

Environment and Social Due Diligence Report

August 2017

IND: Clean Energy Finance Investment Program –Orange Anantapur Wind Power Pvt. Ltd.

Prepared by

Indian Renewable Energy Development Agency for the Asian Development Bank

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**DUE DILIGENCE REPORT
ON
ENVIRONMENTAL & SOCIAL SAFEGUARDS
(TA 8397 IND – CLEAN ENERGY INVESTMENT PROGRAM)**

**Subproject: 100MW Wind Power Project
at Nimbagallu, Anantapur District, Andhra Pradesh**

**Subproject Developer:
Orange Anantapur Wind Power Pvt Ltd
(Subsidiary of Orange Renewable Power Private Limited)**

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List of Abbreviations

ADB: Asian Development Bank
CSR: Corporate Social Responsibility
ESIA: Environmental & Social Impact Assessment
EIA: Environmental Impact Assessment
ESDD: Environmental safeguard due diligence
ESSU: Environmental and Social Safeguards Unit
Gol: Government of India
IFC: International Finance Corporation
IREDA: Indian Renewable Energy Development Agency Limited
LoC: Line of Credit
MNRE: Ministry of New and Renewable Energy
MoEF & CC: Ministry of Environment, Forests and Climate Change
OAWPL: Orange Anantapur Wind Power Pvt Ltd
ORPPL: Orange Renewable Power Pvt Ltd
ORHPL: Orange Renewable Holding Pvt. Ltd.
PS: Performance Standards
PIM: Project Information Memorandum
SPV: Special Purpose Vehicle
SPS: Safeguard Policy Statement
SH: State Highway

PART I
ENVIRONMENTAL SAFEGUARDS DUE DILIGENCE REPORT

Due Diligence report on Environmental Safeguards

Sub Project: 100MW Wind Power Project at Nimbagallu, Anantapur District, Andhra Pradesh

A. Sub Project Title

1. The subproject constitute setting up and commissioning of 100MW Wind Power Project at Nimbagallu, Anantapur District, Andhra Pradesh, India. The wind power generated from this project is to be connected to the State Government owned 220kV/400kV sub-station situated at Uravakonda through a 8 km long transmission corridor, which also to be constructed under the scope of this subproject.

B. Sub Project Background and Project Developer

2. Orange Anantapur Wind Power Pvt Ltd (OAWPL) has proposed to set up a 100 MW project at Nimbagallu, Anantapur District, Andhra Pradesh including a 8km long transmission corridor for connecting to the State Government owned 220kV/400kV sub-station situated at Uravakonda. OAWPL is a SPV (Special Purpose Vehicle) promoted by Orange Renewable Power Private Limited (ORPPL), which is a wholly owned subsidiary of Singapore based Orange Renewable Holding Pte. Ltd (ORHPL).

3. ORHPL has been incorporated in Year 2010 to develop and operate renewable energy projects comprising wind, solar and hydro projects. As of year 2016, ORHPL through its wholly owned Indian subsidiaries or various SPVs has successfully developed and commissioned four wind power projects in India with an aggregate installed capacity of 182.4 MW (81.9 MW in Rajasthan and 100.5 MW in Madhya Pradesh) and has an overall portfolio for 500 MW wind energy projects either operating or under implementation in different stages across 5 states in the country.

C. Sub Project Financial Closure

4. ORHPL through its subsidiary OAWPL has sought term loan from IREDA (Indian Renewable Energy Development Agency Limited) in order to achieve the financial closure to set up and commission the 100MW Wind Power Project at Nimbagallu, Anantapur District, Andhra Pradesh.

5. IREDA is a Public Limited Government Company established in 1987, under the administrative control of MNRE (Ministry of New and Renewable Energy), GoI to promote, develop and extend financial assistance for renewable energy and energy efficiency/conservation projects. The corporate objectives of IREDA are:

- 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 competitive institution through customer satisfaction.
- To maintain its position as a leading organization 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.

6. In line with its corporate objectives, IREDA has committed to part finance the 100 MW wind power project up to INR 188.45 Crores out of the estimated project cost of INR 759 crores. The project is also co-financed by Power Finance Corporation (PFC), a public sector enterprise of Govt. of India.

7. At the request of Gol, ADB has signed a loan agreement with IREDA under the Clean Energy Investment Program to augment the efforts of IREDA in financing and promoting the renewable energy sector including the wind power projects. The present 100 MW wind power project near Nimbagallu, Anantapur District, Andhra Pradesh is one of the several projects that IREDA is contemplating to finance under the LoC (Line of Credit) from ADB.

D. Present Status of Subproject

8. The 100 MW wind power project is under the advanced stage of completion and scheduled for commissioning in September 2016. The project has 50 wind turbines of 2 MW generation capacity each at 50 locations, with a cumulative land requirement of 125 acres. The construction of pooling station at Nimbagallu and 8 km long power transmission corridor up to 220/400KV substation at Uravakonda has been completed. All access roads required for smooth operation and maintenance of the wind power project have been constructed and completed. The entire land required for the project including access roads is largely rain fed private agricultural land and has been purchased by the developer directly from the land owners through willing seller and willing buyer principle.

