDA could realize an amount of ₹ 32.63 crores comprising of entire 100% principal outstanding and part interest. This situation might not be seen if IREDA had

stopped disbursing and allowing the commissioning of the project on account of reference of the company to the BIFR.”

III. MONITORING AND VIGILANCE OF THE SANCTIONED PROJECTS

3.20 When asked about the monitoring mechanism in the administrative Ministry of IREDA, if any, to ensure that norms are not violated during sanctioning of loans, the Company submitted as below :-

“The Ministry has appointed two Government Directors on the Board of IREDA to ensure the compliance of financial guidelines for sanctioning of loans under various renewable energy projects and other norms/guidelines formulated by IREDA to carry out its business.

In addition, a MoU is signed by the Ministry with IREDA on annual basis to evaluate its performance. The performance on the various parameters, fixed in the MoU, is monitored by Inter-Ministerial Committee (IMC) setup by the Department of Public Enterprises (DPE) in their MoU Evaluation Meetings and the company is rated according to its performance. In respect of IREDA, MNRE Directors are on the Board of IREDA as Government Nominees and therefore, proposals under the respective delegations are approved through the Board of Directors, Committee of Directors and Audit Committee. Review Meetings are conducted periodically by Secretary/Joint Secretary, MNRE on the performance of IREDA and also the policies/procedures adopted by IREDA in financing of projects.”

3.21 The Committee desired to know that whether any mechanism to periodically monitor the projects has been devised by IREDA in order to ensure safety of the financed assets and to monitor the financial health of the borrower, IREDA submitted as below :-

"IREDA officials visit the project site before sanction of project till commissioning of the project. Subsequent project visits are being done in the event of default in payment, non-operation of the plant, etc. IREDA has recently initiated the process of appointment/ empanelment of LE for monitoring of the project. LE shall be appointed for 1-2 years post commissioning of the project which can also be extended based on the requirements."

IV. ISSUE OF SUBSIDY

3.22 C&AG observed in Para 5.4 of their Report that out of 12 projects selected by Audit (from total of 123 projects) wherein capital/interest subsidy received (₹ 14.48

crore) by IREDA to the borrowers, in five cases several irregularities were noticed in implementation of subsidy schemes viz. continued passing on subsidy to borrowers who became ineligible, non-recovery of subsidy and absence of mechanisms to ensure continuity of the project. In this connection, the Committee desired to know the Steps which have been taken by the Ministry/IREDA to stop these irregularities. In their reply, the Company submitted that :-

“....in most of the programmes of the Ministry, wherein subsidy is being provided, there is an inbuilt mechanism of monitoring the physical and financial performance. Funds released for settlement of the projects is only after submission of correct monitoring report prepared by third party/ implementing agency who certify the eligibility of the users. Maintaining the system is responsibility of the user. Ministry on regular basis directs SNA for improvement in monitoring system. States are also maintaining project / system data. However, it is not functionally possible for States to maintain status of all the systems. For this purpose third party monitoring is being carried out to know the functionality on a regular basis.

Further, most of the programmes are being evaluated by independent organizations. On the basis of the evaluation report, the programmes will be further modified / strengthened. Observation of the various Audit reports will also be considered while modifying the programme.”

3.23 As observed by Audit, subsidy amount was not recovered from M/s Purti Sakhar Karkhana Limited and M/s Ind Barath Energies Limited in spite of their projects switching over to 100 per cent coal based operation against allowance of only 25 per cent prescribed in the subsidy scheme. The Committee desired to know why IREDA did not monitor periodically the fuel usage by the borrowers for generation of electricity and why guarantees of promoter directors were not encashed though the projects defaulted in repayments. In this regard, the Company submitted that "The terms and conditions which govern the recall of subsidy and the factual aspects in case of Purti Sakhar Karkhana Ltd are as under :

“In case project is not completed as per the time schedule or during the currency of the loan , or the project is abandoned for any reason whatsoever and / or the borrower commits default of the terms and conditions of the loan of FI including payment of dues and FI enforces security and file the application with Tribunal or the Courts for recovery of its dues in that event , the subsidy amount already disbursed to the borrower shall be refunded by

the borrower as if loan was sanctioned without interest subsidy and the Borrower shall pay the amount so acquired to FI for being refunded to MNES on demand and until refund / full payment , the subsidy amount shall carry interest , liquidated damages and other charges as mentioned in the Loan Agreement between the Borrower and FI and it will be treated as if no subsidy was required to be distributed to the Borrower and the loan attract the rate of interest as mentioned in the document (without subsidy)

(Clause No 5 (i) of MNRE letter bearing No. 12/17/2003-CPG dated 29th March 2004)

This condition was not invoked as the developer has not abandoned the project at any point of time and completed the same on 18 March 2007.

It was further added that the developer will continue to operate the bagasse based cogeneration project to the best of its capabilities , for a minimum of ten years after its competition , as per the parameters given I the application and DPR. In case of failure to do so, it will be liable to refund the entire amount of subsidy to MNES. The developer will also agree not to sell, gift, lease rent, transfer or dispose-off in any manner the project for which interest subsidy is being granted , for a period of ten years after commissioning. (Clause No 5 (v) of MNRE letter bearing No. 12/17/2003-CPG dated 29th March 2004)

The above condition was also not invoked as the security was not enforced and no recovery case was filed against the company before Tribunal or the Courts.

Further , as the company was not able to operate the cogeneration plant at the desired level of capacity due to inadequate sugarcane availability as well as other problems in the plant , they took the approval from the Regulator vide order 6th January, 2009 for keeping the PPA in abeyance due to inadequate bagasse availability . MERC , the regulator in this order upheld that the Energy Purchase Agreement (EPA) dated 2 September, 2002 would only operate if the Cogeneration power plant uses non-fossil fuel and if the non-fossil fuel is not available , then the EPA would cease to operate / suspended till the time bagasse is available for 240 days/ annum. Further , the regulator in its order dated 6th January, 2009 was of the view that not only due to investment put into establishment of the plant but also because of shortage of power in the state, it would be rather imperative to ensure that the plant does not come to a standstill and the plant remains in operation.”

3.24 It was further added that:-

“Foregoing paragraph of MERC Order suggests that the Company was not able to operate the bagasse cogeneration plant due to inadequate availability of bagasse and it had brought out the facts to the notice of the regulator who allowed the EPA to be kept in abeyance with a condition that

the same to be restored when the plant starts operating as non-fossil fuel based cogeneration plant.

Subsequently , the EPA was restored by MSEDCL vide order No CE(COMM)/ NCE/ Puri / 15370 dated 16May , 2011 and allowed the Company to sell the power to MSEDCL and limiting the use of fossil fuel by 15 % of total consumption on annual basis or as amended by MNRE time to time. MSEDCL order further stipulated that for non-compliance with the condition of fossil fuel usage by the Company during the financial year shall render the Company to be ineligible for preferential tariff from the date of default and for duration of default during such financial year when such default occurs. And the company shall continue to sell the power to MSEDCL at a rate lower by ₹ 0.50 / unit , during default period, below the preferential tariff determined by MERC time to time. This implies that MERC also acknowledges the fact of non-availability of bagasse and permitted them to run the plant on fossil fuel and sell power at non-preferential tariff keeping in view that the state is power deficit.

In view of the above , the Company neither abandoned the project nor the security was enforced by FI/Banks or by Tribunal and is running the project to the best of its capabilities. Therefore, keeping in view the spirit of terms / conditions of sanctioned subsidy, IREDA did not recall the subsidy.”

3.25 The Company further added that:-

“The State Nodal Agencies like MEDA etc., are designated by the SERCs to monitor the usage of fossil fuel / coal for non- fossil fuel/ biomass based power projects to monitor the usage of coal within the permissible limits. This is to check the misuse of preferential tariff offered to biomass/bagasse based power projects as determined by SERCs. Therefore, the DISCOMs procuring the power from non-fossil based cogeneration project at preferential tariff and the State Nodal Agencies have larger stake in ensuring the proper operation of these projects avoid mis-utilization of the preferential tariff. SNAs are also better placed to monitor the projects due to their proximity to the projects.

Therefore, the Company defaulted in repayment of dues IREDA did not enforced the securities / initiated actions under SARFAESI as in the meetings with the Borrowers, it was assured to regularize the account.”

3.26 As regards in case of recall of subsidy of M/s IndBarath Energies Limited, as per the directions of MNRE, IREDA had recalled the subsidy amount from the borrower. Though, the borrower pre-closed the entire outstanding of ₹ 10.17 crores in September, 2010, the IREDA loan was not fully adjusted and out of the remittance of ₹ 10.17 crores, ₹ 1.98 crore was earmarked/retained in lieu of recovery of interest subsidy and to that extent the balance was shown outstanding in the principal loan outstanding of IREDA. However, since the borrower has filed a writ petition in the High Court against

MNRE/IREDA for recalling of the interest subsidy, the said amount has not been refunded back to MNRE and kept separately for want of decision of the Hon'ble Court in this regard.

3.27 In the case of Bhagyanagar Solvent Extractions Private Limited, since the interest subsidy had already been converted into capital subsidy and the project was also commissioned, recall of the same was not resorted.

3.28 The Audit observed that 90 per cent of sanctioned subsidy was disbursed to M/s HCL Agro Power Limited though there was a condition that the last 20 per cent of the subsidy amount was to be disbursed after the project had operated for a minimum period of 30 days. Information provided by IREDA to Audit indicated that out of ₹ 4.20 crore of the capital subsidy received from MNRE, ₹ 3.78 crore was passed on to the borrower, but the balance amount was not refunded by IREDA to MNRE.

“The amount was released as per the recommendation of Project Monitoring Committee set up by MNRE. Further, last 10% of capital subsidy amount was also released as Bridge loan to facilitate completion of project.

Since IREDA had disbursed Bridge loan against last 10% of capital subsidy amount to facilitate commissioning of the project, at the time of closure of the Account the same was appropriated against capital subsidy. Hence, entire amount of ₹ 4.20 Crore being capital subsidy was disbursed to the borrower being capital subsidy, Hence no amount was left to be refunded to MNRE.

It is worth mentioning here that in the case of M/s HCL Agro Ltd. wherein capital subsidy was granted for first biomass demo project, MNRE has clearly clarified that capital subsidy is not to be recovered since the project is commissioned.”

CHAPTER IV

RECOVERY OF LOANS

4.1 The recovery of the loan due is a critical process and is equally important for a Financing Company to sustain in the long run. Audit in the Para 4.9 and 4.10, pointed out during 2008-09 to 2012-13, IREDA settled 29 cases under One Time Settlement, and recovered an amount of ₹ 208.85 crore against the outstanding dues of ₹ 446.70 crore. Further, out of the 17 OTS cases selected by Audit for scrutiny, it was observed that in 14 cases, IREDA deviated from the OTS/Financing guidelines by allowing OTS to willful defaulters, non-conducting of physical verification of projects, exceeding the prescribed limits while releasing disbursements inadequate monitoring of financial condition of borrowers, etc.

4.2 The number of projects settled under OTS under different sectors and the amount settled under the OTS scheme is given as under:

OTS projects under different sectors

Sector	Wind	Waste to Energy	Solar	Small Hydro	Co-generation	Briquetting	Biomass	Total
Number of Projects under OTS	10	3	4	2	3	4	3	29
Per cent of total OTS cases	35	10	14	7	10	14	10	100

Amount settled under OTS scheme

Total amount due (₹ in crore)				Total amount settled under OTS (₹ in crore)				Loss (₹ in lakh)	Percentage of loss
Principal	Interest	Other	Total	Principal	Interest	Other	Total		
1	2	3	4	5	6	7	8	9 (4-8)	10 (9/4*100)
181.17	222.40	43.13	446.70	173.17	35.34	0.34	208.85	237.85	53.25

4.3 It may be seen from the aforesaid statement that IREDA sacrificed more than half its due on account of OTS. Of this, ₹ eight crore was on account of principal, ₹ 187.06 crore on account of interest and ₹ 42.79 crore on account of other dues such as liquidated damages, incidental charges, etc.

4.4 In agreement with Audit observations the Committee asked the Company about not obtaining additional security while making further disbursements in case of repeated defaults in repayments by the borrowers and whether any policy /guidelines have been framed for recovery/adjustment of pending dues before further disbursement. In their reply the Company submitted that they follows a practice of adjusting the pending dues from the next disbursement for under-implementation projects by keeping in view of the IDC component and successful implementation of projects. In case, there is default by the Company, no further disbursements are released, therefore, there is no question of asking any additional securities.

