

65

**DIRECTORATE OF ENERGY
GOVERNMENT OF HIMACHAL PRADESH
SHANTI BHAWAN, PHASE-III, SECTOR-VI, NEW SHIMLA-171009(HP)**

OFFICE ORDER

Directorate of Energy(DoE), Govt. of Himachal Pradesh, is pleased to accord the Techno Economic Clearance(TEC) to Lingti SHP (500 KW) on Lingti khad a tributary of Neogal khad in Beas basin, Distt. Kangra, Himachal Pradesh, allotted to "M/S Parshanti Hydro Energies Pvt. Ltd., Sai Sankalp, Near PNB, Bagher Road, VPO Panchrukhi, Tehsil Palampur, District Kangra-176103(HP)", at an estimated cost of Rs. 420.00 lac (Rupees four hundred twenty lac) only including Interest During Construction(IDC), Escalation, Financial Charges(FC) and LADC @ 1.00 % of total project cost with the following stipulations:

- 1.i) The completion cost shall not exceed the above cost except on account of the following:
 - a) Interest During Construction(IDC) and Financial Charges(FC) shall be as per actuals but not exceeding the amount as indicated at Annex-I, unless revised by DoE, GoHP while according concurrence under Section-8 of Indian Electricity Act 2003 after review of the financial package.
 - b) Change in rates of Indian taxes and duties such as Excise Duty, Sales Tax/VAT, Custom Duty and levy of any other taxes/duties subsequent to issue of Techno Economic Clearance.
 - c) Change in Indian law resulting in change in the cost.
- ii) The abstract of the Estimated Cost approved by DoE, GoHP is furnished at Annex-I and the Salient Features of the scheme are at Annex-III.
2. The Techno-Economic Clearance(TEC) is subject to the fulfillment of the following conditions:
 - i) Completed cost/Techno-Economic Clearance (TEC) shall not be re-opened due to the following:
 - a) Non acquisition of land.
 - b) Non- finalization of Power Purchase Agreement (PPA)
 - c) Delay in financial closure.
 - ii) The final financial arrangement shall not be inferior to the financing arrangement projected in the Detailed Project Report (DPR) for TEC.
 - iii) The cost of the project cleared by the DoE, GoHP is indicative and shall have no binding on the regulator while fixing the tariff. The tariff of the project shall be regulated by the appropriate Electricity Regulatory Commission.
 - iv) The public issue expenses, if any, shall be reconsidered at the time of approval of completion cost based on documentary proof and in accordance with Security Exchange Board of India (SEBI) guidelines regarding regulation of public issue expenses.
 - v) Fulfillment of conditions stipulated in Central Electricity Authority (CEA)/Central Water Commission(CWC) guidelines in respect of civil works at the stage of detailed designs/execution.
 - vi) Any increase in the cost estimate due to design modifications and geological surprises would be absorbed by the Independent Power Producer (IPP) i.e. "M/S Parshanti Hydro Energies Pvt. Ltd., VPO Panchrukhi, Tehsil Palampur, District Kangra-176103(HP)".
 - vii) No additional cost shall be allowed due to Resettlement & Rehabilitation (R&R) Plan.
 - viii) Normal operation life of the hydro power plant shall be as per provisions of CWC/CEA guidelines or CERC/HPERC regulations.
 - ix) The statutory and administrative clearances as per Annex-II shall be obtained before execution/ implementation of the project.
 - x) The interconnection point with the State grid and interconnection facilities at the interconnection point shall be provided, operated and maintained at the cost of the IPP.

Auth. Sign.


