G. Pulla Reddy Engineering College (Autonomous): Kurnool
IEEE Student Branch (STB15721)

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Sub: Technical Visit Report – Reg

This is a report about the technical visit made by Student members of Electrical and Electronics Engineering to 765/400 kV substation on 26th July, 2014. The students got started from the college by 10:45 AM and reached the destination around 11:20 AM. There they were escorted by security personal of the substation to the main control centre and administrative block. Two engineers of the substation assisted them during their visit in the substation. The substation is divided into two sections:

- The 765 kV section
- The 400 kV section.

The 765 kV /400 kV substation is equipped with seven single phase transformers (each rated 500 MVA) one among which is a spare transformer and the remaining are allocated as two transformers for each phase. Their protection and operation were explained to the students by the engineers over there. To the right of these transformers is the 765 kV section where the CT's, CVT's, circuit breakers, isolators, and reactors were present. The 765 kV side is double bus bar system. To have maximum protection, the 765 KV side is provided with two circuit breakers per phase. The isolators are of knee type. The incoming/outgoing lines on this side are from Raichur, Nellore and Tiruvannamalai in Tamilnadu. To the left of these transformers is the 400 kVsection where the CT's, CVT's, circuit breakers, isolators, and reactors of lower ratings suitable for the 400 kV side were present. The isolators on this side are of pivoted type. The incoming/outgoing lines on this side are from Gooty, Nannur and Nunna. The Nunna line is provided with PIR type circuit breaker to ensure safety.

The entire explanation given to the students by the engineers working over there was in student friendly manner. The entire trip to the substation was very informative.