4.5 The Audit observed that Trust and Retention Account was not periodically monitored by IREDA in case of M/s Purti Sakhar Karkhana Limited and loan amount was not recovered fully in spite of having first charge on the revenue earned by the sale of power. When asked by the Committee, the reason submitted by the Company were as below :-

“The sugar plant was not operational at its full capacity as a result adequate bagasse was not available to operate the cogeneration plant. Therefore, the borrower had to run the cogeneration plant by procuring biomass and other fuels. Therefore, the revenue generated from the project was used for payment of those other liabilities towards fuel etc. and part amount was paid to IREDA and other lenders. Due to the said reason, the TRA was not operational.

In view of commercially unviable operation of the plant, the settlement by way of infusion of funds by the borrower through a strategic investor was a commercially prudent option for IREDA in recovery from a Non Performing Asset, consequently the OTS sanctioned ensured recovery of 100 per cent of the principal outstanding and part recovery of the interest dues. (simple interest during the default period recovered fully).”

4.6 The Committee asked the reasons as observed by Audit for not forfeiting the personal guarantees/assets for default in repayment after reasonable time. The Company stated as below:-

“...technology in RE projects is always undergoing with continuous development and IREDA’s role is to finance and develop projects in RE sector. Therefore in order to promote the renewable energy sector, IREDA takes all corrective measures for the revival of project depending upon the condition of the projects. Once all the corrective steps are exhausted and revival of project is not found feasible, IREDA ultimately goes for recovery by taking legal recourse.

Generally, IREDA invoke personal guarantees in case of default in repayment soon after recovery proceedings start. Forfeiting of personal assets requires court’s intervention, and without exhausting recovery from principal securities it will be difficult to proceed to forfeit personal assets.

IREDA has filed various cases against the promoters of the company to forfeit personal assets and in some cases IREDA sold the property to recover dues with the permission from DRT.”

I. DEBT RECOVERY TRIBUNAL

4.7 When asked about the rate of recoveries in respect of various sanctioning authorities were ever analysed by the Ministry, in their reply Ministry stated that :-

“MNRE has two nominees on the Board of Directors of IREDA. All recovery matters are placed before the Board of Directors by way of a separate Board Agenda for review by the Board Members on regular basis. The Board itself analyses the rate of recovery from the loan sanctioned by all delegated authorities.”

4.8 When asked about the role and efficiency of DRT in recovery of loans sanctioned by IREDA and the procedure followed by IREDA in recovery of loans through DRT, the Company submitted as below :-

“DRT is a special Tribunal established under the Recovery of Debts Due to Banks and Financial Institutions Act, 1993, for expeditious adjudication and recovery of debts. The said act is aimed to counter the dilatory tactics adopted by the recalcitrant litigants. Under the Act DRTs are expected to give

final order within 06 months. However, the disposal of the cases in DRT are getting settled in 4/5 years. In view of the same the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002 has been promulgated. Under SARFAESI Act wherever securities are available the security can be enforced directly by the Banks & FIs without going to DRT. However, the aggrieved parties have right to file an Appeal before the DRTs. Though the special Tribunals are much better than the regular Civil Courts, it is seen that Appeals are allowed in DRTs without even directing to deposit the minimum amount and interim stay against the sale are issued. Thereafter, it is still taking long time for disposal of the interim order on merits. In one of the cases DRT, Hyderabad heard the matter thrice, however without passing the orders, The Ld Presiding Officer retired. Thereafter regular Presiding officer was appointed after about 2 years. This delayed the sale of the assets.”

II. WRITING OFF LOANS

4.9 From the material provided to the Committee it was observed that a number of loans have been written off by IREDA since 2001-02. Most of the written off cases pertain to the financial year 2013-14. When asked about the reasons for writing off loan of 10 Companies amounting to ₹ 95,27,56,513 loan during the period 2013-14, the Company submitted that :-

“The projects pertain to loan sanction and disbursed during the period from 1997-98 to 1999-00 in the biomass power, cogeneration sector and solar PV except one project in the wind sector. As per the prudential norms, 100% provisioning has already been made in the books. However, these projects were not in operation and the value of the security was depleting. Therefore, these projects were identified for technical write off in order to get the advantage of income tax as per the Income Tax Act, 1961.

However, in all such technical written off cases also, the recovery efforts are continuing in DRT/SARFAESI etc. The recovery affected against these loans shall be credited to P&L Statement as and when amount is recovered and at that time income tax is paid on the amount of written off loan recovered.”

4.10 The Committee desired to have a year-wise statement of the loans written-off by IREDA till date and their internal assessment that how much more would have to write off especially in view of the new insolvency and bankruptcy code. In their note provided to the Committee it was told that :-

“As stated earlier IREDA does not write off loans. However in respect of the cases which are categorized as loss assets as per prudential norms and

100% provision is created the same are technically written off from the books. All such cases which are technically written off are followed up for recovery by way of pursuing recovery proceeding before DRT, action initiated under SARFAESI Act, filing of cases U/s 138 of Negotiable Instrument Act, filing of cases for winding up of the companies in the Courts. The recovery affected through these mechanism is accounted for as and when made.

A statement containing loans technically written off as on 30 September, 2016 indicating the year of technically writing off the same is attached at **Annexure-II**.

4.11 Further the Committee asked about the conditions/guidelines for writing off loans and whether these writing off loans has effected IREDA's balance sheet in any way. In a written note the Company stated that FI/Banks follows the practice of technically writing off the loan where the projects are not in operation and 100% provisioning as per prudential norms is already made in the books and the legal action against the promoter/guarantor is continued. Therefore, at the time of taking decision for technical write off there is no impact on the balance sheet. The loans which are considered for technical write off are already classified as NPA (Loss Assets). The names of Promoters/Directors and guarantors are uploaded on CIBIL Website so as to bring to the notice of all FIs/ Banks about the default status of these accounts. No further loans are extended to these borrowers generally by any bank/FIs.

4.12 While tendering evidence before the Committee CMD, IREDA added that :-

“as far as question of return of loan is concern we are taking remedial measures. We have not exclusively done with ‘black list of defaulters’ but we are not giving loans to those companies”

III. NON PERFORMING ASSETS (NPAs)

4.13 As per Audit observation Para no 4.2 and 4.3 IREDA's NPA have come down over the years but the level still remains much higher in comparison to other power financing companies like REC and PFC. This may affect IREDA's credit rating and in turn its ability to raise low cost funds from the market. In this context, the Committee desired to know IREDA's NPA status since the last five years (**Annexure III**) and the

efforts taken to improve NPA status and credit ratings of the Company, IREDA, in their reply, stated that following measures have been adopted to minimize the NPA Cases:-

1. Regular & continuous follow up with stressed accounts,
2. Re-schedulement / restructuring of loans, in deserved cases,
3. NCEF Refinance Scheme for revival of Stressed Biomass and Hydro Projects,
4. Filing of criminal complaints under Section 138 of the Negotiable Instruments Act, 1881,
5. Action for recovery under the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interests (SARFAESI) Act, 2002,
6. Recovery through the Debts Recovery Tribunal (DRT),
7. Initiation of winding-up petition against defaulter companies and
8. Identification and declaration of wilful defaulters
9. Reporting the status of default on the CIBIL Portal.
10. Further, to strengthened the appraisal process the Company submitted as below :-
 - i. We now take credit rating of project from any of the rating agencies in addition to in house rating.
 - ii. Since the percentage of NPAs is more for small hydro, cogeneration and biomass sector, we have taken a decision not to take exposure higher than 50% in any of these sectors. In such cases, there would be joint financing , thereby strengthening the hands of lenders in such projects.
 - iii. The Companies comments on the Audit observation was as below :-

Our NPAs are still higher than NPAs in PFC and REC. The main reasons for this has been financing of Small Hydro, Biomass and Cogeneration projects where NPA levels are high because of various reasons i.e. inexperienced promoters, policy and regulatory issues, etc. However, NPAs in wind and Solar sector are 0.08% and 0% respectively which is 0.08% of total portfolio. Further, as indicated above we have taken measures to limit our exposure in small hydro, cogeneration and biomass sectors. This will further help us in reducing our NPA level."

4.14 It was observed from the Company's website that gross NPA of the Company which was ₹471.60 Crore on 31st September 2015 had gone up to ₹ 546.70 Crore on 31st September 2016. However, as on 31st March, 2015 IREDA had written off bad loans worth ₹ 40.57 Crore. The Committee were surprised to know that NPA of the Company is increasing even after writing off bad loans amounting to ₹ 40.57 Crore. When asked about these discrepancies, the Company submitted that :-

"The gross NPA as on 30 September 2015 was 471.60 Crore. As on 30 September 2016, the gross NPA was ₹ 554.67 Crore. These figures were based on half yearly limited results published for the half year ended 30 September 2016. The increase in gross NPA as on 30 September, 2016 *vis a vis*. September, 2015 is on account of addition of new NPAs in the biomass cogeneration sector and hydro power sector as on 31 March 2016.

As regards, write off of ₹ 40.57 crore, it is to inform that these loans were technically written off from the books as they were classified as loss assets against which 100% provisioning was made in earlier years. However, the recovery efforts for such technically written off loans are continuing in DRT/SARFAESI. The recovery affected against these loans shall be credited to P&L Statement as and when amount is recovered."

4.15 The Committee asked about the number of criminal complaints under Section 138 of the Negotiable Instruments Act, 1881 during the last 10 years i.e. from 2006-07 to 2015-16 (year-wise) specifying the outcome of the filing of the complaint in each case, in this regard the Company stated that 976 no. of cases have been listed in last years.

4.16 Regarding the exact amount of NPAs as on date in IREDA and measures which have been taken to reduce the level of NPAs other than through One Time Settlement (OTS) and provisioning/write off, the Company submitted that as on March 2016, there were 74 projects involving a total amount of ₹591.04 Crores were categorized as NPA.

IV. CRIMINAL COMPLAINTS FILED UNDER SECTION 138 OF NI

4.17 From the information given to the Committee, it was observed that a number of cases have been withdrawn after filing of the cases under section 138 of Negotiable Instrument Act (NIA). In this regard the Committee asked about the guidelines for filing

of criminal cases under section 138 of NIA. The Company stated that IREDA takes PDCs as security for the loan sanctioned. The PDCs are deposited when the borrower fails to repay quarterly dues to IREDA. IREDA files criminal cases under section 138 of NIA, in respect of PDCs returned unpaid from the bank. The due process of filing cases U/s 138 of NI Act such as 30 days notice to the borrower for making payment against the dishonored cheque etc. is strictly Adhered to.

4.18 It was further informed that the cases under section 138 of NIA are withdrawn upon payments of the amount of the PDCs along with the legal charges incurred on filing or in case a loan is restructured and restructured amount is paid by the borrower.

4.19 IREDA stated that during the particular year 2013-14, 119 no. of cases were withdrawn upon receiving of the cheque amount from the borrower along with legal charges or there was reschedulement of the concerned loan account(s). On a query regarding the cases that are over ten years old but not withdrawn, the Company stated that :-

“...yes, there are 114 nos. of Criminal cases which are pending for more than 10 years. Out of the same, 81 no. of cases were declared as Sine Die/ PO (Proclaimed Offender). The Court declares sine die in such cases where Court could not serve the notices. The court declares proclaimed offender in such cases wherein after issuing warrant of arrest no defendant could be traced. Thereafter the court declares the defendants as proclaimed offender under section 82 Cr. P. C. and the matter is remanded for sine die. In such cases as and when the defendants traced the matter thereafter be listed for regular hearing.”

4.20 In regard to One Time Settlement (OTS), when the Committee desired to know about the gain/loss to the Company in detail, the Company replied that one time settlement (OTS) saves lenders – banks and FIs from long drawn legal recovery process which results in further loss of inherent value of assets and waste of human resource in pursuing it. Further, the recovered amount is gainfully deployed in fresh projects.

4.21 The Committee noted that in the last 10 years, most of the recovery proceedings have been held during 2009-2010. When asked the reasons for the same the Company stated that:-

“IREDA had filed the recovery applications in the said projects in Debts Recovery Tribunal, Delhi. The filing of recovery applications was from the year 2001 onwards and after receiving of the dues IREDA had withdrawn the recovery cases in the year 2009-2010.”

