

## Glossary

Term used in report	Description
<b>Adit</b>	Adit is a type of entrance to underground tunnels which may be horizontal or nearly horizontal.
<b>Back hill slope stabilisation</b>	In case of surface power house, it is necessary to stabilize the back hill slope in order to avoid any eventuality in future by way of suitable measures viz. shotcrete, anchors, bolts, etc.
<b>Coffer dam</b>	Coffer dam is a watertight structure, usually of sheet piling, that encloses an area under water, pumped dry to enable construction work to be carried out.
<b>Diversion Tunnel</b>	Diversion tunnel is constructed to divert the flow of river for the construction of dam/barrage on it.
<b>Dam Axis</b>	The vertical plane or curved surface, chosen by a designer, appearing as a line, in plan or in cross-section, to which the horizontal dimensions of the dam are referenced.
<b>Drill and blast method (DBM)</b>	DBM is the method of manual excavation of tunnels i.e. through drilling and blasting.
<b>Environmental Impact Assessment (EIA)/ Environmental Management Plan (EMP) studies</b>	These studies are conducted to assess the possible positive or negative impact that a proposed project may have on the environment, together consisting of the environmental, social and economic aspects and subsequent plan of action. EIA/EMP studies are required to be conducted before submission of proposal for obtaining Environment clearance.
<b>Geological surprises</b>	This term is used to identify the problematic sectors of the geological conditions of the project site.
<b>Geomorphological mapping</b>	Geomorphological mapping gathers various mathematical, statistical and image processing techniques to quantify morphological, hydrological, ecological and other aspects of a land surface.
<b>Geotechnical mapping</b>	Geotechnical mapping is done for identification and location of all surface features relevant to the establishment of geotechnical models at the sites.
<b>Head of the power station</b>	The difference in height between the source and the water's outflow is called head.
<b>Head Race Tunnel (HRT) and Tail Race Tunnel (TRT)</b>	HRT is a tunnel connecting water intake at dam site to power house for generation of hydro electricity whereas TRT is a tunnel for flowing water used for generation of electricity again into the river.
<b>Raise borer</b>	A raise borer is a machine used in underground mining, to excavate a circular hole between two levels of a mine without the use of explosives.
<b>Run of river power stations</b>	Run of river hydroelectricity stations are those with small or no reservoir capacity so that the water coming from upstream must be used for generation at that moment or must be allowed to bypass the dam.

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<b>Shotcrete</b>	Shotcrete is concrete (or sometimes mortar) conveyed through a hose and pneumatically projected at high velocity onto a surface, as a construction technique.
<b>Sluicing</b>	Sluicing is an effective measure of investigation on steep and rocky slopes where soil is relatively thin and sandy.
<b>Surge Shaft</b>	Surge shaft is an additional storage space or reservoir fitted between the main storage reservoir and the power house.
<b>Topographic mapping</b>	A topographic map is a type of map characterized by large-scale detail and quantitative representation of relief, usually using contour lines in modern mapping, but historically using a variety of methods.
<b>Tunnel Boring Machine (TBM)</b>	TBM is used for excavation of underground tunnels. This technology is suitable in cases where adequate numbers of faces for tunneling are not available.
<b>Water ingress</b>	Water ingress means entrance of excessive water in the project site at the time of construction.