9. Gamesa Wind Turbines Private Limited is the EPC Contractor responsible for setting up and commissioning of the 100MW wind power project.

10. An ESIA (environmental and social impact assessment) report for this 100 MW Wind Power Project has been prepared by M/s Kosher Climate India Private Limited. OAWPL has appointed Kosher Climate India Private Limited in order to undertake ESIA for the project as per IFC Performance Standards (PS) on Social and Environmental Sustainability, 2012 and Equator Principles, Health and Safety guidelines and applicable other national/international rules and regulations.

E. Applicable Environmental Safeguards Policies and Regulatory Framework

I Gol India Regulatory Framework

11. As per the present regulatory framework, wind power projects will not require any prior environmental clearances either at the Centre or at the State level. The Schedule of EIA notification, 2006 does not include wind power projects and thus are out of the purview of this notification.

12. Further, as per the re-categorization of industries notified by MOEF&CC in March 2016, wind power projects are now placed under white category, which are exempted from seeking consent to establish and operate from the State Pollution Control Board. The notification of MOEF&CC as well Andhra Pradesh Pollution Control Board is given in **Annexure 1**.

13. As the setting up of subproject will not involve any forest land, the subproject will not require any clearances under the Forest (Conservation) Act, 1980. However, the MOEF&CC has notified criteria for siting of the wind mills/turbines, while establishing the wind power projects. These guidelines are given in **Annexure 2**.

II ADBs Safeguards Policy and Requirements

14. IREDA's mandate is to minimize the energy sector's negative environmental impact by promoting cleaner and more environmentally friendly technologies, and thus IREDA is committed to avoid and mitigate adverse environmental impacts, if any, resulting from the projects it finances.

15. IREDA has agreed upon an ESSU (Environmental and Social Safeguards Unit) in order to be fully compliant to ADB's Safeguard Policy Statement (SPS) 2009. As per this, all sub projects financed by IREDA through the LoC from ADB are to be subjected to the agreed upon ESSU to ensure subproject's compliance to ADB's Safeguard Policy Statement (SPS) 2009.

16. IREDA has setup an ESSU (Environmental and Social Safeguards Unit) in accordance with ESSU. The ESSU is presently functional with a designated officer at the level of Asst. General Manager as in-charge of ESSU as well as compliance officer for regulatory compliances. In addition, ESSU has one full-time environmental cum social safeguards officer with 8 years of experience. IREDA has plans to recruit two more similar officers in near future for ESSU. The awareness campaign amongst borrowers of IREDA and as well as capacity building of ESSU itself is intended to be augmented through a specific ADB TA over next 3 years.

17. IREDA is presently considering to finance the subproject through the LoC from ADB and therefore the subproject is being subjected to the environmental safeguard due diligence in accordance with the ESSU to ensure subproject's compliance to ADB Safeguard Policy Statement (SPS) 2009. In line with its corporate objectives ESSU (Environmental and Social Safeguards Cell) at IREDA conducted an environmental safeguards audit to check and ensure subproject's compliance to the IREDA's ESMS agreed upon with ADB as well as ADB's Safeguards Policy Statement (SPS), 2009. Environmental safeguards audit report is attached as part of **Annexure 6**.

III Scope and Methodology for Environmental Safeguards Due Diligence

18. The ESDD (environmental safeguard due diligence) of the subproject has been carried out as per the laid down procedures in the ESSU agreed upon with ADB and applicable for all IREDA projects financed through ADB's LoC. The scope and methodology adopted for ESDD is briefly described hereunder

19. **Documents Review:** The documents review for conducting ESDD comprised the following:

- Review of Project related documents like PIM (Project Information Memorandum), IREDA's loan processing file containing all project related information from loan application to loan approval stage)
- Review of ESIA report for the 100 MW wind power subproject prepared by Kosher Climate Private Limited as per IFC performance Standards and Equator Principle
- Discussions with the specific team within IREDA, involved in the appraisal and loan processing of the subproject
- Discussions with the sub project developers, explaining the need for safeguards due diligence, scope of ESDD and seeking of additional information for ESDD, wherever required but not available in the PIM or loan processing files at IREDA
- Desk review of secondary data from authentic and published sources

20. **Site Visit:** In co-ordination with IREDA, a field visit was undertaken by environmental and social safeguards specialist to the subproject site between August 8-11, 2016. The representatives of the OAWPL and EPC contractor facilitated site visit and accompanied the safeguard specialists to the subproject locations and responded to all on site queries, including sharing additional information/data wherever required.