CHAPTER V

CAPITALISZATION OF IREDA

5.1 In regard to the requirement of capital infusion in IREDA to create additional capacities to supply modern and sustainable energy services for all and the expected financial requirement, the Company stated that keeping in view the capital requirement the authorized share capital of IREDA was enhanced to ₹ 6000 Crore in 2014-15. The paid up capital of IREDA as on date is ₹ 784.60 Crore. Entire shareholding is presently held by Government of India. In June, 2015, MNRE has conferred Mini Ratna Status to IREDA as a result no fresh equity infusion by Government. of India shall be there. All operations of IREDA viz. lending as well as raising of resources depends upon its net worth. Therefore, keeping in view the enhanced target of Govt. of India for setting up renewable energy upto 175 GW by 2022, IREDA has also prepared its business plan for next five years projecting a market share upto 15%, it has been projected that IREDA shall raise its requisite equity capital through an IPO by June'2017. It is projected that a total amount of ₹1250 Crore shall be raised."

5.2 When the Committee enquired about whether increasing the share capital of IREDA from ₹1000 crore to ₹6000 crore is beneficial for the Company, the Company submitted that the increase in authorized share capital from ₹ 1000 Crore to ₹ 6000 crore is only an enabling provision. Its full benefit can accrue if it is capitalized to this extent."

5.3 During the evidence, on the issue, the CMD, IREDA stated as below:-

"Earlier management of IREDA believed that we can take more equity from the Govt. by increasing authorized share capital. Because the decision was taken so we increased the share capital from ₹ 1000 Crore to ₹ 6000 Crore. Government had issued one notification stating that all Companies should be listed. If our company has to be listed in the market we have to increase our equity to earn value, and to service that our cost will increase which is why I have requested to secretary not to give us equity as we will source it from the market. When we will go to the market we will get some premium and we will be able to service that. We had taken this decision, after the decision of

authorization was taken. At that time we believed that we should not do this because all Govt companies follow the principle that if they are profit making they should be listed. If we have to be listed then equity should be less for greater visibility and better servicing.”

5.4 IREDA has to play a major role in the promotion of renewable energy in the Country and for that IREDA has to expand its size that will need intensive capitalization. Considering that, MNRE has accorded its in-principal approval for raising of fresh equity upto 15% of the total paid up capital through initial public offer. The draft cabinet note for the said purpose has been moved and shortly the final cabinet note shall be placed before the cabinet committee for its approval and thereafter IREDA shall raise its further equity through the IPO Process.

5.5 During the evidence the Secretary, MNRE elaborated at length on the issue which is as under:-

“IREDA is a catalyst; we have to arrange 5-6 lakh crore for 100 GW, I want to tell the figures, approx loan of 1,38,220 Crore has been accepted by the banks out of which loan of ₹ 63000 crore has been disbursed. Role of IREDA is limited here; you rightly said that it is undercapitalized. It is being considered to increase the capitalization of IREDA. The borrowing capacity of the Company becomes restricted due to under capitalization as Company can borrow eight times of the worth. We are considering taking IREDA in public for share holding it may improve its capital base.

It is a capital intensive sector. We need lots of finance. IREDA has to play a major role and for that, IREDA has to expand its size for that, capitalization is required. So, I take that point as valid. We will work towards that. One option is to go to the public and the second option is to infuse more capital.”

5.6 The renewable energy sector is growing at a fast pace and has attracted competitors in the financing arena. These changes in the external environment have posed new challenges for IREDA. When the Committee desired to know the measures taken by IREDA/ Ministry to strengthen it, in a written note the Ministry submitted as below :-

"The Government of India has scaled-up the RE targets to 175 GW by the year 2022 which includes 100 GW from solar, 60 GW from wind, 10 GW from bio-power and 5 GW from small hydro-power. The authorized share capital of IREDA has already been increased to ₹ 6000 crore from ₹ 1000 crore. IREDA

has also been bestowed with “*Mini Ratna*” Status. To achieve this ambitious target, substantial investments in RE sector is required. IREDA, being the premier financial institution for RE sector, will be required to raise equity funds to leverage loan financing for RE Sector. In this regard, the Ministry is seeking approval of the Cabinet Committee on Economic Affairs (CCEA) for proposal of an Initial Public Offer (IPO) consisting of 13.90 crore equity shares of Rs.10 each aggregating to ₹139.00 crore (nominal share value) of IREDA through fresh issue of equity shares in the domestic market as per the Securities and Exchange Board of India (SEBI) Rules and Regulations. The Public issue of equity will enable IREDA to increase its equity base which will help them raise more debt resources for funding RE projects. Such public issue will also enable it to unlock its true value and size its visibility in domestic and international financial markets.”

I. AUTHORIZED CAPITAL VS. PAID UP CAPITAL/FINANCIAL PERFORMANCE

5.7 The Committee observed that the paid up share capital of IREDA is ₹ 784.60 cr. against an authorized capital of ₹ 6,000 crore. When asked about the reason for having a large authorized capital when paid up share capital is so low, the Company stated that:-

"In the 12th Five Year plan (2012-17) MNRE has recommended to increase IREDA's capital base by additional equity infusion of ₹ 5000 crore into the company through a combination of rights issue by Government and also the IPO Route. Further, MNRE has proposed to provide budgetary support of ₹ 2500 Crores concomitant to launching of IPO and rights issue by MNRE. Therefore, the Board in its 231st meeting held on 25th February, 2013 increased the authorized share capital from ₹ 1000 crore to ₹ 6000 crore.

Subsequently, IREDA has been conferred with the status of Mini Ratna Category-I company in June'2015 and therefore, no further capital infusion by Government of India will be made in IREDA. Further, Department of Investment and Public Asset Management (DIPAM) has advised IREDA for listing of its shares in stock exchange. Accordingly, IREDA has initiated necessary action for raising equity through IPO route and the same is expected in the year 2017-18."

5.8 When the Committee asked about the impact of decreasing capital adequacy ratio to the overall performance of the Company, the Company stated that :-

" the capital adequacy ratio at present worked out on conservative basis and as on 31.03.2017 the same will be worked out as per recent RBI norms. Further, the present CRAR is above the threshold limit of 15% set as per RBI.

There appears to be no threat of raising resources in the year 2017-18 also. In any case, in the year 2017-18 IREDA is also planning to raise the capital by way of IPO which will further improve the CRAR Ratio."

II. MINI-RATNA STATUS

5.9 IREDA was conferred Mini-Ratna status Category-1 in the year 2015. The benefits and liabilities associated with the status are as below:-

- a. As and when, IREDA proposes to go in for Initial Public Offer (IPO) for funding its future expansion, the status of "Mini Ratna" shall instill confidence in the investors and attract positive investment response.
- b. Morale boosting of existing employees while working in 'Mini Ratna' PSU.
- c. Can facilitate in future expansion by forming JVs and strategic alliances with partner organizations/ institutes.

5.10 Apart from the above, the following enhanced autonomy and delegation of Power will be available to IREDA being 'Mini Ratna' Company:

- a) IREDA shall have the Power to incur capital expenditure.
- b) IREDA can establish Joint Venture, Subsidiaries & Overseas Offices.
- c) IREDA can enter into Technology Joint Ventures & Strategic Alliances.
- d) The Board of IREDA shall have the powers for Merger & Acquisitions.
- e) IREDA Board of Directors shall have power to structure and implement schemes relating to personnel and human resource management, training, voluntary or compulsory retirement schemes, etc.

III. NBFCs VS. RBI REGULATIONS

5.11 Regarding the regulations these NBFCs follow, the Company stated that "as per Circular No. DNBR(PD) CC.No.043/03.10.119/2015-16 dated 01.07.2015, all Non-Banking Finance Company owned by Government of India not accepting public deposit are exempted from RBI Regulation. Board of Directors of such companies are required to frame their own Prudential norms with the concurrence of their administrative Ministry. Accordingly, the prudential norms as approved by Board are being followed by IREDA.

5.12 In this regard, RBI in their written note furnished to the Committee submitted that

“...in view of the role being played by Government companies in discharging social obligations, norms prescribed by their respective supervisory departments/ministries and to avoid dual control and regulation over them, the Bank had, in consultation with the Central Government, decided to grant them exemption from key regulatory provisions vide Notifications dated January 13, 2000 and October 1, 2002.”

5.13 It was further added that:

“On a review, it was noted that Government owned NBFCs, even if monitored by their respective ministries could pose high systemic risk on account of their significantly large balance sheets and their interconnectedness with the broader financial system. Further, their ability to impact financial markets and being recipients of large funds from the budgets, it was felt that there was a need to bring them within the Bank’s prudential norms framework, in addition to their being monitored by the respective ministries. It was therefore, proposed to bring all deposit taking and systemically important government owned companies under the provisions of the said Directions and as the first step in that direction these companies were advised to prepare a roadmap for compliance with the various provisions of the NBFC regulations, in consultation with the Government, and submit the same to the Reserve Bank. We have since received the roadmap from most of the companies and the Reserve Bank is now in the process of making the provisions of the said directions mandatory on the government owned companies.”

5.14 Further, the Committee enquired about whether the NBFCs like IREDA have any special advantage over these Companies that are regulated under RBI, the Company stated that:-

"Broadly IREDA is following all the prudential norms as prescribed by RBI for NBFCs from time to time except the policy of classification of non performing assets on non receipt of due payments after 120 days (applicable for the financial year 2016-17 for NBFCs). IREDA being an NBFC receive repayments every quarter and classify account an NPA on non receipt of payments for 2 quarters and classification of NPA is carried out at the end of financial year due to peculiar nature of renewable energy projects having seasonal operation. We follow RBI prudential norms for classification of NPAs as applicable to NBCs."

5.15 As per Audit observations(Para 3.8.1) IREDA treat itself as an infrastructure finance company without RBI's approval under which higher exposure limits are permitted. When the Committee enquired about this, the Company submitted that:-

"IREDA did not apply to RBI for infrastructure status as RBI norms permit additional exposure of 5% for the single borrower and 10% for the group borrowers over and above the limits prescribed by RBI for financing in the infrastructure projects. Since, RE sector falls in the definition of infrastructure sector, the exposure limit has been accordingly fixed with the approval of the Board. It is further to state that IREDA is financing in niche area of only RE sector therefore the exposure limits has been kept as stated above."

5.16 When the Committee desired to know from RBI that if IREDA had ever applied for being designated as infrastructure Company, RBI in their reply submitted that IREDA had applied for classifying itself as infrastructure finance company vide its letter no. Accts/26/NBFC/96-97/IREDA/VI dated March 12, 2010. IREDA is currently categorized as NBFC-non deposit accepting systematically important company.

CHAPTER VI

PROMOTION OF SOLAR ENERGY

6.1 The Committee have been informed that since the launch of National Solar Mission, IREDA's Solar Energy Portfolio has seen significant growth. As of 31st December, 2016, IREDA has sanctioned loans over ₹ 9900 crores in the Solar Energy Sector and corresponding disbursements in the sector is over ₹ 4200 crores. IREDA has supported 3862 MW (including joint/consortium financing). The Committee were informed that 34 solar parks in 21 States with an aggregate capacity of 20,000MW have been approved and are under various stages of implementation. In this regard the Committee desired to know the number of solar parks which have been completed and actually commissioned so far. In their reply, IREDA submitted that:-

“Based on the proposals received, till date, 34 solar parks of aggregate capacity 20,000 MW has been approved to 21 States. These Solar Park are at different stages of development. Project of 250 MW in Anantapuram solar park in Andhra Pradesh has been commissioned while others are in pipeline.

6.2 Regarding extension of solar parks in remaining States the Company stated that the Ministry of New and Renewable Energy has planned to increase the capacity of solar parks from 20,000 MW to 40,000 MW through setting up of more solar parks in the States. Proposal is under consideration. The major difficulties faced by the developers in commissioning of these solar parks, the Committee were informed that

“the major constraints being faced by the developers in commissioning of solar parks are land acquisition, evacuation infrastructure, conducive state policy for development of solar and business environment such as willingness of DISCOMS to purchase solar power, power evacuation infrastructure etc.”

6.3 In regard to support from the State Governments in respect of land acquisition, technological support etc. the Committee have been apprised that the State Governments do facilitate in providing land in solar park and solar projects. Role of State Governments is very important in solar power development. Conducive policies of State Governments are required to bring projects. They, however, need to align their policies to meet the national target.

6.4 Regarding the solar panels used in solar energy projects the Company submitted that the Solar panel being used in solar energy projects are a mix of imported solar panels as well as indigenously manufactured. Most of the imported panels are coming from China owing to its price advantage over manufacturers in other parts of the world.

