

Adani Green Energy (Thirty) Limited

Cost benefit analysis for "765 kV Double circuit transmission line " from Khavda AGETL PSS to PGCIL substation at Bhuj of PGCIL in Gujarat is estimated as per the Guide lines of Govt. of India, issues with letter no. 7-69/2011-FC(Pt.) dated 1st August, 2017 and given below:

Table – A: Estimation of Cost of Forest Diversion:

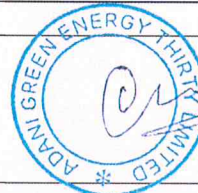
Si. No.	Parameters	Cost (Rs. Lakhs)
1.	Ecosystem services losses due to proposed forest diversion (Economic value of loss of eco-system services due to proposed forest diversion has been taken as the "net present value (NPV)" of the forest land being diverted as prescribed by the Central Government (MoEF&CC) NPV rates taken as Rs. 4.38 Lacs per Ha under Class IV of Tropical Throne Forests of open forest land less than 40% density (per Ha.) born by the Project, works out to be Rs. 991.29 Lakhs for 226.3223 Ha Forest Land	991.29
2.	Loss of animal husbandry productivity (Taken at 10% of NPV)	99.13
3.	Cost of human resettlement (There is no human resettlement due to proposed forest diversion)	Nil
4.	Loss of public facilities and administrative infrastructure (Roads, building, schools, dispensaries, electric lines, railways, etc.) on forest land, which would require forest land if these facilities were diverted due to the project (No public facilities and administrative infrastructure are involved)	Nil
5.	Possession value of forest land diverted (Taken at 30% of NPV)	297.39
6.	Cost of suffering to oustees (There are no oustees due to proposed forest diversion)	Nil
7.	Habitat Fragmentation Cost (Taken at 50% of NPV)	495.64
8.	Compensatory afforestation and soil & moisture conservation cost. (CA arrived at Rs. 300,000/- per Ha for 226.3223 Ha) (Cost for double the area is Rs. 1357.93 lakhs)	1357.93
9.	Project Cost: Fixed assets, inclusive of investments, current assets, loans & advances including other expenditures like preoperative expenses, interests during construction, etc.: Rs. 45,000 Lakhs	45,000.00
	TOTAL	48241.38



Adani Green Energy (Thirty) Limited

Table – B: Estimation of benefits of Forest Diversion:

Si. No.	Parameters	Cost (Rs. Lakhs)
1.	Increase in productively attributed to the project (The project is part of 8 GW Khavda Hybrid Renewable Power Project. Adani Green Energy Thirty Limited (AGE30L) is in process of developing 3500 MW wind & solar based power plant near Rann of Kutch, At Khavda taluka in Kutch district of Gujarat. The connectivity for the said plants granted to connect at PGCIL, Bhuj Pooling sub-station. This dedicated line shall add 175,748 million units of electric energy over life period of 25 year to the national grid. As the line is connected to the ISTS, the generated power would feed the power to the respective region/ states; where there is shortfall of electricity. Hence productively attributed cannot be quantified in the state of Gujarat, India)	NA
2.	Benefits to the economy to the specific project (The development of such projects in Khavda area of Gujarat state shall have multiple national benefits such as, i. Reduction of carbon footprint in tune of 95 Million-Ton over period of 25 years due to usage of renewable source of energy, ii. Contribution to growth of national GDP iii. Meeting rising demand of electricity etc. hence benefits to economy cannot be quantified in the state of Gujarat, India)	NA
3.	No. of population benefitted due to specific project (As the plant shall be connected to ISTS through the dedicated line the generated power would feed the power to the respective/states; where there is shortfall of electricity. Hence number of populations directly benefitted cannot be quantified for the state of Gujarat, India)	NA
4.	Economic benefits due to of direct and indirect employment due to the project. During Project Stage, the project will provide employment to 20 Permanent and 150 Temporary Employment for a period of 18 months . The Economic Benefit is estimated at Rs. 628.8 Lakhs (For Permanent Employment, Average Benefit of Rs. 10 Lakhs/Year per person and for Temporary Employment, Rs. 400 /- per year per person) During Operation Stage (calculated for 30 Years), the project will provide employment to 08 Direct and 10 Indirect Employment for a period of 30 Years. The Economic Benefit is estimated at Rs. 2838 Lakhs (For Direct Employment, Average Benefit of Rs. 10 Lakhs/Year per person and for Indirect Employment, Rs. 400/- per year per person)	3466.8
5.	Economic benefits due to Compensatory afforestation (The NPV of the CA Land considered as prescribed by the Guidelines, 7-69/2011-FC(Pt.) dated 01.08.2017) NPV rates taken as Class III Medium Density Forest Rs.8.03 Lakhs/Ha for 226.3223 Ha. forest land diversion	3634.74
6.	Revenue from the Transmission Line Project for 30 Years @190 Crore/Annum	570000
	TOTAL (B) in Lakhs	577101.54



Adani Green Energy (Thirty) Limited

Cost: Benefit Ratio

I Cost of Project (including loss of Forest) = Rs. **48241.38** Lakhs

II Financial Benefits of the Project: Rs. **577101.54** Lakhs

Cost Benefit Ratio = 1: (B) / (A)

=1: 577101.54 / 48241.38

The Cost Benefit Ratio of the Project is estimated at 1: 11.96