F. Environmental Safeguards Due Diligence

21. Based on the documents review, site visit and desk review of secondary data from published sources, environmental safeguards due diligence was carried out. The findings of the environmental due diligence as well as the environmental sensitivity of the 100 MW wind power project is summarized hereunder

- The land parcels for each of the 50 wind turbines including associated access roads largely constitute agricultural lands under rain fed single crop cultivation. The cumulative land requirement for the subproject including access roads is about 125 acres, which works out to an average of 2.5 acres per wind turbine of 2.5MW power generation capacity.
- The locations/siting of wind turbines under the subproject is in conformity with MOEF&CC Criteria for Siting of the Wind Turbines with respect to distances from sensitive areas and human settlements areas (ref Annexure 2)
- The vane tips of all wind turbine machines under this subproject are painted with orange colour in accordance with MoEF&CC guidance criteria, to avoid bird hits.
- None of the 50 wind turbine locations are in proximity (within 1km radius) to any human habitations or any other encumbrances, which therefore adequately meets the wind turbine siting criteria of MOEF & CC (ref Annexure 2). Photographs of the areas around wind turbines, pooling substations, transmission corridor access roads, taken during field visit as part of safeguards due diligence (August 8-11, 2016) are given in **Annexure 3**.
- The sub project did not warrant felling of any trees and therefore no permissions had to be sought for tree felling or site clearance activities during the site clearance/pre-construction stage of the subproject.
- The site is well connected through by road and is approximately 8km from the nearest State Highway (SH-32). The subproject site is approximately 60 km from Anantapur, which is also the nearest railway station. The nearest commercial airport is at Bengaluru, which is 250 kms from the site location
- The entire region/area surrounding the sub project is most suitable for wind power generation as the area falls in the region with annual wind power densities between 200-300 W/m² Further, the capacity of the project is 100MW and there are not many sites which can accommodate such a project and provide adequate evacuation facility as well.
- As per the current regulatory framework, the subproject will neither require prior environmental clearances or consent to establish and operate from the central/state regulatory bodies (ref **Annexure 1**).
- Although, from the regulatory perspective, subproject does not require/warrant, the developer(OAWPL) has prepared an ESIA report as part of its corporate governance framework as well as to comply with the requirements of their other co-financing

institutions like PFC and others. Copy of ESIA report is included as **Annexure 4** to this report.

- ESIA includes all relevant baseline information and comprehensively address all issues pertaining to the subproject with respect to location and surrounding baseline environmental conditions. The ESIA report identifies all potential impacts and includes an environmental management plan suggesting suitable mitigation measures along with roles and responsibilities for implementing the same.
- The subproject has budgetary provisions for CSR (corporate social responsibility) activities by the developer. Annexure 3 provides photographs of furniture, donated by the developer to the nearby schools as part of their CSR initiatives. Incidentally, these furniture(s) have been fabricated from the wooden package material of the WTG equipment and machinery received at site and reused for fabricating school furniture as reported by the developer.
- The sub project has no National Park or Wildlife Sanctuary or ecologically sensitive areas within a radius of 10 km.
- No monuments archeological or historical monuments, protected by Archeological Survey of India or the State Government have been reported in and around the sub project site within a radius of 10 km.
- No perennial or seasonal rivers/streams flow within a region of 10 km radius surrounding the sub project site.
- The subproject does not fall under the ADB prohibited list of activities given in **Annexure 5** (extract of Attachment 1 of IREDA's ESSU).
- A rapid environmental assessment using the REA checklist (attachment 3 of IREDA's ESSU for wind energy projects) and environmental categorization (attachment 4 of ESSU) was carried out for the subproject based on the documents review including the ESIA for the sub project as well as the through desk review of published data supplemented by site visits for ground truth verification. The filled-in REA checklists along with the environmental categorization form are given in **Annexure 6**.
- The subproject can be classified as Category B due to its less significant environmental impacts, which are largely limited to sub project site. The ESIA prepared earlier in December 2015 by the sub developer has also categorized the sub-project as Category B.
- As the project has regulatory exemptions from both centre and state levels, developer has informed that no environmental monitoring was carried out during construction phase. The HSE in-charge at project site has informed that PFC, the other co-lender to this sub-project has not sought any such requirement for periodic monitoring reports during construction phase.
- Regional Manager-HSE, Orange Renewable has confirmed during due diligence site visit as well as subsequently that they have not received any complaints from local people during construction phase. During due diligence site visit, this has been sporadically verified with some local villagers/farmers near wind turbines through informal consultations.
- On the contrary, the developer has informed that the local people have been benefitted through employment as well as small/petty contracts related to project

construction activities during construction phase. Even during the operation phase, developers intends to employ the local people for surveillance and security of the subproject and other miscellaneous requirements as deemed fit.

- Factories Act, 1948 as well as Explosives Act 1884 (amended 2008), is not applicable to this subproject. However, Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 is applicable to ensure safety and welfare measures for workers employed at building and other construction sites. The subproject is covered under 'other construction' category. The Andhra Pradesh Building and Other Construction Workers' Welfare Board monitor compliance to this act/regulation at all work sites and also a cess is levied on contractor. The workforce for subproject is being sourced through contractors' having valid license from Labour department, Government of Andhra Pradesh (copy of labour license is provided as **Annexure 7**)
- During due diligence visit and subsequent clarification sought, developer has informed/confirmed that during the construction phase of this subproject, there was only one fatal incident, for which the incident investigation report was prepared by GAMESA, which is provided as **Annexure 8**
- Other than this, there has been no incidence of injuries which required hospitalization of workforce but all workforce (more particularly supervisory staff) have been oriented to report all incidents, however minor it is and /or even injuries, which can be handled through first aid at site and thus all incidents are recorded, which can be seen in Annexure 2, a typical HSE monitoring report by the developer (**Annexure 9**). In such minor incidents/cases, the work force was provided first aid, if any required and let off for the day with paid wages and '**recorded as lost work day**' (PI see sl 2 under C Annexure 2).
- As per due diligence, this reflects the sensitivity and preparedness of both EPC contractor as well as developer towards EHS issues at work construction site.