I. INDIGENOUS MANUFACTURING OF SOLAR PANELS

6.5 The Committee have been apprised that manufacturing of solar panels in the Country by indigenous technology will substantially bring down the costs. When asked about the current initiatives taken in the matter, the Company stated as below:-

“Manufacturing of solar panels in the Country is taking place with indigenous as well as imported solar equipments and components. Cost of solar power has to be at grid parity in India to encourage DISCOMS buy solar power. India does not have enough manufacturing capacity currently for cells and modules to cover full demand. Therefore import of cells and modules is taking place. In order to bring down the cost of indigenous technology and use of domestic manufacture cells and modules and to boost indigenous production, the Government is encouraging solar manufacturers through the following schemes, where solar cells/modules are to be procured from indigenous manufacturer:

- (i) Setting up of 300 MW of grid connected and off grid solar PV projects by Defense establishments under Ministry of Defense and para military forces under Ministry of Home Affairs with Viability Gap Funding.
- (ii) Setting up of 1000 MW of grid connected solar PV power projects by Central Public Service Undertakings (CPSUs) and Government of India Organizations with Viability Gap Funding. Govt. is considering to enhance the target capacity of this scheme from 1000 MW to 8500 MW.

In addition, there is a provision for concessional Custom Duties and Excise Duty Exemption on input Raw Materials required for manufacturing of Cells and Modules in India.

This apart, Government is providing capital subsidy for setting up of manufacturing units for solar cells and modules and the entire value chain under modified especial incentive packing scheme (M-SHIP) of Ministry of Electronic and Information Technology (MEITY). BHEL has the manufacturing capacity of cells and modules of 105 MW and 226 MW respectively. At

present the Country does not have enough manufacturing of solar cells and modules and the situation may change in future.”

6.6 During the evidence, CMD, IREDA, further stated as below:-

“in solar energy we import 85% of solar panels, our manufacturing are not as competitive , they have reduced solar price aggressively, they have each plant of around 3000-4000 MW installed capacity but Indian manufacturers plants have total installed capacity as only 1500-2000 MW. China have 80% of world’s manufacturing capacity, they provide us low cost solar panels. We import from China, it is policy matter if you change it.”

II. SOLAR PANELS ON WATER BODIES

6.7 The Committee enquired from the Company whether they ever tried to exploit water bodies apparently available in different States like Bihar to develop renewable energy. In their reply the Company submitted that :-

“With the objective of achieving gainful utilisation of the unutilised area on top of canals and also the vacant land along the banks of canals wherever available, the Government of India has approved the implementation of a “Pilot-cum-Demonstration Project for Development of Grid-connected Solar PV Power Plants on Canal-banks and Canal-tops” under National Solar Mission (NSM) announced by the Government of India.

Based on the requests received from various States for allocation of canal-top/ canal-bank solar power projects under the “Pilot-cum-demonstration project for development of grid connected solar PV power plants on canal banks and canal tops”, In-Principle approval given for setting up full targeted capacity of 50 MW canal-top and 50 MW canal-bank solar PV power projects in the states of Andhra Pradesh, Gujarat, Kerala, Karnataka, Punjab, Uttarakhand, Uttar Pradesh, & West Bengal.

IREDA is financing the Solar projects being installed on Canal Banks and Canal Tops as applied by some of the developers.”

6.8 When asked if there were any harmful effects on installing solar panels over water bodies, IREDA clarified that world-wide, there have been quite a few installations of solar panels over water bodies like ponds, lakes, etc. However, it is still a novel concept for India as there have not been large scale solar PV installations over water bodies in India. No report indicating any harmful effect of

installing solar panels on the environment or water being unsafe for animals, birds, plants and human life, has come to notice.”

6.9 When asked about the norms to be followed by the general public for installation of solar-panels on their residence, the Company replied that:-

“Many of the States have their own policies in place and installation of solar panels by the general public on their residences is governed by the same and varies from state to state. The approximate cost of Solar Panel at this stage is around ₹ 50,000/- per Kw.”

6.10 Regarding the status of use of solar-panels for lighting the path on National and State highways, the Company replied that:-

“Ministry has supported 50 KM path from Deogarh to Baisukinath temple in Jharkhand with 5X100 KWp Solar Power Plants. The same model can be tried on State highways and National Highways. The cost involved will be roughly ₹1.5 lakh/kwp solar power plant. The plants will be at centralized location for better maintenance & safety.”

6.11 On the issue of life-span/durability of solar panels installed on roof tops of buildings and its cost-effectiveness when compared to electricity provided by the State Electricity Boards, IREDA clarified that:-

“The Life Span of Solar Panels is of 25 Years with a degradation of 10% at every 10 years. The power produced through solar panel is cost effective.”

6.12 When asked if Government has taken any measures to promote small borrowers and renewable energy projects on smaller units say on residential houses, the Company stated that apart from IREDA Loan, multilateral funding through World Bank and ADB has been sanctioned to SBI (State Bank of India) & PNB (Punjab National Bank) to promote rooftops in industrial, commercial, residential and social sector. Ministry also provides subsidy at the rate of 30% limited to benchmark cost to promote rooftops in residential sector.

6.13 National Institute of Solar Energy has assessed the State wise solar potential by taking 3% of the waste land area to be covered by Solar PV modules. The chart of State-wise solar potential and solar potential exploited as on 30.4.2017 is below:-

State-Wise Estimated Solar Energy Potential and Total Commissioned Capacity in the Country

Sl. No.	State/UT	Solar Potential (GWp) #	Total Commissioned Capacity (MW) as on 30/04/2017
1	Andhra Pradesh	38	1948.10
2	Arunachal Pradesh	9	0.27
3	Assam	14	11.78
4	Bihar	11	111.52
5	Chhattisgarh	18	128.86
6	Goa	1	0.71
7	Gujarat	36	1249.37
8	Haryana	5	81.40
9	Himachal Pradesh	34	0.73
10	Jammu & Kashmir	111	1.36
11	Jharkhand	18	23.27
12	Karnataka	25	1082.48
13	Kerala	6	74.20
14	Madhya Pradesh	62	857.04
15	Maharashtra	64	452.37
16	Manipur	11	0.03
17	Meghalaya	6	0.01
18	Mizoram	9	0.10
19	Nagaland	7	0.50
20	Odisha	26	79.42
21	Punjab	3	793.95
22	Rajasthan	142	1850.43
23	Sikkim	5	0.00
24	Tamil Nadu	18	1697.32
25	Telangana	20	1320.92
26	Tripura	2	5.09
27	Uttar Pradesh	23	336.73
28	Uttarakhand	17	233.49
29	West Bengal	6	26.14
30	Delhi	2	40.27
31	UTs , MoR, PSU	1	96.40*
TOTAL		750	12504.27

As assessed by National Institute of Solar Energy

(* includes A&N : 6.56 MW, Lakshadweep :0.75MW, Puducherry : 0.08MW, Chandigarh :17.32 MW, Daman & Diu : 10.46 MW, Dadar& Nagar 2.97 MW and Others/MoR/PSU : 58.31 MW)

6.14 In a query of the Committee whether solar panels to cover foot-over bridges at railway stations, metro stations can be used in place of metallic sheds, the Company stated that :-

“It can be tried however efficiency of such type of design will limit the efficiency of the solar modules. It was already tried on the parking sheds in many organizations with solar panels as a roof.”

III. SOLAR ROOF TOP PROGRAMME

6.15 From the material provided by the Company, the Committee observed that under Solar Rooftop Programme the capacity installed in certain States like Andhra Pradesh, Madhya Pradesh, Assam and Delhi is very low as compared to their installed capacity (in MWp) whereas in some States like Kerala, Karnataka and West Bengal installed capacity is higher than their sanctioned capacity. As per IREDA scheme, aggregate rooftop solar capacity financing is minimum 1 MW with smallest sub-project not less than 20 kW.

6.16 During the course of examination, one of the observations of the Committee regarding roof top solar system was that people who are going for roof top solar are not getting subsidy as per schedule. The Govt of India is releasing the subsidy on time but it is not going to the customers, who have gone for roof top solar. The other problem is people are not mentally prepared to spend Rs. 80000 per KW at one time.

6.17 Regarding subsidy being provided by the Government for installation of solar projects on residential houses on loans taken from IREDA, the Company submitted that:-

“The loans for solar roof top projects on residential houses are being provided by the banks only and these projects are categorized under priority sector lending and loans upto ₹ 10 Lacs are considered as part of home loans as per RBI Guidelines. However, the MNRE is facilitating the lines of credit from various multilateral/bilateral agencies at concessional guarantee fee. Ministry also provides subsidy at the rate of 30% limited to benchmark cost to promote rooftops in residential sector.

IREDA provides loan at the rate of 9.9% for industrial, commercial, residential and social sector through Line of Credit from KFW. The minimum size of the loan is 25 KW with combined project size should be 1 MW.”

CHAPTER VII
GENERAL ISSUES

I. MANPOWER

7.1 In order to achieve the objectives efficiently and in a time bound manner, the Company is giving significant thrust on strengthening and developing its human resources. As on date, the Company has total 152 employees. The Committee have informed that the Company's training and development policies are aligned with strategic objectives to enable the organization to implement strategic plans. The Company has been laying strong emphasis on attracting and acquiring best talent and also on efficient deployment of manpower on the right roles as per business requirements of the Company. The management is committed to create and nurture a work environment that attracts and inspires excellence and bring out the best while at the same time provide an opportunity to employees to contribute, grow and excel.

7.2 The sanctioned and actual manpower strength of the Company at present both at executive and the non-executive levels are as below :-

Category	Sanction	Actual
Executive*	154	125
Non executive	59	27
Total	213	152

*including 3 Board of Directors

It was further informed that recruitments shall be made depending upon the requirement based on the volume of the business of the company through campus and lateral recruitment in coming years. The last recruitment in the executive level has been made in October 2016.”

7.3 The Committee observed that Audit has raised objection on shortage of manpower, particularly in the executive cadre, that may hamper the efficiency of operations in the Company.

7.4 When asked about the action which has been taken by IREDA to meet the shortfall of persons in position as against the sanctioned strength, the Company informed that:-

“The IREDA has hired the services of ASCI, Hyderabad to study the organization structure of IREDA and suggest the changes required therein. Based on the said study, the Board of Directors in their meeting held on 27 February, 2015 has sanctioned the strength of IREDA to be 215 nos. in next five years. Accordingly, the action has been taken to recruit more people in the year 2015-16 and 2016-17 and the staff strength as on 31 March, 2017 is likely to reach 170 staff.”

II. ISSUE OF SMALL INVESTORS

7.5 The Committee observed that only 30 projects were sanctioned by Director (Technical) / Director (Finance) while 157 projects were sanctioned by the Board of Directors. Director (Technical) / Director (Finance) have the authority to sanction projects upto 2 crores while projects of over 70 crores can only be sanctioned by the Board of Director. This implies that projects valuing few amount are not received by IREDA. When asked about the reasons for people/firms with smaller projects not approaching IREDA, the Company replied that :-

“The cost of a typical 1 MW project varies from ₹ 5-6 crores/MW. However, Our minimum limit for loan is ₹ 50 lakhs as per financing norms therefore we are able to cover a very small requirement or size of project considering cost/MW.”

7.6 The Committee desired to know if small investors are being encouraged to install renewable energy projects or IREDA/MNRE have any plan of action in this regard, IREDA stated that :-

“As per IREDA financing norms, the applicants with loan requirement of minimum ₹ 50 Lacs and above are eligible to approach IREDA for financing requirement. Accordingly, IREDA is sanctioning loans to all sizes of the projects. However, since most of the current development activities involve large scale projects, therefore, large project developers are approaching IREDA more frequently.

Further, Ministry has introduced various Programmes such as, Solar Rooftop programme and decentralized off grid Solar PV Programmes for implementation of Solar Pumps, Lightening system, etc to attract small investors.”

7.7 Regarding the small developers during the evidence CMD, IREDA further added that :

“...now CSR funds are available, we can develop projects of small communities by these funds. We are financing smaller projects sometimes it takes time. Nobody can be rejected on the basis of coming first time or its small project. It does not happen.”

7.8 In a query regarding any impact on market share of IREDA in financing RE projects, the Company stated that :-

“It is creating a healthy competition; however, IREDA’s share has not come down. IREDA is maintaining 10-12% market share and there are lot of opportunities for Banks/FIs for financing RE projects.”

7.9 When asked about the major hurdles before the Government Companies in operating RE projects, IREDA stated that “there are no major hurdles in operating RE Projects. It is their business decision to take up RE projects. During RE Invest 2015, a commitment by way of green energy certificate of 19.56 GW capacity was submitted by 48 leading PSUs.

