BRIEF NARRATIVE OF THE SCHEME

1. PREAMBLE

1.1 The state of Sikkim is spread through 7096 sq. km and 4 no of districts. The peak demand of Sikkim is expected to grow from 70MW to 144 MW by the end of XII plan and to 176 MW by end of XIII plan. At present there was only two 132 kV sub-station in Sikkim. The load centers are dispersed & isolated and did not get benefit of grid connected power over the year.

1.2 Energy & Power Department, Govt. of Sikkim, in abbreviated EPDS, the State Transmission& Distribution Utility, Govt. Of Sikkim planned to develop network so that affordable, secure and reliable power could be made available to various locations of the state. So, EPDS take up the job of constructing suitable transmission lines and Sub-stations for evacuation of power generation from existing & upcoming Hydro Projects in Sikkim to the four District of Sikkim. EPDS has planned to construct 19 nos. of sub-station and 29 nos. of transmission lines and 08 nos. of bays extension for Strengthening of power transmissions and distributions in Sikkim State for overall integrated power development.

2. DESCRIPTION OF PROJECT

2.1 The proposed 220KV transmission lines constituting:

  i) 220/132/66 KV Samardong GIS Sub-station.
  ii) 220/132/66 KV Dikchu-Pool Sub-station.
  iii) 220 KV D/C Samardong – Dikchu-Pool Transmission Line.

2.2 Geographic area of the Scheme in Sikkim:

1	220/132/66 KV Samardong GIS Sub-station.	Name of Village – Tshalumthang, Rekip & Namphing. District – South Sikkim
2	220/132/66 KV Dikchu-Pool Sub-station.	Name of Village – Sirwani, Namgethang, Beong-Sang, Khamdong, Simik, Tumin & Samdong. District – East Sikkim
3	220 KV D/C Samardong – Dikchu-Pool Transmission Line.	Route description: Tshalumthang, Rekip & Namphing, Sirwani, Namgethang, Beong-Sang, Khamdong, Simik, Tumin & Samdong.

2.3 The enclosed map plotted on traced Survey of India Topo sheet of 1:50000 scale (1cm=0.5 km) shows the route alignment of transmission line proposed under the scheme.

3. ACCRUAL OF BENEFIT OF THE SCHEME

Affordable, secure and reliable power could be made available to various locations of the state and development of industries and agriculture beside relief to domestic consumers in the entire Sikkim state. The increase in installed capacity of Electric Power shall help to achieve GDP growth. Sikkim state will have their free quota of energy generated as per present practice which will make the state power surplus/self-reliant on its energy demand in addition to inflow of revenue from sale of excess power.
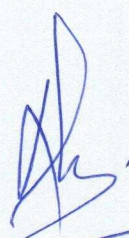
4. DESCRIPTION OF THE ROUTE

The terrain encountered for all the lines 100 % hills. The MSL of the tower locations vary from 1745 mtr to 420 mtr. The corridor for 220 kV line in this area is very limited considering the treacherous terrain and involvement of forest could not altogether be avoided. The route has been so aligned to avoid Wildlife areas and to pass through bare minimum forest area. Thus to obtain a suitable corridor for laying of the line way leave through forest is necessary.

5. CONCLUSION

The Hydro-electric Projects being developed by the various Independent Power Producers as mentioned above having their Power Houses and associated AIS & GIS Switchyards at different area in Sikkim. Energy & Power Department (Govt. of Sikkim), the State Transmission & Distribution Utility, has to make its transmission system ready for evacuation of power matching with target of commissioning of Generating units. The Sikkim state will have their free quota of energy generated as per present practice which will make the state power surplus/self-reliant on its energy demand in addition to inflow of revenue from sale of excess power.

As all the relevant environmental and forest clearances have been accorded to various Hydro Projects, clearance may also be accorded for diversion of minimum forest land for laying of transmission line for evacuation of generation of various HEPs without any hindrance.

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