G. Conclusions and Recommendations

22. The conclusions of the ESDD for the subproject are:

- This subproject has been prepared by the subproject developer as per their own investment plan supplemented by IREDA's loan assistance but not in anticipation of LoC from ADB through IREDA.
- The construction and operation of the 100MW Wind Power Project at Nimbagallu, Anantapur District, have no major significant environmental issues with respect to its siting/location as well as during construction phase.
- IREDA, through its ESSU is committed to undertake periodic due diligence visits to subproject site during construction and operation phases and monitor the implementation of environmental management and environmental monitoring being carried out by the developer.
- The current subproject will therefore be in compliance to ADB Safeguard Policy Statement (SPS) 2009 and does not pose reputational risk to ADB funding on environmental safeguards and considered for LoC from ADB funding under the Clean Energy Investment Program.

PART II
SOCIAL SAFEGUARDS DUE DILIGENCE REPORT

SOCIAL DUE DILIGENCE REPORT

Subproject: 100 MW Wind Power Project at Nimbagallu in Anantapur District of Andhra Pradesh

Developer: Orange Anantapur Wind Power Private Limited (ANPWPL) an SPV of Orange Renewable Power Private Limited

1. Introduction

Indian Renewable Energy Development Agency Limited (IREDA) is the single largest renewable energy financier in India and applied for ADB loan to fund as a part of its overall lending portfolio, to private sector renewable energy and energy efficiency subprojects in India, including small scale wind, biomass, small hydro, solar, cogeneration, and energy efficiency.

IREDA's mandate is to minimize the energy sector's negative environmental impact by promoting cleaner and more environmentally friendly technologies, and thus is committed to avoid and mitigate adverse environmental impacts, if any, resulting from the projects it finances. In order to identify and effectively address potential impacts from projects funded with the ADB line of credit, IREDA has formulated and adopted an Environment and Social Safeguard Unit (ESSU), which is in compliance with Indian national laws and Asian Development Bank (ADB) Safeguard Policy Statement (SPS) 2009. The objective of the ESSU is to guide IREDA's actions to safeguard against adverse environmental and social impacts for sub-projects using ADB's funds.

Keeping in view the main objective of the ESSU, ADB social safeguard requirements and in confirmation with the national and local policy and legal framework, a social due diligence study has been carried out for the subproject i.e. 100 MW wind power plant in Andhra Pradesh being promoted by Orange Anantapur Wind Power Private Limited (ANPWPL) an SPV of Orange Renewable Power Private Limited.

2. Subproject Description

The proposed project site is approximately 59 km in North - West direction from Anantapur District of Andhra Pradesh. The project site spreads across an area of 8 kms and falls in five villages' viz. Amidyala, Nimbagallu, Mopidi, Indravathi and Renumakulapalli of Uravakonda Mandal in Anantapur District. The project site comprises largely of fallow agricultural land, part of which is being used by locals for farming during rains. Land use of the land selected for WTGs as per government records is agricultural for which certificate of conversion to Non Agricultural (NA) land use has been obtained. The copy of the land use change certificate is attached in **Annexure-10**.

ANPWPL has contracted Gamesa Renewables to provide turnkey solutions for micro-siting, wind resource analysis, supply, erection, commissioning and operation & maintenance of the project WTGs. The project will involve installation of 50 numbers of WTGs of Gamesa Make G97, 104, 2 MW each WTG, totaling to a capacity of 100 MW. The map of the project site with WTG locations is provided in **Figure 1**.



Figure: 1 Project Site Map

M/s Topview infrastructures Pvt. Ltd., sub-contractor of Gamesa, acting as land aggregators for the project was responsible for procuring land through willing buyer-willing seller basis after paying the proper market value to the original land owner. Land purchasing and registration process was completed by administering Agreement to Sale (ATS) and Power of Attorney (POA) by the original land owner.

The power generated from the wind farm shall be transmitted to state govt. 220kV/400kV (sub-station) situated at Uravakonda for which ANPWPL shall sign a power purchase agreement with Andhra Pradesh Southern Power Distribution Company Limited (APSPDCL) at wind preferential Tariff as determined by Andhra Pradesh Electricity Regulatory Commission (APERC) from time to time for the specified control period.

