

Justification for locating Proposed Project in Forest Land

Government of India has set a target of reaching 175 GW of installed capacity from renewable energy sources by the year 2022, which includes 100 GW from Solar, 60 GW from Wind and 15 GW from other renewable sources. In order to achieve the target, various Solar, Wind, Wind-Solar Hybrid policies have been enunciated by Central and State Governments. Gujarat is the leading front runner state, implementing large capacity renewable projects under these policies.

In order to provide support to development of large scale renewable energy projects, the state of Gujarat has issued a policy for allotment of revenue waste land to the Park developers. In accordance with the Gujarat Government policy "Allotment of Government waste / barren land for the purpose of raising Renewable Energy Generation Park", **Adani Green Energy Limited** (referred as AGEL) has planned to develop 10,000 MW Wind-Solar Hybrid Park in Kutch district of Gujarat. **Adani Green Energy (Four) Limited** (referred as AGE4L), a subsidiary of AGEL has won the Bid of **8 GW** capacity Manufacturing Link of Solar Power Plant from SECI. Out of these 8 GW, AGE4L has proposed to develop and connect 3.5 GW capacity of Hybrid Park to the GRID by developing a plant near Rann of Kutch, Khavda village, District Kutch of Gujarat. For power evacuation of the proposed project, a special purpose vehicle "**Adani Green Energy (Thirty) Limited** (referred as AGE30L) has proposed to develop **765 kV Double Circuit Transmission Line** which will connect Switchyard at Khavda to Pooling Substation (PSS1) of **Power Grid Corporation India Limited** (referred as PGCIL) at Bhuj. The proposed Hybrid Park will require an estimated area of approx. **20,000 hectare** of land. The entire land identified for the park is barren revenue wasteland. Hybrid projects within the Proposed Hybrid Wind-Solar Park are also envisaged to be developed by AGEL and/or its subsidiaries as the Project Developer.

Proposed Transmission Line alignment for 765 kV D/C from Khavda to Bhuj has been examined for social, technical and economical consideration and possible efforts were made to avoid the forest land by Adani Green Energy Thirty Ltd. however, forest land crossing cannot be avoided due to unavailability of route. We have proposed diversion of 226.3223 Ha. protected forest area of Banni Grassland Division, Kutch under section-2 of Forest Conservation Act-1980 for construction of the mentioned project.

It is further stated that the area of forest land involved in the proposed transmission line alignment is bare minimum. The main factors considered for selection of a suitable site are:

- Availability of adequate land for power plant along with suitability for operational facilities.
- Land Topography, terrain and Geotechnical conditions
- Annual Wind Resource Availability
- Evacuation Infrastructure of power
- Market requirement for power
- Minimal rehabilitation requirement
- Environmental compatibility
- Road Connectivity and access to other infrastructure facilities

Three routes have been evaluated in attached comparative statement and alternate – 01 is finalized based on lesser requirement of forest diversion i.e. 226.3223 Ha.



Adani Green Energy Thirty Limited

Comparative Statement for Alternative Route Analysis

Sr. No.	Description	Final Route R1	Alternate Route R2	Alternate Route R3
1	Bee Line Length(KM)	78.010	78.010	78.010
2	Line –Length (KM)	102.243	81.298	80.923
a)	Plain	97.771	78.661	78.142
b)	Undulated	-	-	-
c)	Hilly	4.472	2.637	2.781
3	Angle Points (includes start & end point)	34	23	30
4	Gantry	1	1	-
5	Power Line Crossings	Nakhatrana, Khavda, Bhuj	Nakhatrana	Nakhatrana
6	Railway Crossing	0	5	5
7	River Crossing	Nil	Nil	Nil
8	Pollution	Nil	Nil	Nil
10	Special Towers	Nil	Nil	Nil
11	Population Major Cities	Nakhatrana, Khavda, Bhuj	Nakhatrana	Nakhatrana
12	Densely populated Areas	-	Nil	Nil
13	Airports	Nil	Nil	Nil
14	Forest Length (km)	33.778	42.979	41.707
a)	Reserve Forest(km)	0	0	0
b)	Banni Forest (km)	33.778	42.979	41.707
15	Forest Area (in Ha)	226.3223	287.95	279.44
16	CRZMA Length (Km)	Nil	16.677	16.527
17	Creek Length (Km)	6.563	5.940	5.530
18	Sanctuary Length (Km)	Nil	Nil	Nil
19	Sanctuary 5km Buffer Length (km)	Nil	Nil	16.104
20	BSF Area (Km)	40.952	12.676	12.898
21	Tree (Density)	Low to Medium	Medium	High
22	NH/SH crossing	0 / 4	0 / 2	0/2
23	Special Foundations		Nil	
24	Conclusion	Although the route length of this route is longest among all the three alternatives, however, this route is avoiding CRZ hence, this route is best among all the three alternatives and is also feasible from the construction, operation and maintenance point of view. Hence, this route is recommended for route alignment survey.	Although this is the shorter than route no. 1, however, this route is falling in the CRZ area and obtaining permission for working through CRZ area is very time consuming and difficult and hence, this route is not feasible from the construction and O&M point of view, hence, this route is not recommended for route alignment survey.	Although this is the shortest route among all the three alternatives, however, this route is falling in the CRZ area and obtaining permission for working through CRZ area is very time consuming and difficult and hence, this route is not feasible from the construction and O&M point of view, hence, this route is not recommended for route alignment survey.