III. BIO-MASS POWER AND COGENERATION

7.10 Bio-mass sector is the highest contributor towards NPA of the Company and IREDA has taken policy decision in this regard. As bio-mass energy is carbon-neutral and has the potential to provide significant employment in the rural areas, the Committee wanted to know how IREDA/MNRE propose to lessen the number of its project turning into NPA. The Company replies that this would require (i) strengthening supply chain for fuel (ii) having some regulation on biomass (iii) two part tariff – fixed and variable cost tariff which many states have now adopted.

7.11 Bio-mass power and cogeneration programme are oriented towards promoting technologies for optimum use of Country’s bio-mass resources for grid power generation. The Committee wanted to know how Government/MNRE intends to achieve the objectives especially when IREDA has taken measures to limit their exposure in cogeneration and bio-mass sector. On this the Company replied that:-

“We have not reduced our exposure to the sector but only have taken a decision to restrict our exposure in individual projects upto 50% of project cost. Generally bank/FIs do not take full exposure in projects. Developers can avail balance 20% of project loan from other banks/FIs and 30% is required to be brought in as equity.”

7.12 The Committee desired to know the problems associated with development of bio-mass energy in the Country as it is a fact that most of the bio-mass projects contribute towards NPA as stated by the Company. The Company were asked to explain the reasons and steps which are being taken to improve the situation, the Company submitted as below:-

“Financial assistance in Biomass sector is clubbed with sensitive inherited risks like

- (a) Lack of regulatory policy framework for governing the price of raw material
- (b) Exponential escalation in price of raw material
- (c) Escalation of tariff was not commensurate with the hike in price of Biomass
- (d) Downward revision of tariff by DISCOMs in some cases despite entering into a PPA
- (e) Development of other industries like briquetting, brick kiln, paper industry and other process industries led to increase in demand of biomass, which affected availability of raw material and increase in cost of raw material/fuel.
- (f) Inexperienced or first time borrowers with lack of long term planning.

Most of the biomass power projects have been classified as NPA due to the problems/reasons as stated above. IREDA through NCEF funds of ₹200 crores is reviving the projects for upgradation to Standard Category. The accounts are being restructured/ rescheduled by way of converting part of the loan at nominal rate of 2% and providing longer repayment periods to ensure that viability of the projects improve.”

PART – II

OBSERVATIONS/ RECOMMENDATIONS OF THE COMMITTEE

1. Contribution of IREDA in Development of RE

IREDA, a GOI public finance institution established in 1987 under the Companies Act for financing RE and energy efficiency projects has so far approved financial assistance to 2382 clean energy projects supporting green capacity addition of more than 7525 MW, with loan commitment of ₹ 48,832 crore and disbursement of ₹27,790 crore, which has helped in supporting the growth of Renewable Energy sector in India. The Committee note that as per MNRE's Report on status of implementation of Green Energy commitments for financing of Renewable Energy Projects, IREDA is second leading NBFC in RE sector amongst the leading financial institutions in the Country in terms of total amount sanctioned and total amount disbursed during the period 15.2.2015 to 30.9.2016 after L&T Infrastructure Finance Company limited.

The Committee note that renewable energy installed capacity as on 31 December, 2016 was 50,068 MW and it is targeted to achieve 175 GW RE capacity by 2022. IREDA being Government re-financing agency has a greater role to play in this regard. While taking note of

the role and the contribution made by IREDA, the Committee feel that still a lot needs to be done particularly in view of the ambitious targets of 175 GW RE capacity by 2022. Not only that, in this era of competition, IREDA being a commercial entity and with other major private players in field, sustainable efforts are required by IREDA to maintain its position in the market. The Committee hope and trust that IREDA would take all the desired initiatives and emerge as a lead player in RE re-financing sector, thereby promoting the growth of renewable energy sector which would help in reduction of carbon emissions in the Country.

2. Market share of IREDA

The Committee note that as per the Audit Report, IREDA's share in the total commissioned capacity of RE which was 52.83 per cent at the beginning of the Tenth Five Year Plan (2002-07) period declined to 19.21 per cent at the end of the Tenth Five Year Plan and further to 7.66 per cent at the end of the Eleventh Five Year Plan. Thus, IREDA was not able to sustain its position as a leading financial institution in the renewable energy sector. MNRE, in the information furnished to the Committee, has given an altogether different perspective of IREDA's share in the total commissioned capacity, whereby it is

stated that IREDA's share at the beginning and end of 10th Five Year Plan was 25 per cent and 15 per cent respectively. Further, at the end of 11th Five Year Plan IREDA's share was 12 per cent. The Committee are not able to comprehend huge difference in the data given in the Audit Report and in the revised position furnished to the Committee. Even the revised position furnished to the Committee indicates decline in IREDA's share over the years.

When specifically asked for the reasons, IREDA has tried to justify by stating that they have been consistently making growth of around 23 per cent of CAGR in terms of absolute disbursement and sanctions. In one of the replies IREDA has stated that the agency was able to retain market share to about 12 per cent consistently and in the post evidence replies it is stated that IREDA is maintaining 10-12 per cent market share. The Committee find from the replies a sense of complacency on the part of IREDA. The Committee caution IREDA and would like the Company to continuously monitor its performance and take all the initiatives to maintain its share in the highly competitive market particularly when the private sector is taking keen interest in re-financing RE projects.

3. Discrepancies as pointed out by Audit

The Committee observe that the C&AG, in their Audit Report have pointed out some of the discrepancies on non-adherence of financial guidelines by IREDA in a number of projects. The discrepancies in this regard *inter-alia* include disbursing loan even without registration, exceeding credit exposure limits, non-creation of mortgage before disbursement, non-creation of trust and retention account in some projects, allowing longer repayment period in some projects advancing loan to the borrowers whose accounts have been closed due to NPA and non-conducting of inspection in some projects. Some instances as quoted by Audit are (i) projects of Tata Power Company Limited and Maharashtra State Power Generation Company Limited, the loans were sanctioned even without registration of the projects. In case of M/s SCI India Ltd as observed by Audit, different conditions for obtaining security against the loan were imposed in the sanction letter and the loan agreement; (ii) as per the Audit, IREDA exceeded its own exposure norms in cases of M/s Tata Power Company Limited, M/s Vaayu India Power Corporation Limited, IL&FS Wind Power Ltd. and Athena Damwe Power Limited. It was also noted that M/s Venkateshwra Sponge and Power Private

Limited were issued NOCs by IREDA without creation of additional security by them, even though it was a co-financed project and that Andhra Bank was able to recover more amount from the borrower than IREDA in spite of having a *pari passu* arrangement. IREDA has submitted to the Committee that their financing norms/guidelines are only indicative for financing RE projects. As per project requirement guidelines are reviewed/revised/modified from time to time in line with changing scenario and deviations from the guidelines, wherever considered, are duly approved by the Board of Directors. The Committee, however, are not convinced as to how even the basic requirements of a project can be waived off. They find that such irregularities/deviations, besides inviting Audit objections, affect the creditability of the PSU and may erode IREDA's standing in the RE sector. The Committee while taking serious note of these deviations would like to recommend to take due precautions while sanctioning loans.

4. Gaps in sanction, disbursement and recovery of loans

The Committee observe from the data furnished by the Ministry/IREDA that although the amount of loan sanctioned, disbursed and recoveries made has increased in absolute terms

during 12th Five Year Plan as compared to 11th Five Year Plan, the percentage of loan disbursed as compared to loan sanctioned has declined from 59 per cent to 53 per cent. Not only that the percentage of recovery as compared to loan disbursed which was 62 per cent during 11th Five Year Plan has declined considerably to 33 per cent. The Committee are concerned to note the aforesaid disturbing trends which clearly indicate the non-viability of the projects for which loans are being sanctioned by IREDA, as substantiated by the analysis of few projects pointed out by Audit and further examined by the Committee. The information furnished by the Ministry reveal that post sanction of loan a number of projects on which Audit made objections have been closed or disbursement not made thus making the whole process of sanctioning of loan futile. To quote specific instances in case of projects of (i) Shri Venkateswara Sponge and Power Pvt. Ltd.; (ii) Mahita Power Projects (P) Ltd. and (iii) Renew wind energy (Rajasthan) Pvt. Ltd., loan account stand closed. Besides in case of (i) Athena Damwe Power Ltd., (ii) Bhadragiri Power (P) Ltd. and (iii) Vaayu (India) Power Corporation (P) Ltd., no disbursement has been made. In another case relating to Enbee Infrastructure Ltd. the project was abandoned. The aforesaid analysis calls for a re-look

into the whole system of granting of loan by IREDA to various agencies. The Committee would like Ministry/IREDA to analyze the position project wise and apprise the Committee accordingly. Not only that, the PSU need to be very careful before sanctioning the loan to an entity so as to avoid such situations in future.

5. Recovery of the Loan

As per Para No. 4.9 and 4.10 of the C&AG Report during the year 2008-09 to 2012-13, IREDA settled 29 cases under One Time Settlement (OTS). So far as sector wise number of these 29 OTS cases is concerned, 10 related to wind, 4 each in solar and briquetting, 3 each in waste to energy, co-generation and biomass and 2 in small-hydro. In these 29 cases, the amount due for recovery on account of principal on interest, etc. was ₹ 446.70 crore, out of which recovery of ₹ 208.85 crore was made through OTS. Hence, IREDA sacrificed Rs. 237.85 crore, that is more than half its dues, on account of OTS, i.e. ₹ 8 crore on account of principal, ₹ 187.06 crore on account of interest and ₹ 42.79 crore on account of other dues such as liquidated damages, incidental charges, etc.

As per the Audit findings, out of 17 OTS cases selected by then for scrutiny, in 14 cases IREDA deviated from the OTS/financing guidelines. Such deviations include not conducting physical inspection before the release of interim loan, OTS even to the willful defaulters, etc. The examination of the Committee reveal that in many cases, interim disbursements were made multiple times to the parties without creation of mortgage. Not only that rescheduling of the projects was sanctioned at the interim disbursement stage. To mention a few instances viz. in case of M/s SreeSuryachandra Synergetic Pvt. Ltd, four interim disbursements were made and after third interim disbursement, reschedulement of the project was sanctioned. In case of M/s Purti Sakhar Karkhana Ltd, two interim disbursements were made; in another case M/s Jain Farms and Resorts Ltd. the disbursement was made without inspection of the project. In some of the cases, Trust and Retention Account was not created and additional security was not made in case of repeated default by the borrowers. Besides as pointed out by Audit, adequate mechanism was not there to assess the wealth of the guarantor independently.

In addition to above, the Committee find from the data furnished by Ministry/IREDA, that a number of projects after sanctioning of the loan are being abandoned. During the year 2014-15 out of 61 projects sanctioned by IREDA, only 20 projects could be commissioned and 18 projects were dropped. During the year 2015-16 there was some improvement with regard to the abandoned projects as the data indicate that 7 projects were abandoned. With regard to commissioned projects, the position worsened as against 108 sanctioned projects, only 34 were commissioned. The Committee conclude from the aforesaid scenario that the whole approach of IREDA in sanctioning loan is somewhat flawed.

To improve the situation, IREDA has stated that certain measures have been taken viz. adjustment of pending dues from the next disbursement for under implementation projects and evoking of personal guarantee which require court's intervention. The Committee observe that these steps are the last resort for the recovery of loan for a failed project. Most important on the part of IREDA is to put in place an effective mechanism for ascertaining the viability of the projects for which loans are sanctioned. Besides the system of relaxing of norms also need a review. The Committee, therefore, strongly

recommend that measures like OTS must be utilized sparingly and definitely not for willful defaulters. IREDA, being a financial institution, must follow the benchmarks of financial prudence and monitor performance of repayments so as to recall loans before those turn into NPAs.

6. Issue of Writing off Loans

From the information submitted by IREDA, the Committee note that since the year 2001-02, the Company has written off a huge amount of bad loans. For instance in the year 2003-04, the written off bad loan amount was ₹ 12.25 crore. In the years 2009-10 and 2011-12 it was ₹ 16.13 crore and ₹ 23.86 crore respectively and in the years 2013-14 and 2014-15, it was ₹ 95.27 crore and ₹ 40.56 crore respectively. The Company has stated that these loans were technically written off from the books as they were classified as loss assets against which 100% provisioning was made in earlier years. However, the recovery efforts for such technically written off loans are continuing in DRT/SARFAESI. The recovery affected against these loans shall be credited to P&L Statement as and when amount is recovered. The Company has also stated that these projects were not in operation and the value of the security was depleting and thus, were

identified for technical write off in order to get the advantage of income tax as per the Income Tax Act, 1961. The Committee note that the loans which were considered for technical write off, are already classified as NPA (Loss Assets). The names of Promoters/Directors and guarantors are uploaded on CIBIL Website so as to bring to the notice of all FIs/ Banks about the default status of these accounts and no further loans are extended to these borrowers generally by any bank/FIs.