The project requirement in terms of various components and activities involves the following:

- Procurement/direct purchasing of land through Land aggregator
- Installation of 50 wind turbines with a unit generating capacity of 2 MW each, totaling a generation capacity of 100 MW;
- Electrical connection with feeder underground cable from the turbines, to the distribution transformers and a connection to the substation.
- Construction of access roads and internal roads
- Power evacuation at 220/400 kV Uravakonda substation

3. Subproject Status

As on 31st August 2016, the status of project implementation is as follows:

- Wind Resource Assessment completed;
- Micro-siting has been completed;
- Procurement of land for all components are fully completed;
- Demarcations and pathway finalization completed;
- Soil testing completed for all the site purchased;
- Pooling Substation and zero point storage yard completed;
- Approach and internal roads completed to WTG clusters and clusters to individual WTGs;
- All 50 WTGs towers erected stringing completed;
- Site office of ANPWPL established and Project staff mobilization completed;
- Project is already commissioned.

4. Scope of Review and Methodology

This social due diligence report is prepared based on review of various subproject documents, consultation with developers, field staff and on site observation. The documents reviewed for the subproject includes Environmental and Social Impact Assessment (ESIA) Report and Inception Report, Land Use Conversion Certificate, Sale deed and NoC from Village etc. Site visit conducted initially during August-2016 and consulted with the field staff of Project Developer.

The ESIA study for the proposed subproject has been conducted as per applicable national regulations in India. The study includes collection and collation of baseline environmental and socio-economic information of the study area, assessment of potential project level environmental and social impacts and development of project specific mitigation and management plans.

5. Social Safeguard Categorization and Rationale

On the basis of the review of project information and site observation, the Social Safeguard Screening Checklist (refer **Annexure 6**) was completed as per the requirement set forth in IREDA's Environmental and Social management System (ESSU). Based on the social safeguard checklist, it was established that the subproject is categorized as "Category-C" from both Involuntary Resettlement and Indigenous Peoples safeguard point of view. The Involuntary Resettlement Categorization form and the Indigenous Peoples Categorization form are attached in **Annexure 6**.

The rationale behind the social safeguard categorization as "C" i.e. the subproject does not require any further specific actions so far as the social safeguard point of view is because the subproject does not involve any involuntary acquisition of private land and does not have any negative impacts on people including indigenous community. The photograph of the subproject site is presented below in **Figure-2**.



Figure-2: Photograph of the Subproject Site

6. Social Safeguard Issues under the Subproject

The social safeguard issues identified through the social due diligence process is discussed in the following section.

6.1 Land Requirement under the Subproject

The land requirement for the subproject was for tower locations, approach roads and pooling station. Total land requirement for the purpose was 147.05 acres. The land requirements for various locations are presented in the Table: 1 below.

Table 1: Land Requirement for the Subproject

Location No.	Sale Deed No.	Village	District	Survey No.	Area in Acre
G1-8	293/2016	Amidyala	Anantapur	691/A5	2.70
	289/2016			691/A1B	0.79
G1-9	291/2016	Amidyala	Anantapur	236/2	3.40
G1-11	292/2016	Amidyala	Anantapur	204/B	3.26
G1-12	290/2016	Amidyala	Anantapur	210/6A	3.29
G1-14	474/2016	Amidyala	Anantapur	211	1.23
				212/A2B	0.78
				212/A3B	0.78
				212/A4B	0.75
G1-15	472/2016	Amidyala	Anantapur	672/B	3.45
G1-16	1384/2016	Amidyala	Anantapur	669	3.33
G1-17	1084/2016	Amidyala	Anantapur	667	2.43
	1085/2016			667	1.00
G1-18	1107/2016	Amidyala	Anantapur	243/A	0.42
				243/B	2.90
G1-19	1083/2016	Amidyala	Anantapur	248	3.27
G1-20	736/2016	Amidyala	Anantapur	673/F	3.52
G1-21	1082/2016	Indravathi	Anantapur	18/A2	0.44
				18/C2	0.55
				18/C1D	0.95
				18/C1B	1.58
G1-23	704/2016	Amidyala	Anantapur	630	3.27
				144/A2	0.97
G1-24	509/2016	Renumakupalli	Anantapur	144/D2	1.50
				145/A1B	0.84
				65/A1B	0.55
G1-25	757/2016	Renumakupalli	Anantapur	143/B5A2	1.11
				143/B5B2	1.00
				144/E2	0.50
				15/B1	0.89
G1-26	1200/2016	Indravathi	Anantapur	15/B2	2.69
G1-28	756/2016	Amidyala	Anantapur	276	3.80
				283	2.13
G1-29	502/2016	Amidyala	Anantapur	284	1.14
G1-30	501/2016	Amidyala	Anantapur	270	3.21
				115/C	1.60

