Annexure-II

Cost-Benefit Analysis

Parameters for Evaluation of Loss of Forests

Sl. No.	Parameters	Transmission Lines
01.	Loss of value of timber, fuel wood and minor forest produce on an annual basis, including loss of man-hours per annum of people who derived livelihood and wages from the harvest of these commodities	Negligible as the nature of proposal involves only transmission line. However, it is assessed that loss of timber comes Rs. 0.12 lakhs/annum.
02.	Loss of animal husbandry productivity, including loss of fodder	Negligible.
03.	Cost of human resettlement	Not applicable as human displacement is not Involved.
04.	Loss of public facilities and administrative infrastructure (roads, buildings, schools, dispensaries, electric lines, railways etc.) on forest land or which would require forest land if these facilities were diverted due to the project	Not applicable as no such public utilities falls on the forest land involved.
05.	Environmental Losses: (Soil erosion, effect on hydrological cycle, wildlife habitat, microclimate, upsetting of ecological balance)	Density of forest involved varies from 0.2 to 0.4. Hence considering average density of 0.3 for an forest area of 17.256 Ha., environmental loss is assessed to Rs. 656.107 lakh @ Rs.38.022 lakhs /hectare.

Cost-Benefit Analysis

Annexure-III

Parameters for Evaluation of Benefit, notwithstanding Loss of Forests

Sl. No.	Parameters	Transmission Lines
01.	Increase in productivity attributable to the specific project	Considering average flow of power through the line at 90 MW, Load Factor-50%, Loss-2%, average cost of power at Rs.4.93 Kwh, Energy sent out/year = 90x 1000 x 0.5 x 8760 x 0.98 Kwh = 386,316.00 x 1000 Kwh. Value added = 386316 x 1000 x 4.93 =Rs.190.45 Crore /Year
02.	Benefits to economy	The transmission scheme is for evacuation of hydro-electric power generated from HEPs with addition of cheap hydro-electric power, not only power system becomes more stable, but also saves other fossil fuel whose deposits are increasingly diminishing. With commissioning of the scheme, the state of Sikkim also will earn considerable revenue from royalty besides a boost in industries and agricultures and relief to domestic consumers.
03.	No. of population benefited	Whole Sikkim State population will be benefited as there will be revenue generation and un-interrupted power supply in the State.
04.	Employment potential	Transmission Line costs approx. 91.615 crores. Approximately 20% will be labour component and Percentage of various categories of labourers, their daily wages shall be as under: i) Skilled- 20% @ Rs.335/day ii) Semiskilled-30% @ Rs.320/day iii) Unskilled-50% @ Rs. 300/day

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The following employment opportunities are generated:

i)	Skilled labourers	-	1,09,391 mandays
ii)	Semiskilled labourers	-	1,71,779 mandays
iii)	Unskilled labourers	-	3,05,385 mandays

05.	Cost of rehabilitating the displaced persons as different from Compensatory amounts given for displacement	Nil, as no person is being displaced due to the transmission line project.
06.	Cost of supply of free fuel wood to workers residing in or near Forest area during the period of construction	Nil, as during construction period workers shall be provided with Kerosene/LPG.

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