The Committee are disheartened to note that IREDA is writing off huge amounts of loan and as the process is non transparent, it may lead to possibility of wrong-doings. Therefore, the Committee feel that as technical write-off creates non-transparency and destroys the credit risk management system, it must be done sparingly. The Committee expect that writing off should not develop as a regular practice in the Company and it should take strict action against the defaulters and exclusively blacklist defaulters so that no further loan is availed by them from any financing agency. The Committee in this regard would like to be apprised about the recovery made so far from the technically written off loans year-wise, so that an assessment on the impact of technically writing off the loans can be made.

7. Issues of NPA

As per the data furnished by Audit, the gross NPAs of IREDA to the total loans outstanding in 2008-09 was 13.34 *per cent* which thereafter showed a decreasing trend and reduced to 3.86 per cent in 2012-13, except in the year 2011-12 in which it increased marginally to 5.46 *per cent*. Further, as per the information furnished by the Ministry/IREDA, the gross NPA as on 30.09.2015 was ₹ 471.60 crore and as on 30.09.2016, the gross NPA was ₹ 554.67 crore. Audit has observed that the main reason for reduction in NPA from March 2013 to March 2015 was one time settlement (OTS) of NPA cases, upgradation to performing assets and write off of outstanding loans from the books of accounts.

The Committee have analyzed the issues related to OTS, write off and gaps between sanctions and disbursements in the preceding paras of the Report. While taking note of the strong observation of Audit, that reduction in NPA is due to OTS and write off outstanding loans, the Committee would like IREDA to specifically furnish the data of reduction in NPAs after excluding OTS/write off/upgradation to performing assets. The Committee are of the strong view that OTS/writing off should be sparingly resorted to and not for the

purpose of book keeping for improving the image of the Company. There is an urgent need to take initiatives to improve the recovery position and increase the capital base of the Company. For this, IREDA should further strengthen its internal control mechanism and closely monitor the outstanding loans to reduce the level of its NPAs.

8. Status of IREDA – applicability of RBI norms

It has been stated in the Audit Para that while scrutinising IREDA's application for categorising it as an infrastructure finance company, RBI noticed that it was exceeding the permissible exposure limits. RBI, therefore, directed (September 2010) IREDA to submit the time frame within which IREDA would comply with RBI norms of December 2006. The Ministry/IREDA has stated that IREDA did not apply to RBI for infrastructure Finance Company status. On a specific query as to whether IREDA had ever applied for being designated as Infrastructure Finance Company, RBI in the written reply has stated that IREDA had applied for classifying itself as IFC vide its letter no. Accts/26/NBFC/96-97/IREDA/VI dated March 12, 2010. The Committee are unable to comprehend how the Ministry/IREDA straight away denied applying to RBI regarding the infrastructure status even when Audit in the replies has categorically

mentioned about this and RBI in the replies specifically quoted the relevant letter no. and date. The Committee take strong objection to the way they have been misinformed about the position in this regard. They would like Ministry/IREDA to explain the position.

As stated by RBI, IREDA is currently categorized as NBFC-Non Deposit Accepting-Systemically Important Company. The Committee have been apprised that the exposure norms of RBI with respect to single borrower/group of borrowers do not apply to IREDA being a Government NBFC not accepting/holding public deposit in terms of RBI circular. As stated by the Ministry/ IREDA, IREDA's Board of Directors has approved the exposure norms for NBFC i.e. single borrower 15%+5% of net worth and for group borrowers 25%+10% of net worth. The Committee further note that as per the position indicated by the RBI, in view of the role being played by Government companies in discharging social obligations, norms prescribed by their respective supervisory Departments/Ministries and to avoid dual control and regulation over them, the Bank had, in consultation with the Central Government, decided to grant them exemption from key regulatory provisions vide Notifications dated January 13, 2000 and October 1, 2002. While appreciating the spirit of

the relaxations granted by RBI to NBFC, the Committee feel that these relaxations need to be exercised sparingly after due diligence and with proper justifications. In case of IREDA, Audit has pointed out that the prescribed credit exposure limit was exceeded in 29% of selected cases. Not only that IREDA exceeded its own relaxation norms, for example IREDA exceeded the exposure limit even to 56 per cent in case of M/s Tata Power Company Limited (Project No. 1838), as pointed out by Audit, besides deviations of various kinds made in 40 per cent of selected cases. Not only that, IREDA was operating an OTS scheme continuously without a fixed timeframe, which could promote a culture of non- payment, as rightly observed by Audit in its report. Above all, as observed in preceding paras of the report, many of the projects after interim disbursement were abandoned, the percentage of commissioned projects being only 31 per cent during 2015-16, thus serving little social obligations.

The Committee find that RBI is in the process of bringing all deposit taking systemically important Government owned companies under the provision of RBI's prudential norms framework, in view of the high systemic risk they can pose on account of their large balance sheets and their interconnectedness in the broader financial

system besides their ability to impact financial markets being recipients from the budgets. While taking note of the large scale relaxation being granted by IREDA as elaborated above, the Committee would like to recommend to consider bringing even the Non Deposit Accepting-systemically Important Companies too within the RBI's prudential norms framework on the same consideration, after due consultation with these Government NBFC's and concerned Ministries.

9. Discrepancies in subsidy schemes

Several irregularities have been pointed out by Audit in implementation of subsidy schemes viz. continued passing on subsidy to borrowers who became ineligible, non recovery of subsidy and absence of mechanism to ensure continuity of the project. The Company took the stand that in most of the programmes of the Ministry, wherein subsidy is being provided, there is an inbuilt mechanism of monitoring the physical and financial performance and therefore, it is the responsibility of the third party/implementing agency who certify the eligibility of the users. The Ministry on regular basis directs State Nodal Agencies for improvement in monitoring system. But in some cases as observed by Audit, subsidy amount

was not recovered, for instance from M/s Purti Sakhar Karkhana Limited and M/s IndBarath Energies Limited, where in spite of their projects switching over to 100 per cent coal based operation while only 25 per cent can be allowed, subsidy amount was not recovered as per the prescribed guidelines. The Committee also noticed that in the case of Bhagyanagar Solvent Extractions Private Limited, subsidy was not recalled. To substantiate its stand, IREDA has quoted several State orders to justify switching to 100% coal based operation against admissible limit of 25% as prescribed in the subsidy scheme. But, on the contrary, the Committee find that in the order of the Maharashtra Electricity Regulatory Commission (MERC), the regulator upheld that Energy Purchase Agreement (EPA) dated 02.09.2002 would only operate if the cogeneration power plant uses non-fossil fuel and if the non-fossil fuel is not available then the EPA would cease to operate or remain suspended till the time bagasse is available for 240 day/annum. However, due to shortage of power in the State later, MERC allowed it to happen.

The Committee feel that any dilution in implementation of subsidy scheme was uncalled for as the purpose of subsidy to generate electricity through renewable sources got defeated and

IREDA did not recover subsidy from the borrower when the plant switched over to use of fossil fuel. Similarly in the cases of M/s IndBarath Energies Limited, M/s GK Bio Energy Limited and M/s Bhagayanagar Solvent Extractions Private Limited, Audit observed that the subsidy was not called back by IREDA in spite of violations of terms and conditions governing the subsidy scheme. Even in some cases IREDA requested MNRE not to recall subsidy on the ground that the project has been commissioned. However, the Committee are of the considered opinion that these actions of the Company defeat the very purpose of the subsidy scheme. They agree with the Audit observation that IREDA needs to develop a mechanism to monitor continuity of the project for the specified period after their commencement to ensure electricity generation through RE project in lieu of Government subsidy. Further, subsidy should be recalled in all cases where projects do not run for the specified period as this dilutes the objective of the scheme. The Committee feel that there is an urgent need for taking a policy decision by IREDA/MNRE in this regard. The concrete action in this regard should be taken and the Committee apprised accordingly.

10. Monitoring and Vigilance of the sanctioned projects

The Committee have been apprised that IREDA officials visit the project site before sanction of the project, during its implementation and also after commissioning of the project. Subsequent project visits are also undertaken in the event of default of payment, non-operation of the plant etc. IREDA has also started appointing Lender's Engineer (LE) for monitoring of the projects. Appointment of LE for 1-2 years post commissioning of the project is reportedly being considered too which can be extended based on requirements. As regards the Ministry's monitoring mechanism, the Committee have been informed that the Ministry has appointed two Government nominee Directors on the Board of IREDA to ensure the compliance of financial guidelines for sanctioning of loans under various RE projects. Further, the performance on the various parameters fixed in the MoU, is monitored by Inter-Ministerial Committee set up by the DPE in their MoU evaluation meetings and the Company is rated according to its performance, along with review meetings that are conducted periodically by Secretary/Joint Secretary - MNRE on the performance of IREDA and also on the policies/procedures adopted by IREDA in financing of projects. However, despite the Ministry's

monitoring, discrepancies have been noticed by C&AG in the projects financed by IREDA. The Committee are, therefore, of the considered view that to prevent such discrepancies, there is a need to improve the efficacy of its internal Audit, ensure safety of the financial assets, monitor the financial health of the borrower, besides appointing LE to every project to keep a check on any deviations and to discourage any further non-compliance by the developers and the Company as well.

11. Manpower requirements

The Committee note that out of 213, total sanctioned strength (executive and non-executive), the actual manpower strength of the Company is only 152. The Company informed that based on the study of ASCI, which suggested to increase the manpower, the Board of Directors has sanctioned the strength as 215 and it will reach 170 at the end of March, 2017. Though Company targets to raise the number in next five years, the Committee are surprised to note that despite the Audit objections in the year 2012-13, the Company took four years to increase their workforce. The Committee further note that despite DPE instructions there is no independent Director on the Board of

IREDA and the Ministry of NRE are still in the process of appointing independent Directors on the Board of the Company.

In view of the above, the Committee infer that manpower constraints in IREDA may hamper its efficiency and operations of Company. The Committee, therefore, desire that the MNRE/IREDA should immediately initiate necessary action to fill up the vacant posts and appointment of Independent Director on the Board of the Company so that its performance is not adversely affected.

12. Increasing equity base of IREDA

The Committee note that keeping in view the capital requirement of the Company, the authorized share capital of IREDA was enhanced to ₹ 6000 Crore in 2014-15. The paid up capital of IREDA at present is ₹ 784.60 Crore. Due to Mini Ratna Status, IREDA is no longer eligible for any further equity infusion by the Government of India. Operations of IREDA viz. lending as well as raising of resources now depend upon its net worth. The Committee have been further informed that in view of the enhanced target of Government of India for setting up renewable energy upto 175 GW by 2022, IREDA has also prepared its business plan for next five years projecting a market share upto

15 per cent. Besides, IREDA was expected to raise its requisite equity capital to the extent of Rs. 1250 crore through an IPO. The Company has also submitted that increase in authorized share capital from ₹1000 Crore to ₹ 6000 crore is only an enabling provision, its full benefit can accrue if it is capitalized to that extent.

As stated by the Secretary during the course of deposition, to achieve 100 GW RE, there is a need for financing of Rs. five to six lakh crore. So far, Banks have sanctioned loan of Rs. 1,38,220 crore out of which Rs. 63,000 crore has been disbursed. The Committee are disappointed to note that IREDA's share in this regard was very less as stated by the Secretary, MNRE during the evidence. The Committee emphasize that IREDA being the main Government agency for refinancing the RE project, it has to play an important role for which IREDA need intensified capitalization, particularly when the Government has scaled up RE target to 175GW by 2022, for which substantial investments would be required. The Committee in this regard, would like IREDA to raise resources from market through IPO as projected by the Company, which would also enable it to unlock its true value and increase its visibility in domestic and international market. The Committee hope that the Government/MNRE would help

IREDA to capitalize intensively as IREDA has to play the major role in refinancing for the scaled up ambitious target for RE sector.

13. Research, Development and Demonstration in Renewable Energy Sector

The Committee are disappointed to note that the Country remains dependent on imported technology in RE Sector as indigenous technology has not moved ahead much. During the evidence, the Committee have been apprised by the Ministry/IREDA representatives that 85 per cent of the solar panels are still being imported from China as they are cheaper and technologically advanced.

So far as the efforts made by MNRE in Research and Development in RE Sector are concerned, the Committee find that Rs.584 crore has been spent on Research, Development and Demonstration as support for R&D projects to various R&D/academic institutions/industry in the area of solar thermal, SPV, Biogas, Wind, Biofuel by hydrogen and fuel cell; and to MNRE Institutes, namely, NISE and NIWE during the 12th Plan Period. Besides, MNRE has three dedicated Institutions as autonomous bodies for solar energy, wind energy and bio-energy which are functioning as research

demonstrations, standardization and testing centres. Alternate Hydro energy Centre at IIT Roorkee is also involved for testing and evaluation of small hydro power.