Location No.	Sale Deed No.	Village	District	Survey No.	Area in Acre
G1-31	1079/2016	Amidyala	Anantapur	118	1.00
				119/1	1.15
G1-33	1087/2016	Amidyala	Anantapur	627	2.95
G1-34	1368/2016	Nimbagallu	Anantapur	434/A1	0.41
				435/A1A	2.44
				422/11	0.80
				432/A2	1.83
G1-35	2966/2015	Nimbagallu	Anantapur	432/B2	1.60
G1-37	506/2016	Amidyala	Anantapur	252	3.29
G1-38	508/2016	Amidyala	Anantapur	252	3.29
G1-39	1088/2016	Amidyala	Anantapur	134	3.68
G1-41	505/2016	Amidyala	Anantapur	136/A2	2.13
	507/2016	Nimbagallu	Anantapur	400/C	1.35
G1-42	510/2016	Nimbagallu	Anantapur	391/B1B	1.00
				391/B2B	2.30
				299/C	0.80
G1-44	755/2016	Amidyala	Anantapur	300	2.50
	2884/2015			97/A1A	0.54
	2882/2015			97/A1C2	1.34
G1-45-47	2883/2015	Amidyala	Anantapur	97/A1D2	1.34
				98/J1A2	3.00
	2885/2015			98/J1B2	3.50
				156/B	1.04
G1-48	478/2016	Mopidi	Anantapur	156/C1	1.19
				156/C2	1.26
				156/B	1.13
	478/2016	Mopidi	Anantapur	156/C1	0.55
				158/A2	1.43
	2965/2015			158/B2	0.43
G1-50	479/2016	Mopidi	Anantapur	159	1.10
				160/A2	0.63
				160/B	1.30
				160/E	0.64
G1-51	473/2016	Mopidi	Anantapur	118/A2	0.25
				134/A2	1.41
	477/2016			152	1.60
				162	0.16
G1-52	476/2016	Mopidi	Anantapur	132	0.32
				133/A1	2.00
	477/2016			133/A2	0.85
G1-53	759/2016	Mopidi	Anantapur	131/C	1.74
				131/A2	0.70
				132	1.27
G1-55	713/2016	Indravathi	Anantapur	116/1	3.29
				116/2	0.19
G1-56	475/2016	Indravathi	Anantapur	12	0.67

Location No.	Sale Deed No.	Village	District	Survey No.	Area in Acre
				19/A	2.54
				19/B	0.36
G1-57	503/2016	Indravathi	Anantapur	18/C1B	1.58
	1081/2016			18/B2	0.46
				18/C2	0.55
				18/C1D	0.95
G1-58	705/2016	Amidyala	Anantapur	630	3.31
G1-59	1086/2016	Amidyala	Anantapur	790	3.89
Total					147.05

As mentioned earlier the land required for the subproject, the developer has directly purchased the land from the landowner on willing seller - willing buyer basis. The land was purchased from 63 landowners in four villages. The developer has obtained the NOC from Gram Panchayat and villages from where land is purchased to establish the plant and the copy of this NOC is provided in **Annexure 11**. The sample sale deed agreement administered for land purchasing is attached in **Annexure 12**. Based on the assessment of sale deed agreements, it is confirmed that the land has been purchased from the owners directly clarifying the purpose of purchase and the land register has verified and certified that the land is encumbrance free and without any kind of litigation.

The associated facility i.e. transmission line from polling station to State Government owned 220/400 kV Uravakonda sub-station has been laid by Andhra Pradesh Transmission Company Limited (APTRANSCO). The APTRANSCO has laid the line in compliance with Indian laws and as per the provision under Indian Telegraph Act, 1885 and Electricity Act 2003 by paying compensation for temporary damage for assets including crops and trees. The Indian Telegraph Act, 1885 and the Electricity Act, 2003 give the transmission and distribution utilities the authority to place towers, poles and lines on any land as required. However, Section 10 (b) of the Indian Telegraph Act, 1885, clearly states that land for the lines and poles (towers) will not be acquired. Further, Section 67 (3) and 68 (5) of the Electricity Act, 2003 require the utilities to minimize damage to property in carrying out their works, and to pay full compensation to all persons interested for any damage sustained by them due to the works carried out.

6.2 Involuntary Resettlement Issues under the Subproject

Since there is no compulsory land acquisition involved the subproject as the land is directly purchased from the landowners on willing buyer – willing seller basis, there does not arise any issue of involuntary resettlement. The landowners have directly sold their land to the developer and the lands are either barren or low-productive agricultural land. During the land identification and purchase process attention has been paid and avoided purchasing of land from small and marginal farmer. Thus the landowners have only sold part of their land and not suffered any major livelihood loss. During the site visit it was observed that the land parcels purchased for the subproject are away from the settlement area and therefore does not occurred any physical displacement.

It was informed by the project developer that during the construction period, many villagers were engaged as laborers including women. At present, the developer has hired some villagers including those sold their land to the project as security person for guarding the turbine locations.

6.3 Indigenous Peoples Issues under the Subproject

According to the Census of India 2011 statistics, Scheduled Tribe (ST) population of Anantpur district is below 3%. It is confirmed from the census information that no indigenous people are present in the subproject-affected villages and none of the land purchased for the subproject belongs to the ST community. Hence, there is no issue of indigenous people has been identified under the subproject. The project outcome is not directly benefiting the ST community as the power generated from the plant will be connected to transmission grid only and does not have any role in distribution system. However, at larger level, the power generation will definitely strengthen the power supply system of the area as a whole and hence indirectly benefit all communities including ST in the area.

