

Upper Sengulam Hydro Electric Project Stage -I(24 MW)

Kerala State Electricity Board proposes to implement Upper Sengulam Hydro Electric Project at the upstream of existing Sengulam Hydro Electric Project in Muthirappuzha, a tributary of river Periyar in Idukki District. **The aim of the Project is utilize the surplus water expected to reach Sengulam Balancing Reservoir after the commissioning of Pallivassal Extension Scheme, Sengulam Augmentation Scheme and water from the free catchments of Pallivassal and Sengulam.** The project area falls in Devikulam Taluk of Idukki District of Kerala State. The Project is closed to Cochin – Dhanushkodi National Highway. Adimai is the nearest town. Distance of the Project from Adimali is 20km. Nearest Railway station is Angamaly is at a distance of 130 km. Nearest Airport is at Nedumpassery at a distance of 120 km. Nearest Harbour is at Cochin at a distance of 145 km.

The project comprises of circular tunnel having finished dia of 3.3m and length of 2700 m., 10 m diameter surge shaft, 2.8m dia 1000 m long pressure shaft, a 24 MW power house, tailrace channel and switchyard. The Power House is proposed at 500m upstream of existing Sengulam Power House at the right bank of Muthirapuzha river. After power generation the tail water will join Muthirapuzha river. The project when completed would generate 53.22 MU of energy annually and will be fed to the Kerala State Power Grid. No inter state or inter basin transfer issues are involved in this Project.

The requirement is to hand over 0.95 Ha of forest land for the permanent use of KSEBL for the construction of Intake and allied structures for the implementation of Upper Sengulam HEP, which is being presently leased to M/s HNL for captive Eucalyptus plantations under Munnar forest Division.

As stated above, the scheme envisages the utilization of surplus water expected to reach Sengulam Balancing Reservoir after the commissioning of Pallivasal Extension Scheme, Sengulam Augmentation Scheme and water from the free catchments of Pallivassal and Sengulam. The scheme utilizes only the surplus water in the existing Sengulam Balancing Reservoir and there is no new construction of Dam and hence there is no additional catchment area. The Sengulam Balancing Reservoir is entirely surrounded by the HNL captive plantation and there is no other alternatives to avoid the forest land.