The Committee have also been apprised that the Ministry has also supported creation of a Centre of Excellence for innovation, incubation and entrepreneurship in the area of renewable energy at CIIE IIM Ahmedabad by providing/committing a grant-in-aid of Rs.24 Crore. CIIE IIM Ahmedabad through this grant has created Indian Fund for Sustainable Energy to support start up with innovative ideas besides providing them training and hand holding support.

The Committee firmly believe that the Country has scientific and technological potential to move forward in RE Sector for which more needs to be done in the field of Research and Development. There is no dearth of talent in the Country. The need of the hour is to encourage Research and Development in RE sector through our premier technological institutions like IITs. The Committee, therefore, are of the view that IREDA/Ministry has to work in the mission mode so as to encourage financing for Research and Development, particularly in RE Sector and financing for smaller project so as to ensure technologically competitive projects besides promoting use of

indigenous products through various policy decisions in RE Sector. The concrete initiatives as suggested may be taken and the Committee be apprised accordingly.

14. Financing of Start-Ups/Small Projects

The Committee are disappointed to note that IREDA is yet to start financing for start-ups which is apparent from the reply whereby it is stated that no start-up as borrower has approached IREDA so far. The Committee would like IREDA to analyse the factors due to which start-ups do not approach IREDA for financing.

The Committee further note that there is a great potential for small projects in hilly and North-Eastern areas. There is a need to tap the potential by the positive and favourable policies for financing the small projects. The Committee have been apprised that IREDA finances project loan as low as ₹ 50 lakh and finance solar project, with aggregate capacity of 1 MW and above and hydro projects of size lower than 1 MW. The Committee in this regard would like to be apprised about the year wise financing/loan advanced to smaller projects in various sectors viz. hydel, solar, wind, bio-mass etc.

The Committee are of the view that start-ups/small projects bring innovation to the field and renewable energy being the

emergent sector, there is an urgent need to have favourable policies with regard to financing start-ups/small projects. Besides there is a need for having simple procedures/formalities for financing particularly when start-ups/small entrepreneurs cannot afford chartered accountants / professionals for completing the formalities. IREDA being the exclusive Government financing agency for RE sector, need to act proactively and try to reach out to the start-ups/small entrepreneurs. Awareness about the financing of RE projects also need to be created.

15. Bio-mass co-generation

The Committee have been informed that lack of regulatory policy framework for governing the price of raw material, escalation of tariff not commensurating with the hike in price of Biomass, downward revision of tariff by DISCOMs in some cases despite entering into a PPA development of other industries and inexperienced or first time borrowers with lack of long term planning, bio-mass co-generation projects are the main reasons for loans sanctioned by IREDA for bio-mass co-generation plants turning into NPA.

The Committee are of the considered view that considering the importance of bio-mass cogeneration particularly their contribution to address the environmental concerns and tackling climate change and the significant employment they provide in rural areas, there is a need to encourage and incentivize this sector. IREDA/MNRE has to play a greater role by co-ordinating with State Governments, through policy intervention and integrating with schemes like MGNREGA so as to enhance the viability of bio-mass power plants particularly in the States having high bio-mass power potential. All the desired initiatives should be taken in this regard and the Committee be apprised accordingly.

16. OTHER ISSUES

The Committee during the course of examination besides considering the issues pertaining to IREDA particularly those raised in the Audit paras, also examined other matters related to renewable energy sector as a whole. The observations/ recommendations of the Committee in this regard are as follows :

(A) Sensitizing people's contribution towards environment

The Committee note that as part of creation and evacuation of renewable energy infrastructures, IREDA/MNRE is involved in Grid Connected solar roof top programme and the schemes / programmes of the MNRE are implemented all over the Country including rural areas. On analysis of the data on sanctioned and installed capacity as furnished to the Committee, it is observed that States like Andhra Pradesh, Assam, Delhi, Gujarat, Jharkhand, Madhya Pradesh, Maharashtra, Tamil Nadu, Telangana and Uttarakhand have achieved less than 30% of sanctioned capacity while States like Madhya Pradesh and Jharkhand have installed capacity of as low as 5% and 10% respectively. States like Kerala, Karnataka, Punjab, Uttar Pradesh, West Bengal and Bihar have installed capacity much higher than their sanctioned capacity. The Committee are concerned to note that States like Meghalaya, Nagaland, Sikkim, Bihar, Daman and Diu and Dadar-Nagar Haweli have zero sanctioned capacity. The Committee were astounded to note such high level variations in this programme. The Committee feel that as Government is providing subsidy for solar roof top programme it becomes imperative to monitor its implementation. India is one of the lowest per capita

consumers of electricity in the world. The Committee are disheartened to note that despite energy shortages and high cost of back up supply, roof-top solar PV systems have not yet become widespread in India. The Committee feel that this is primarily due to lack of adequate financing, unfamiliar technology and low consumer awareness. The Committee also note that there are various discrepancies in implementation of subsidy scheme, like non availability of subsidy to the needy people, prolonged delay in disbursement of the subsidy and no continuity in the scheme. Therefore, solar roof top programme has not achieved the desired level.

The Committee are of the view that aided by Government policy and cost effectiveness the solar roof-top programme has the potential to transform the renewable energy sector and promote ecologically sustainable growth while addressing India's energy security challenge. The Committee note that Government has full support of World Bank at international level too and a variety of financing mechanisms are available under this programme. Therefore, the Committee desire that Government should spread awareness about the scheme and impart required training to interested investors to

make them familiar with the technology. It will not only correspond to a major innovation for the roof-top market but also improve the investment climate for solar PV while addressing the much needed low cost power at individual level. At the same time, the Committee hope that, it will sensitize the public about climate change and the individual responsibility towards saving the environment.

(B) Installation of roof-top solar panel on residential premises

The Committee note that many of the States have their own policies in place, and installation of solar panels by the general public on their residences is governed by these policies which varies from State to State. The Committee have been apprised that the cost of a solar panel is approximately ₹ 50,000 per KW and that many private banks are open to providing loans to people for the same. However, people in general hesitate to spend huge amounts for solar roof top panels as the subsidy provided by the Ministry is not passed on to the people. The Committee see a good future in residential roof top programme of the Government and feel that the pressure on the discoms can be eased with more and more people using solar roof tops. But to achieve this, the Government has to spread awareness amongst people about the programme, the loan facility being

provided by the banks and the subsidy being provided by the Government.

(C) Promotion of roof top solar panels on Government, Industrial & commercial buildings, Railway Stations and foot over bridges of metro and railway station, etc.

The Committee note that solar panels are being installed on Government buildings to save power and make use of the land. The Committee have been informed that the life span of solar panels is of 25 years with a degradation of 10% every 10 years and the power produced through solar panel is cost effective. Besides, multilateral funding is also being provided through World Bank and ADB to promote rooftops in industrial, commercial, residential and social sector. Regarding installation of solar panels to cover foot-over bridges at railway stations, metro stations in place of metallic sheds, the Committee have been informed that the Government can try to install the solar panels but the efficiency of such type of design will limit the efficiency of the solar module. The model has already been tried on the parking sheds in many organisations with solar panels as a roof. While taking note of the cost effectiveness and longevity of the solar panels, the Committee recommend that the Government should encourage installing solar panels on roof top of Government,

industrial and commercial buildings including railway stations and bus stops. The Government should also encourage the State Governments, urban local bodies etc. to include installation of solar panels in their building bye-laws. The efficiency of solar panels already installed on parking sheds and foot-over bridges of rail and metro stations should be assessed and if found, should be implemented all over the Country.

(D) Installation of Solar panels on water bodies

The Committee have been informed that the Government of India has approved the implementation of a 'Pilot-cum-Demonstration project for Development of Grid-connected Solar PV power Plants on Canal-banks and Canal-tops' under National Solar Mission (NSM). On the basis of the request received from various States, in-principle approval has been given for setting-up full targeted capacity of 50 MW canal-top and 50 MW canal-bank solar PV power projects in the States of Andhra Pradesh, Gujarat, Kerala, Karnataka, Punjab, Uttarakhand, Uttar Pradesh and West Bengal. IREDA is financing the Solar Projects being installed on canal banks and canal tops as applied by some of the developers. The Committee have also been informed that there is no harmful effect of installing solar panels on canals either on the

environment or the water for consumption by animals, birds, plants and humans. The Committee note that although the concept of installing solar panels over water bodies is new in India, solar panels have been installed world-wide on water bodies like ponds, lakes etc. The Committee are of the view that this concept would help in saving electricity as there are a huge number of water bodies/lakes/canals in India some of which are major tourist attractions. The Committee recommend that Ministry and IREDA should sincerely work on this project and also give wide publicity on their website and print media to attract developers from various States. However, while installing the solar panels, care should be taken on preserving the ambience of those water bodies, which are major tourist attractions.

(E) *Installation of Solar panels on highways*

Regarding the use of solar-panels for lighting the path on National and State Highways, the Committee note that the MNRE has supported 50 km path from Deogarh to Basukinath temple in Jharkhand with 5 x 100 KWP solar power plant. The Government has proposed to try the same model on State and National Highways. The cost involved would be roughly ₹ 1.5 lakh per KWP solar power plant with centralised location for better maintenance and safety. The

Committee appreciate the initiative of the Government as solar panels on highways would prove to be cost effective in the long run in view of the vast network of National and State highways in the Country. The Committee emphasize that more State and National Highways should be covered and desire to be apprised of the progress on the same, the response received from NHAI and the State Governments on the matter as well as the future plans of MNRE.

(F) Exploiting of Wind Energy potential by various States

The Committee note that wind energy potential mainly exists in 8 to 9 States and most of these States are yet to exploit their full wind potential. Although MNRE has taken initiatives to exploit their energy, the desired targets have not been achieved. Delay in land allotment, obtaining clearance especially of forest land, non-development of accurate forecasting and scheduling system, delay in payment to wind power generators, 'most-run' status not being complied with, breaking down of wind power generators, etc. have been cited as some of the major factors in non-achievement of targets in the wind energy sector by the developers and the States. The Committee find that State Governments have not provided enough support to deal with the problems of developers especially in allotment of land and

the required clearances which are the main reasons for delay in initiating the projects.

The Committee note that apart from other useful initiatives, the Government is establishing Renewable Energy Management Centres(REMCs) at 11 locations in renewable resource rich States. The Committee, however find that not even a single REMC has been established as yet. The Committee recommend expediting establishment of REMCs that would be of great help in advanced forecasting, dispatching solutions & real time monitoring of RE generation to closely coordinate with the Grid Operations. The Committee also recommend the Government to bring out a comprehensive policy for taking care of all concerns of wind energy developers at the earliest that is coherent across all States in India. The policy should not only focus on reducing cost but also on reducing risk of installing wind projects.

(G) Avoiding installation of second -hand Wind units

The Committee are happy to note that 70 percent indigenization has been achieved by manufacturers of Wind Energy Units. However, instances have been reported as apprised to the Committee regarding installation of second-hand wind energy units as new units in India

which were earlier closed down in other Countries. Shockingly, neither IREDA nor officials of MNRE are aware of such installations. The Committee express their apprehension that such installations are taking place without the knowledge of MNRE and IREDA. Now when things have been brought into the knowledge of IREDA/Ministry, it is expected that such activities would stop and the Government will promote indigenization and installation of new wind units. The Committee also recommend expediting replacement of large turbines in place of smaller turbines so that capacity (potential of wind energy) could be increased.

**New Delhi;
6 February, 2018
17 Magha, 1939 (S)**

**SHANTA KUMAR
Chairperson,
Committee on Public Undertakings.**

APPENDIX I

MINUTES OF THE FOURTEENTH SITTING OF THE COMMITTEE ON PUBLIC UNDERTAKINGS (2016-17)

The Committee sat on Tuesday, the 8th November, 2016 from 1100 hrs. to 1245 hrs in Committee Room 'G-074' Ground Floor, Parliament Library Building, New Delhi.

