STATE POLLUTION CONTROL BOARD
DEPARTMENT OF FOREST, ENVIRONMENT & WILDLIFE MANAGEMENT
GOVERNMENT OF SIKKIM
DEORALI, GANGTOK

PUBLIC NOTICE

M/s TT Energy Pvt. Ltd., proposes to construct a 99 MW hydro-electric project by utilizing the water of Rathong Chhu a tributary of Rangit River in the West District of Sikkim. The Salient features of the project are as under:

TING-TING HYDROELECTRIC PROJECT (2 X 49.5 MW)

SALIENT FEATURES:

PROJECT LOCATION	
State	Sikkim
District	West
Stream	Rathang Chu River
Location (nearest village)	Yuksum
DAM	
Latitude	27°13' N
Longitude	88°12' E
HYDROLOGY	
Catchment area at Dam Site	372 sq. km
Average Annual Inflow	2578 mm
Probable maximum Flood Discharge (PMF)	1885 Cumec
DAM AND APPURTENANT STRUCTURES	
DAM	
Type	Concrete Gravity
Length of dam at top	98.5 m
Spillway Width	36 m
Full Reservoir Level	1165.00 m
Submergence area at FRL (approx.)	4.02 ha
Stretch of Reservoir	0.46 km
RIVER DIVERSION AT DAM	
Upstream Cofferdam	
Length	35.8 m
Downstream Coffer Dam	
Crest Elevation	EL. 1125.00 m
Length	63.1 m
Diversion Tunnel	
Shape & Size	D-shaped, 3.6 m
Length	131.0 m
Invert level at inlet	EL. 1137.0 m
Invert level at outlet	EL. 1122.4 m
INTAKE	
Location	On left bank, 5.9 m upstream of Dam axis
Design Discharge	46.13 Cumec
Feeder Tunnel from Intake	One no. of 4.4 m Horse Shoe Shaped
HEADRACE TUNNEL-HRT	
Shape & Size	Horse Shoe, 4.4 m

Length	2141 m
Design Discharge	46.13 cumec
Adit to HRT	
Location	Just U/s of surge shaft
Length	122 m
SURGE SHAFT	
Vertical Shaft	Restricted Orifice Type
Internal Diameter	10 m
Height of Shaft	63.9 m
Lining Type	RCC Lining
Vertical Lift Gate Size	3.4 m (W) x 3.4 m (H)
Top of Surge Shaft	EL. 1188 m
Bottom of Surge shaft	EL. 1124.1 m
Max. Surge level	EL. 1185 m
Min. Surge level	EL. 1127.80 m
Orifice dia	2.25 m
Adit to Sruge Shaft Bottom	
Shape & Size	D-shaped, 4.5 m
Entry Sill Level	EL. 1120.70 m
Length	77 m
PRESSURE TUNNEL PENSTOCK	
Total Length up to Bifurcation	760 m
No. of anchor blocks	3
Branch penstock length	23.1 m & 32.6 m
POWERHOUSE	
Type	Surface Powershouse
Size	48 m (L) x 18 m (W) x 44 m (H)
Number of units	Two (2)
Rated Discharge per unit	23.06 Cumec
Turbine Speed	500 rpm
Gross Head (monsoon period)	EL. 924.00 m
Installed Capacity	2 x 49.5 MW
Annual Plant Load Factor (90% year)	0.473
Power Factor	0.9
TRANSFORMER	
Type and capacity	Single phase, 11kv/220 kv, 21.0 MVA
Location	Outdoor on left bank of the river
Number	7
TAILRACE TUNNEL	
Type	Twin box, cut and cover tunnel
Length (including tail pool)	140.8 m
No. & Size	2 nos. x 4.8 m x 3.5 m
SWITCHYARD	
Type	Outdoor
Location of Switchyard	Downstream of pH on right bank at EL. 940.00 m
Bus bar Voltage	220 KV
TRANSMISSION LINE	Switch yard to pooling station
Type	Single Circuit 220 KV
ESTIMATED COST	
Civil Works (including gates & hoists)	Rs. 226.61 Crore
E&M Works (including cost of transmission line to polling station)	Rs. 167.83 Crore

Total Basic Cost	Rs. 394.44 Crore
Escalation during construction	Rs. 34.76 Crore
Interest during Construction	Rs. 59.93 Crore
Total (Generation Works)	Rs. 489.13 Crore
Cost per MW installed	Rs. 4.91 Crore
POWER BENEFITS	
Design Energy Generation (90% Dependable year with 95% machine availability)	410.24 GWh
Annual Energy Generation in (90% Dependable year)	424.09 GWh

Whereas by notification of the Govt. of India in the Ministry of Environment & Forest, Govt. of India No. S.O. 1533 (E) dated 14th September 2006 issued under sub-section (1) and clause V of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 read with clause (d) of sub-rule (3) of Rule 5 of Environment (Protection) Rules, 1986 and in suppression of the notification no. S.O. 60 (E) dated 27th January 1994 as made mandatory under part II, section 7, sub-section 3 dated 14th September 2006, the State Pollution Control Board is required to conduct Public Hearing in the interest of the public for preparing recommendations based on the technical assessment of documents and data furnished by the Project Authorities for obtaining necessary environmental clearance from MoEF, Govt. of India. Therefore notice is hereby given to all concerned persons, having a plausible stake in the environment aspects of the project or activity and to provide responses in writing or by participating in the public hearing to be conducted on 17th June 2009 at Layathang Govt. Primary School Ground near Kanchendzonga falls, Chozo block, Gyalzing, West Sikkim at 10.00 A.M. onwards. Any person having plausible stake in the environmental aspects of the project or activity can submit their responses before the hearing date which may be addressed to the Member-Secretary, State Pollution Control Board-Sikkim, Department of Forest, Environment & Wildlife Management, Govt. of Sikkim, Deorali, Gangtok. Further access to the details of the project/executive summary, has been made available in the web-site www.sikenvis.nic.in and at the offices of the State Pollution Control Board- Sikkim, Deorali, Gangtok, Office of the District Collector (West) Gayzing, District Industry Office, Gayzing, West Sikkim and Zilla Parisad Bhawan, Gayzing, West Sikkim.

Sd/-
Member Secretary,
State Pollution Control Board-Sikkim,
Deptt. of Forest, Env. & W/L Management,
Government of Sikkim,
Deorali – Gangtok.

IPR.RO…..… Dated…….