

STATE POLLUTION CONTROL BOARD

DEPARTMENT OF FOREST, ENVIRONMENT & WILDLIFE MANAGEMENT **GOVERNMENT OF SIKKIM**

DEORALI, GANGTOK.

PUBLIC NOTICE

M/s Sneha Kinetic Power Project Limited proposes to construct a 96 MW hydro-electric project by utilizing the water of River Dikchu, a tributary of Teesta River in the State of Sikkim. The Salient features of the project are as under:

DIKCHU HYDROELECTRIC PROJECT (3 X 32 MW)

SALIENT FEATURES:

LOCATION

State Sikkim

District East Sikkim & North Sikkim

River

Dam Site Location 150 m d/s of confluence of Bakcha Chu and

Dikchu (Near village Lingdok)

27⁰24'00"N & 27⁰24'45" N Latitude 88°35'20"E & 88°32'00"E Longitude

Nearest Airport Bagdogra Nearest Railway New Jalpaiguri

HYDROLOGY

 240 Km^2 Catchment Area at Dam Site $1100 \text{ m}^3/\text{sec}$ Design Flood

RESERVOIR

EL 950.0 m Full Reservoir Level (FRL) Minimum Draw Down Level (MDDL) EL 939.0 m Live Storage at FRL 0.33 M Cum

DIVERSION TUNNEL

Number

Size 6.0 m (Circular)

Length 300.0 m

TUNNEL INTAKE

Invert Level EL 927.00 m Size of each gate 4m x 4m

Trash Rack Size 7.3m x 8.8m (Steel Trash Racks)

Design discharge 39m²/sec

DAM

Type Concrete Gravity
Top Elevation of Dam EL 956.0 m
Height of dam above riverbed level 35.0 m
Length of Dam 116 m

Riverbed level EL 920.0 m (avg)

SPILLWAY

Design flood 1100 m³/sec

Type Ungated 0gee Spillway

Length of spillway 60 m Crest level of ogee portion EL 950.0 m

No. of under sluices

Size of each radial gate 7m (W) x 8m (H) Sill level of radial under sluice gate EL 924.0 m

DESILTING ARRANGEMENT

Design discharge 39 m³/sec Type Dufour No. of de-silting chamber 1 no.

Size 106m long, 15m wide, 11.5m high

Total Design Discharge 39m³/Sec

Particle size to be removed $\geq 0.2 \text{ mm } (90\% \text{ efficiency})$

Silt flushing tunnel size 4.0m diameter

Length 250 m

HEADRACE TUNNEL

Size & Type 4 m dia, Horse Shoe Shaped, CC lined

Design discharge 39m³/sec
Length 5.7 km (approx)

Adits 2 Nos., 4 m D – Shaped

SURGE SHAFT

Size & Type 9 m diameter

Vertical Shaft Height 90 m

PRESSURE SHAFT & PENSTCKS

Pressure shaft Diameter 4.0 m (Circular)

Number 1 Underground Pressure Shaft Length 500 m

Penstocks Type & Number Circular, 3 Nos.

Diameter 1.6 m Length 50 m

POWER HOUSE

Type Underground Installed Capacity 96 MW Number of units 3

Powerhouse cavern size (main) 65m x 15m x 35m

Type of turbine Vertical Axis Francis Turbine

Tail water level at outlet

Type of Turbine

C.L of Turbine

Rated Head

Design Discharge

EL 581.0 m

Vertical Francis

EL 582.0 m

350 m

10.3 m³/sec

TAILRACE

Size 4 m dia

Type Horse-shoe shaped

Length 1200 m
Design Discharge 39m³/Sec
Tail Water Level at Outlet EL 581.0 m

SWITCH YARD

Type, Size & Location Open, 150m x 100m & adjacent to

powerhouse

POWER GENERATION

Installed Capacity 96 MW

Annual energy generation in a 90%

Dependable year 450.3 Mu

Annual energy generation in a 90% Dependable year on 95% machine

Availability 439 Mu

CONSTRUCTION PERIOD 4 years

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 16th November 2007 at Dikchu bazaar, East Sikkim at 10.00 A.M. onwards and 19th November 2007 at Ramthang Panchayat Bhawan, Ramthang, North Sikkim 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, Department of Forest, Env. & Wildlife Management, Govt. of Sikkim, Deorali, Gangtok. Further excess 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 (East) Gangtok, Office of the District Collector, North - Mangan, District Industry Office, North-East, Gangtok, Sikkim and Zilla Parisad Bhawan, Gangtok, East Sikkim and Zilla Parishad Bhawan, Mangan, North Sikkim.

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