7. Public Consultation under the Subproject

During various stages of subproject preparation, public consultation meetings were carried out involving various stakeholders. The project developer has informed the villagers about the project during very inception stage. The stakeholders engaged in the consultation process included village *panchayat*, village community, landowners, local administration, revenue officers, and various line departments. In addition to the social safeguard issues discussed in the consultation meetings, some of the other relevant subproject specific issues such as subproject benefit, community participation, CSR policy and activities and grievance redress mechanism etc. discussed during the consultation. The details of public consultation are documented in the ESIA report. The key consultation outcome and action plan incorporated in the ESIA report is provided in the **Table: 2**.

8. Grievance Redress Mechanism for the Subproject

To establish and implement a system to identify and take necessary steps to provide an effective approach for complaints and resolution of issues made by the affected community in reliable way, a grievance redress mechanism is formulated and adopted by the developer. The grievance redress system describes the procedure of grievance handling and their redress across the all units. It also specifies working regulations for Contractors / Service Providers / Vendors associated with the subproject. The functioning of grievance redress system is the responsibility of Project Head / HR & SHES Team. The GRM process is provided in the **Figure: 3**. During the site visit, it is observed that a complain register was available in their site office but found no complain registered in it.

9. Community Development Initiatives by the Subproject

The subproject has created employment opportunities for local people and utilizing local resources in terms of employment of local laborers, hiring machines and manpower for transportation of materials and equipment during construction. During the site visit it was observed that local peoples are trained and engaged as security guards in the plant.

As a part of its corporate social responsibility (CSR) program, the developer has assessed some local needs and indented the following activities to be taken up as a part of Community Development Plan for the villages near the plant.

- Helping setting up medical facilities in the villages, organizing health check-up camps

- Upgrading Infrastructure in schools like, provision of Library and Computer rooms, furniture and fans in schools.
- Educate villages about methods to replenish underground water.
- Support for repair /strengthening of existing water resources.
- Educate them about the best practices in arid regions and best crops to grow.
- Strengthening of existing roads in the villages during construction period and post construction period
- Conduct veterinary camps for livestock in the project villages.

The contractor has already implemented some of the community development initiatives like supplying of kits to school children, repairing and maintenance of common road used for the plant and villages and organizing health check-up camps in the villages etc. A photograph showing the furniture provided to the local schools by the project developer is presented in the Figure: 3. The project developer has recently started commissioning of the plant and planning for annual estimate to carry on the CSR activities in the affected villages.

Table: 2 Summary Public Consultations and Action Plan

Gram Panchayat	<p>The team during social survey and consultations, ensured to visit the head of Panchayats and secretary of all the villages in the study area to record their stand on the project and concerns of the villages as a unit.</p> <p>At the very first impression, it was clear that the Gram Panchayat was favourable and in support of development activities like implementation of the wind power project. <u>They key outcome from the interacts:</u></p> <p><u>View of Project:</u></p> <ul style="list-style-type: none"> - Positive towards any prices from the land being procured. - Employment creation for local labourers was appreciated. - Increased visitors to their villages were appreciated as it helped small local businesses. <p><u>- Key Concerns in Village & Expectations:</u></p> <ul style="list-style-type: none"> - The yield from the fields was a point of concern in all villages due to unavailability of water and unfertile nature of land. - More number of local workers to be employed in the project construction. - Infrastructure help to the common facilities such as schools and village welfare centres. - Some were concerned about help in getting the nearest canal water to the villages - Assistance to the village youth in guidance and jobs by the project leaders was desired. 	<p>The concerns from the Gram Panchayata were genuine for the development of the region. A number of issues have been discussed in the proposed CSR plan as one of the chapters of this report. The issue of employment and training were discussed at the site itself with Gamesa team and also with ANPWPL. It was identified that Gamesa is already carrying out training programme all the places of their presence. It is recommended that ANPWPL/Gamesa carry out similar exercise at the project site. The details of proposed plan for community development and CSR plan in provided under chapter 11 of this report.</p>
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Villagers	<p>The concerns of villagers were similar to that of Panchayat. Most of the villagers knew about wind mills and have seen similar projects in surrounding villages. They were not worried about implementation of the project. Most of the villagers were expecting employment opportunity from the project. In two rare occasions, villagers asked the survey team about impact of wind farm on water availability and rains. To which it was clarified that the project whatsoever, cannot have any impact on the rainfalls and water availability.</p>	<p>ANPWPL where ever possible shall try to employ the local community people and is possible train to the required skill set level.</p>
Women	<p>Most of the women are restricted to the activities of household. There few women in the villages who could be contacted and had asserted their concerns with respect to village. It was clear from the interaction that women were not the decision makers and most of the key decision rested with men in the house. However, few of the women interviewed conveyed the following concerns:</p> <ul style="list-style-type: none"> - They had no opinion about the project and were positive about any development the project may bring to the village. - Open defecation problem was to be dealt with and more initiative from private parties was desired. - Most of the women were keen on development of temples in their village. <p>- Water condition for domestic use needed improvement as sometimes the hand pump bores were drying up.</p>	<p>The village has almost no sanitation facility, with houses having bathing facility but no latrines. The defecation is open is a common practice and in all the villages in study area more than 90% of the families follow defecation in open. ANPWPL can join hand with the ongoing “Swachh Bharat Abhiyan” and help manage setting up of sanitary facilities in villages. Further, ANPWPL can contribute to improving the water situation of the area by helping water shed management, repairing irrigation tanks, setting up of water pumps/ tube wells etc. The underground water needs to be replenished regularly and steps towards it should be considered as vital.</p>
Landowners	<p>Most of the land sellers were farmers owning large pieces of land. The land sellers were satisfied with the compensation for their land and were ready to offer more land if required by the project. They wanted to get priority in any employment opportunity from the project.</p>	<p>ANPWPL has paid adequate compensation for the private land procured based on negotiations with land owners, reportedly at higher rates than the prevalent market price. Specific caution is taken by the land aggregator to ensure that no land is purchased from any marginal farmers. In cases where, the sale of land has any impact of the livelihood of a family it, is to be ensured that one member of the family is provided employment in the project activity.</p>

