

**JUSTIFICATION OF LOCATION FOR CONSTRUCTION OF 132/33 KV GSS, LAKHANPUR AND ITS ASSOCIATED 132 KV D/C LINE FROM 132/33 KV GSS, BRAJRAJNAGAR TO PROPOSED 132/33 KV GSS, LAKHANPUR:**

Lakhanpur tahasil area is availing power from 33/11 KV sub- station, Belpahar which is being fed by 33KV supply from 1x40 MVA + 3x20 MVA +1x12.5 MVA, 132/33 kV Grid Sub-Station, Brajarajnagar. The length of the 33KV line is around 15 Kms from the grid sub-station. But the 11KV which is giving supply to the areas under Lakhanpur tahasil is around 250 Km (in total) for which a single tripping of the said line causes power interruption in the total command area. The voltage profile in the concerned tahasil area is very low because of the long 11KV line. The remote 33/11KV sub-station at Dhulunda is availing power from 33/11KV Belpahar Sub-station through 33KV line. By construction of the said grid will reduce the distance of 33 KV line to Dhulunda substation by 25Km and will improve voltage profile in that area.

So, in order to eradicate the low voltage profile and frequent power interruption of Lakhanpur and nearby areas a 2x20 MVA, 132/33 kV Grid Sub-station at Lakhanpur is needed. Also 2x20 MVA, 132/33 kV Grid Sub-station at Lakhanpur will act as an alternative supply to the distribution sub-stations making the Distribution system stable and more reliable.

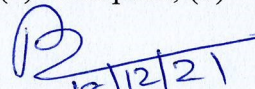
The construction of a 132/33 kV Grid Sub-station at Lakhanpur is very much needed in order to make the 132 kV system voltage level stable in the network connecting to Grid Sub-Stations at Brajarajnagar and Lapanga (In future). Proposed 132/33 kV Grid Sub-station at Lakhanpur is also required to share the load of Jharsuguda and will improve the voltage profile of the area.

Some part of the Lakhanpur block is specially known for ginger cultivation which it exports in tones to other countries. The area is also rich in agricultural products like rice, sugarcane and ground nuts. The area is also huge source of water supply. Because of this huge demand in agricultural products state Govt. is planning for many mega lift projects which couldn't be feasible because of low voltage profile and multiple interruption of power supply. The proposed grid sub-station will enhance the mega lift projects under Govt. scheme and hence the production of agricultural products in the Lakhanpur block.

The economy of the Jharsuguda District can be judged through its natural resources. The District is rich in minerals like coals, quartzite and fire clay. Besides deposit of limestone, granite, white sand stone and laterite stone are also found in several places of Jharsuguda District. Hence the addition of the new project at Lakhanpur will encourage towards growth of new small as well as large scale industries.

The proposed 132/33 kV Grid Sub-station at Lakhanpur will feed the surrounding Distribution Sub-Stations.

This will ultimately feed power to these DISCOM consumers with better voltage profile through 33 KV Systems to 33/11 KV sub-stations at (1) Muchbahal, (2) Jharupada, (3) Dhulunda and (4) Lakhanpur.

  
18/12/21  
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