PRESENT

Shri Tapan Kumar Sen - *(in the Chair)*

MEMBERS

Lok Sabha

2. Shri Lal Krishna Advani
3. Shri Kristappa Nimmala
4. Shri Prahlad Patel
5. Shri Shivaji A. Patil
6. Shri Ajay Nishad
7. Shri Ram Sinh Rathwa
8. Shri Narendra Keshav Sawaikar
9. Shri Rameshwar Teli

Rajya Sabha

10. Shri Narendra Budania
11. Shri Ram Narain Dudi
12. Shri Naresh Gujral
13. Shri Praful Patel

SECRETARIAT

- | | | |
|----|---------------------|------------------|
| 1. | Smt. Sudesh Luthra | Joint Secretary |
| 2. | Smt. Anita B. Panda | Director |
| 3. | Shri G.C. Prasad | Deputy Secretary |

OFFICE OF C&AG

1. Shri Rakesh Jain Dy. C&AG
2. Shri L. S. Singh Principal Director (RC)

In the absence of the Hon'ble Chairperson, the Committee chose Shri Tapan Kumar Sen, Member of the Committee, to chair the sitting in terms of rule 258(3) of the Rules of Procedure & Conduct of Business in Lok Sabha. The Hon'ble Chairperson welcomed the members and the officers of C&AG of India and brought to their notice the provision regarding Direction 55(1) of "Directions by the Speaker" regarding confidentiality of evidence tendered before the Parliamentary Committees.

2. Then, the officials of C&AG made a power point presentation with respect to Performance Audit Report No. 12 of 2015 on "Financing of Renewable Energy Projects by Indian Renewable Energy Development Agency Limited". In their presentation, the officers of C&AG informed the Committee that during the period of audit i.e. 2008-2013, more than 200 projects were financed by IREDA and in respect of 17 cases, norms were deviated. They also highlighted various issues which included shortfall in the renewable energy capacity, fixing of realistic targets in line with the corporate plan of IREDA, violation of guidelines in registration of different projects, status of IREDA as infrastructure finance company without RBI's approval and discrepancies in sanction and disbursement of loans to various agencies. The presentation also touched upon the issue of Non-Performing Assets of the Company, absence of internal control mechanism in case of repeated defaults in repayments by the borrowers, vigilance and monitoring of the projects by IREDA and reasons for the discrepancies in the PIDMOS data and actual figures as per the balance sheet of IREDA. Pointing out the inadequacies in various projects of IREDA noticed by them, the C&AG officers highlighted the issue of subsidy in defaulted projects sanctioned by the Company and role of private sector in creating additional capacity of renewable energy in the Country. The C&AG officers also informed the Committee about non-receipt of action taken replies on the audit observations from the Ministry concerned.

APPENDIX II

MINUTES OF THE SIXTEENTH SITTING OF THE COMMITTEE ON PUBLIC UNDERTAKINGS (2016-2017)

The Committee sat on Monday, the 9th January 2017 from 1100 hrs to 1215 hrs in Committee Room 'E', Basement, Parliament House Annexe, New Delhi.

PRESENT

Shri Shanta Kumar - Chairperson

MEMBERS

Lok Sabha

2. Shri Lal Krishna Advani
3. Shri Ramesh Bais
4. Shri Kristappa Nimmala
5. Shri Prahlad Singh Patel
6. Shri Ajay Nishad
7. Shri Rameshwar Teli

Rajya Sabha

8. Shri Narendra Budania
9. Shri Ram Narain Dudi
10. Shri Naresh Gujral
11. Shri Praful Patel
12. Shri Ram Chandra Prasad Singh

SECRETARIAT

1. Smt. Sudesh Luthra Joint Secretary
2. Smt. Anita B. Panda Director
3. Shri G.C. Prasad Deputy Secretary

OFFICE OF C&AG

1. Shri Rakesh Jain Dy. C&AG
2. Shri L. S. Singh Principal Director (RC)

REPRESENTATIVES OF INDIAN RENEWABLE ENERGY DEVELOPMENT AGENCY LIMITED (IREDA)

1. Shri K.S. Popli CMD
2. Shri S.K. Bhargava Director (Finance)
3. Shri B.V. Rao Director (Technical)

2. At the outset, the Chairperson welcomed the members to the sitting of the Committee and informed them about the two agenda items to be considered by the Committee, i.e. (i) adoption of an action taken report and (ii) oral evidence of representatives of Indian Renewable Energy Development Agency Limited (IREDA) in connection with the examination of the subject 'Financing of Renewable Energy Projects by Indian Renewable Energy Agency Limited (IREDA) based on Performance Audit Report No. 12 of 2015'.

3. *****

(The representatives of IREDA were then ushered in)

4. The Hon'ble Chairperson welcomed the representatives of IREDA and brought to their notice the provision contained in Direction 55(1) of "Directions by the Speaker" regarding confidentiality of proceedings of the Parliamentary Committees.

5. Then, the representatives of IREDA made a power point presentation with regard to IREDA's mandate and financing of Renewable Energy projects by them. In their presentation, CMD, IREDA informed the Committee about the Mini Ratna Status of the

Company conferred in 2015 and an increase in the market share of the Company to the tune of 15% now. Different operational areas of IREDA, broad lending norms, renewable energy potential and targets, MoU targets vs. achievements of the Company, IREDA's share in RE sector in the Country's resource base, measures taken for further improving their market share, monitoring of different projects financed by them, status of NPA and measures adopted to minimize it and the Company's loan portfolio were also explained.

6. After the presentation, the members of the Committee sought clarifications on various issues related to the subject which *inter alia* included the status of IREDA as an infrastructure Finance Company as per RBI norms, possible reasons for limited participation of Government Companies in the RE sector, use of imported technology vs. indigenous technology, commissioning of solar parks in various States, possibilities of developing renewable energy resources and role of IREDA in bringing renewable Energy into mainstream, etc. Certain other issues raised by the Members were decreasing capital adequacy ratio of the Company and the efforts being made to improve this ratio, reasons behind the large authorized Capital of the Company against paid up share capital, writing off bad loans, impact on recovery due to new provisions contained in the Insolvency and Bankruptcy Code, increase in gross NPAs of the Company, etc. The Committee also strongly advocated the need to support manufacturing of indigenous solar panels so as to minimize imports as well as the need to give small entrepreneurs and investors opportunities in the field of renewable energy. The representatives of IREDA responded to the queries in detail. In respect of points for which information was not readily available, the Chairperson directed that written replies may be furnished to the Secretariat within fifteen days.

A verbatim record of the proceedings has been kept.

[The Committee then adjourned].

APPENDIX III

MINUTES OF THE SEVENTEENTH SITTING OF THE COMMITTEE ON PUBLIC UNDERTAKINGS (2016-2017)

The Committee sat on Wednesday, the 15th March 2017 from 1500 hrs to 1650 hrs in Committee Room 'B', Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

Shri Shanta Kumar - Chairperson

MEMBERS

Lok Sabha

2. Shri Ramesh Bais
3. Dr. Kambhampati Hari Babu
4. Shri Shivaji A. Patil
5. Shri Narendra Keshav Sawaikar
6. Shri Kalikesh Narayan Singh Deo
7. Shri Rameshwar Teli

Rajya Sabha

8. Shri Narendra Budania
9. Shri Ram Narain Dudi
10. Shri A. K. Selvaraj

SECRETARIAT

1. Smt. Sudesh Luthra Additional Secretary
2. Smt. Anita B. Panda Director
3. Shri G.C. Prasad Deputy Secretary

OFFICE OF C&AG

1. Shri Rakesh Jain Dy. C&AG
2. Shri L. S. Singh Principal Director (RC)

REPRESENTATIVES OF INDIAN RENEWABLE ENERGY DEVELOPMENT AGENCY LIMITED (IREDA)

1. Shri K.S. Popli CMD
2. Shri S.K. Bhargava Director (Finance)

2. At the outset, the Chairperson welcomed the members to the sitting of the Committee and informed them about the two agenda items i.e. (i) adoption of the draft report on the subject 'Housing and Urban Development Corporation (HUDCO)' and (ii) oral evidence of representatives of Ministry of New and Renewable Energy in connection with the examination of the subject 'Financing of Renewable Energy Projects by Indian Renewable Energy Agency Limited (IREDA) based on Performance Audit Report No. 12 of 2015)'.

3. *****

(The representatives of Ministry of New and Renewable Energy were then ushered in)

4. The Hon'ble Chairperson welcomed the representatives of Ministry of New and Renewable Energy and brought to their notice the provision contained in Direction 55(1) of "Directions by the Speaker" regarding confidentiality of proceedings of the Parliamentary Committees.

5. Thereafter, the representatives of Ministry of New and Renewable Energy briefed the Committee on broad areas of the functioning of Ministry of New and Renewable Energy including emerging issues with positive developments in the field of renewable energy. The officials from IREDA then made a power point presentation with regard to estimated potential of renewable energy, all India installed capacity targets in renewable

energy sector and the achievement as on 28.02.2017, progress in off-grid solar power covering devices like solar lanterns and pumps, stand alone solar power plants and Mini/Micro grids, IREDA's MOU target vs achievement in the last three years etc. The presentation also included present status of IREDA's financial performance, PAT, NPA, major reasons for account becoming NPA and steps taken for their reduction and exposure norms of IREDA.

6. After the presentation, the members of the Committee sought clarifications on various issues related to the subject which *inter alia* included reasons for huge gap between the amount of loan sanctioned and the amount of loan disbursed and writing off bad loans, difficulties in achieving target of 16600 MW of renewable energy in the current year, reasons attributed for withdrawing a large number of criminal cases under Section 138 of NIA, RBI exposure norms applicable on IREDA as a non-banking finance Company and the additional norms approved by their Board of Directors, irregularities in implementation of subsidy schemes, start-ups/ small investors in the renewable energy projects as financed/supported by IREDA and land acquisition for solar parks in various States. Certain other issues raised by the Members were decreasing capital adequacy ratio of the Company and the efforts being made to improve this ratio, large authorized capital of the Company against paid up share capital, difficulties in exploiting wind energy, land and transmission problems in RE sector and bringing RE into centralised grid system. The representatives of MNRE responded to the queries in detail. In respect of points for which information was not readily available, the Chairperson directed that written replies may be furnished to the Secretariat within fifteen days.

The witnesses then withdrew.

(A verbatim record of the proceedings has been kept.)

The Committee then adjourned.

APPENDIX IV

MINUTES OF THE EIGHTEENTH SITTING OF THE COMMITTEE ON PUBLIC UNDERTAKINGS (2017-18)

The Committee sat on Wednesday, the 24 January, 2018 from 1105 hours to 1320 hours in Committee Room No. 3, Block A, Parliament House Annexe Extension Building, New Delhi.

PRESENT

Shri Shanta Kumar - Chairperson

MEMBERS

Lok Sabha

2. Shri Lal Krishna Advani
3. Shri G. Hari
4. Dr. Hari Babu Kambhampati
5. Shri Kristappa Nimmala
6. Shri Ajay Nishad
7. Shri Prahlad Singh Patel
8. Prof. Saugata Roy
9. Shri Rameswar Teli

Rajya Sabha

10. Shri Shamsher Singh Manhas
11. Shri Naresh Gujral

SECRETARIAT

1. Smt. Sudesh Luthra Additional Secretary
2. Smt. Anita B. Panda Director
3. Shri G.C. Prasad Deputy Secretary

REPRESENTATIVES OF C&AG

1. Shri Ranjan Kumar Ghose Deputy CAG
2. Shri Manoj Sahay Principal Director (AB)

REPRESENTATIVES OF DEPARTMENT OF FERTILIZERS

3. Ms. Bharathi Sivaswami Sihag Secretary
4. Shri Dharam Pal Additional Secretary
5. Shri S.K. Lohani Joint Secretary (Fertilizer) and CMD (FACT)
6. Shri A.B. Khare CMD (MFL)

REPRESENTATIVES OF DEPARTMENT OF PHARMACEUTICALS

7. Shri Jai Priye Prakash Secretary
8. Ms. Meenakshi Gupta Additional Secretary & FA

2. At the outset, the Chairperson welcomed the members to the sitting of the Committee and informed them about the three agenda items i.e. (i) adoption of the draft report on the on the subject 'Financing of Renewable Energy Projects by Indian Renewable Energy development Agency Limited (Based on Performance Audit Report No. 12 of 2015) (ii) Oral evidence of the representatives of Ministry of Chemicals and Fertilizers (Department of Fertilizers) in connection with examination of the subject "Review of Loss Making CPSUs" with specific reference to Fertilizers & Chemicals Travancore Limited (FACT) and (iii) Oral evidence of the representatives of Ministry of Chemicals and Fertilizers (Department of Pharmaceuticals) in connection with

9. *** *** *** ***
10. *** *** *** ***
11. *** *** *** ***

(The witnesses then withdrew).

*A verbatim record of the proceedings has been kept separately.
The Committee then adjourned.*

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