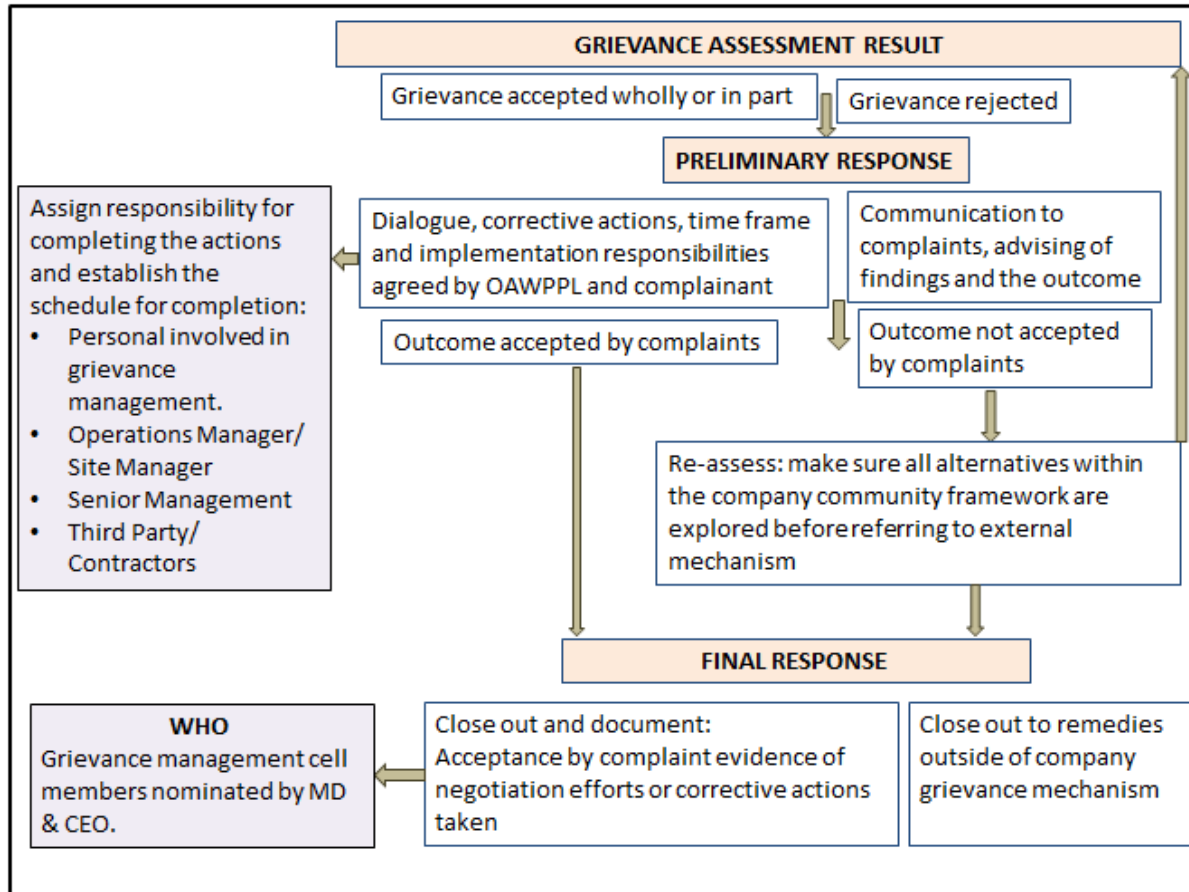


Figure:3 Grievance Redressal Mechanism



Figure-3: Photograph of the Furniture Distributed to Schools

10. Conclusion and Recommendations

The social due diligence study of current subproject reveals that there will not be any adverse social impact due to the intervention. The subproject is categorized as Category "C" from social safeguard point of view. The private land required for the subproject is directly purchased from landowners by paying market value to the landowners and no compulsory acquisition of land occurs in the subproject, therefore no involuntary resettlement occurs.

As per the ESMS requirement, no further action including resettlement planning, livelihood planning or indigenous peoples planning is required for the subproject. However, the developer will continue to engage the local villagers throughout the operation period and carry out CSR activities in the area.

Based on the findings of due diligence study the subproject is recommended for funding under the proposed project using ADB line of credit. IREDA will ensure compliance of ESSU and carry out periodic monitoring of the social safeguard issue and report to ADB as agreed in the ESMS.