

Status of Completed & Ongoing Projects of R & D:

**COMPLETED PROJECTS**

<b>Sl. No</b>	<b>Name of the Project</b>	<b>Start &amp; End Date</b>	<b>Completion status</b>
1.	Study on the prospect of upgrading the existing open circuit cooling system to acidity-free cooling system through neutralization of acidity to contain corrosion and scaling at Kopili HE Plant	07.03.2012 & 31.08.2013	Completed
2.	Study of the corrosion and erosion of metal in the water path and under water turbine parts and selection of erosion resistant corrosion inhibitor system for Kopili HE Plant.	28.06.2012 & 24.06.2013	completed
3.	Investigation of deformation modulus of soft tertiary rock at Pare HE Project by measuring deformation in open excavation. (Drilling of Bore holes & Installing extensometers thereof.	10.08.2012 & 15.05.2013	Completed
4.	Study of the catchments of the Panyor Lower HE Plant (PLHPS) through Remote Sensing to assess the status of soil erosion with reference to up-coming projects in the area and silt deposition in the reservoir	24.08.2012 & 22.08.2014	Completed
5.	Application of Remote Sensing and GIS (Geographic Information System) in estimation of river inflow/discharge in to the reservoir of Kameng H.E. Project. a) Development of Model and submission of Phase-I report. b) Validation of the Model and submission of Final report.	17.06.2013 & 16.06.2015	Completed
6.	Feasibility study for implementing HTS Generator in a Hydro Electric Power Plant for generation modernization to increase efficiency. (Feasibility study and submission of report). a) Preliminary feasibility study. b) Detailed feasibility study. c) Final report using HTS generator	1.10.2013 & 30.09.2015	Completed
7.	Assessment of turbine efficiency under different reservoir level at Kopili Hydro Electric Plant. a) Feasibility Study and submission of report. b) Submission of Final report	7.06.2013 & 30.12.2014	Completed
8.	Study of reduction of acidity of the responsible stream either by diversion from the main river feeding the Kopili Reservoir or by taking up some chemical treatment to prevent damages of metal parts of Kopili H.E. Plant at Umrongso". a) Feasibility report on Diversion of responsible stream for acidity diversification and/or chemical treatment. b) Submission of Final report With recommendation.	09.07.2014 & 4.01.2016	Completed
9	Assessment of corrosion of the steel liner of the water conductor system of Kopili H.E. Plant and suggestion for selection of corrosion resistance system for the steel liner including a model study.	30.03.201 & 30.03.2018	Completed

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10	Study on flora and fauna and survival in acidic water of Kopili Reservoir of Kopili Hydro Electric Plant, Umrongso, Dima Hasao District, Assam with emphasis on identification of endangered species and a practical solution to their conservation under existing condition of acidic water”	30.03.2016 & 30.03.2018	Completed
11	Investigation of Deformation Modules & Characteristics of Soft Tertiary Rock at Pare HEP.	29.09.2014 & 11.04.2022	Completed.
12	R&D on Smart Illumination Controller at AgGBPS, Tripura.	24.06.2022 & 22.09.2022	Completed.
13	Design of an automatic communication system through Cloud computing using sensor based automated input for efficient operation of PLHPS with due emphasis on downstream concerns up to confluence with Subansiri River	24.01.2020 & 23.01.2023	Completed
<b>ONGOING PROJECTS</b>			
14	R&D on Fire detection system at AgGBPS, Tripura.	23.09.2022 & 22.09.2024	Work in Progress
15	Development of low cost sustainable and efficient electro-catalyst and proton exchange membrane for electrolyser assembly for producing Green Hydrogen	09.11.2022 & 08.11.2025	Work in Progress