

Practical Aspects Pertaining to the Selection of Size and Location of Source Substations in an Oil Field

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Abstract : Finalization of Substation sizing and location is an important task to be carried out by electrical designers in an oil field. Practical issues influence the selection of size and location of the source substations that feed multiple production facilities are listed. Importance of selection of appropriately rated short circuit level for 11KV switchboards and constraints pertaining to availability of manufacturers are highlighted. Without being lost in the research of absolute optimum solution, under time constraints, the importance of practical approach is brought out. Focus on identifying near optimum solutions by process of elimination of unfeasible substation locations with the support of cost figures, is emphasized through a case study.

Keywords : substation, size, location, oil field

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