<u>SLV POWER PRIVATE LIMITED</u> <u>ANIYUR MINI HYDEL SCHEME (3 X 8 MW = 24 MW)</u> <u>CATCHMENT AREA TREATMENT PLAN</u>

1. INTRODUCTION :

M/s SLV Power Pvt. Ltd. Is setting up a Mini Hydel Scheme of 24 MW capacity across Aniyur Stream, Neriya Village, Belthangady Taluk, Dakshina Kannada District, Karnataka. The project is located in private plantation land.

2. THE PROPOSED PROJECT :

The development of Mini Hydel across the Aniyur hole stream comprises of construction of a small diversion weir across the stream, carrying the water through steel pipe (Penstock) to the Power House for generating 24 MW Power. The project is conceived as a Run of River project. The generation will be during the monsoon months and no storage is contemplated being a Run of River project. The latitude and longitude of weir is 13° 4' 31.70" N, 75° 28' 45.20" E. The latitude and longitude of Power House is 13° 3' 24.10" N, 75° 28' 22.50" E.

3. RIVER :

The river Netravati is a major west flow river situated in Dakshina Kannada District of Karnataka. The river has its origin at Kudremukh peak and joins the Arabian sea at Mangalore after flowing a distance of 105 Km, draining a catchment area of 1306 Sq Km. Most of this is in the

costal plains of the Arabian sea. The river is fed by number of streams/ tributaries all along its flow.

Aniyur River, locally known as "Aniyur Hole" is one of the tributaries of Netravati River. The proposed Mini Hydel Scheme is across the Aniyur Hole.

4. HYDROLOGY :

The catchment receives heavy rain fall during monsoon months that is from June to September. The average annual rain fall in the area is 5000 to 6000 mm. The hydrological analysis for the proposed project has been made based on the rain fall data and also on the gauging data of the stream. After a careful analysis of the available data for a fairly long period, the capacity of the project has been estimated

5. THE CATCHMENT :

The catchment area of Aniyur Stream intercepted up to the proposed diversion weir have been worked out at about 39 Sq. Km. A map showing the catchment area marked on the Toposheet Numbers **D43P8** (48 O/8) and **D43P12 (48 O/12)** in 1:50,000 scale is attached. Also the layout of the project marked on the toposheet (scale 1:50000) is attached vide Ref No. L. (vi) in the FORM A of application.

- a. The catchment area is having the moist deciduous and semi ever green forest in between the mountain ranges and valleys and mostly with plantation of Cocoa, Rubber, Cardamom with vegetation.
- b. The proposed Mini Hydel Scheme requires only 1.5383 Ha of Private Plantation land for implementing the project.
- c. The Catchment area of the Aniyur hole MHS is envisaged across the Aniyur hole river. The catchment area drained up to the proposed weir site is 39 Sq. km. The River originates at an elevation of about 1485 m. above MSL near mountain called Ombattu Gudda at the top of the Western Ghats in Mudigere taluk of Chickmagalur District. This stream is also known as initially called Nellitaluhalla and Doddahalla after Aniyur hole in its down stream reaches. The terrains of the catchment in general are steeply sloping and are generally covered with dense forest with Coffee and Rubber plantations. It is spread over in two taluks viz., Beltangadi Taluk in Dakshina Kannada District, Mudigere Taluk of Chickmagalur District. The catchment area receives heavy rainfall and during monsoon period, an average rainfall is about 5500 mm.

d. Land use pattern in the catchment area:

Area in Hectors

Taluk	Geographical area	Forest Area	Plantation Area	Area not available for cultivation	Fellow land rocky area
Beltangadi	860.00	-	850.00	2.00	8.00
Mudigere	3040.00	1850.00	1085.00	14.00	91.00
Total	3900.00	1850.00	1935.00	16.23	99.00

6. COMPENSATORY AFFORESTATION PROGRAM :

As 1.5383 Ha of private plantation land with vegetation is being utilized for implementation of 24 MW Mini Hydel Project, An equivalent area of private land is being earmarked for developing compensatory afforestation in the same village.

7. THE CATCHMENT AREA TREATMENT PROGRAM (CATP) :

This includes construction of check dams, gully traps, contour trench and diversion trench at specific locations accompanied by tree and shrub planting to control erosion in gullies, eroding streams and land slide. The location and details of these structures will be worked out individually, keeping in view the patches of plantation and site-specific design requirements agricultural/forest

8. COST ESTIMATE :

The details of estimated financial expenditure for Catchment Area Treatment are assessed as under:

		Expenditure	
SI No	Derticularo	Maximum	
SL NO.	Fai liculai S	Lumpsum	
		(Amount in Rs.)	
1	Gally Checks and Check dams and	2,00,000	
	miscellaneous works		
2	Plantation and Planting of Trees	50,000	
3	Stone Pitching / Grass Pitching etc	1,00,000	
	3,50,000		

9. CONCLUSION :

The above work would be carried out by the project implementing agency under the direction of the State Forest Department or as to be decided by the Karnataka Forest Department.

The above expenditure towards Catchment Area Treatment Program would be met by the Developer of the project.