Dashrath

Director

Indrajit

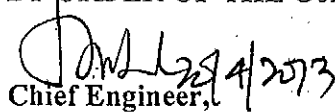
- xi) The cost of providing and/or strengthening/additions etc. of the system at and beyond the Interconnecting Sub-station which may also include the cost of replacement of switchgear/ protection and provision of shunt capacitors, strengthening of bus bars, apart from other works required at injection voltage level and other one or more successively higher voltages, civil works relocation of existing bays etc. shall be recovered by HPSEBL, as per the regulations of HPERC read with the clarifications/decisions by HPERC and/or any other competent authority as may be finally applicable. The share of IPP on this account shall be paid by the IPP to HPSEBL as per the final decision of the competent authority.
- xii) Whereas the HPSEBL/HPPTCL shall endeavor to provide the evacuation system at the earliest, the scheduled date for providing evacuation arrangements shall be spelt out in the PPAs on case to case basis inter-alia, keeping in view the time lines indicated in the relevant plan and approved by HPERC.
- xiii) The powerhouse generating equipment as well as other electrical equipment to be provided by the developer shall be compatible for parallel operation with the State grid after interfacing. The IPP shall be responsible for any loss of generation on this account.
- xiv) O&M charges for maintenance of inter connection facilities at the interconnection sub-station shall be paid by the IPP to HPSEBL throughout the period, the IPP runs the project and the same shall be reviewed at the beginning of every financial year.
- xv) For evacuation of power the IPP shall interface this project with 33/11 kV substation at Nagri of HPSEBL by constructing 11 kV line from powerhouse to Nagri substation. The additional cost of the terminal equipment at substation shall be borne by the IPP.
- xvi) The project line shall be provided, operated and maintained by the IPP at his cost as per normal conditions after obtaining approval of HP Govt. under Section 68(1) of Electricity Act, 2003.
- xvii) The above mentioned evacuation arrangements shall be subject to the HPERC approval of "Comprehensive area wise plan for augmenting and establishing of transmission/ sub-transmission system for evacuation of power from small HEPs" which has already been submitted to HPERC. The Transmission/Distribution Licensee may however also evolve alternate system(s) depending on the site conditions and subsequent developments with the approval of HPERC.
- xviii) The IPP shall develop operate and maintain the Project including the dedicated transmission system subject to compliance with the following:
 - a) Grid code and standards of grid connectivity.
 - b) Technical as well as Mechanical standards for construction of Electrical lines.
 - c) Norms of System Operation of the concerned State Load Dispatch Center (SLDC) or Regional Load Dispatch Center (RLDC).
 - d) Directions of the concerned SLDC or RLDC regarding operation of dedicated transmission line.
 - e) The IPP will only be allowed to inject power in HP system with the undertaking that necessary action to provide tele-metering to SLDC shall be provided by them and specifications required to be got approved from the office of SE(SLDC), HP Load Despatch Society, Totu, Shimla from compatibility point of view with existing SCADA system.
- xix) The conditions on these lines shall have to be suitably included by the developer in the PPA etc. apart from other standard conditions.
- xx) The observations of DoE, GoHP on the DPR and replies thereof shall form an integral part of the DPR.
- xxi) Minimum 15% release of water immediately downstream of diversion structure shall be ensured all the times including lean season as per Power Policy of HP Govt., 2006 and subsequent amendments thereof. The necessary monitoring equipment as per recommendations of the Pollution Control Board shall be installed by the IPP during execution of the project.
- xxii) LADC/LADF amount and activities shall be implemented as per Power policy of HP Govt., 2006 and subsequent amendments thereof.

Auth. Sign.

 Director
PARSHANT HYDRO ENERGIES PVT. LTD.

- xxiii) The additional 1%(one percent) free power from the project shall be provided and earmarked for a Local Area Development Fund(LADF) as per HP Govt. Notification No. MPP-F(1)-2/2005-V dated 30.11.2009.
- xxiv) The TEC is based on the reports and data furnished by the IPP in the DPR and it is presumed that information furnished is correct and has been collected reliably after carrying out detailed field investigations and surveys under the supervision of competent personnel. The scrutiny of DPR does not cover the examination of the detailed designs & working drawings of project components in regard to their structural, hydraulic and mechanical performance & safety which shall be ensured by the project authority/IPP.
3. The project shall be completed within 24 months from the date of start of the construction work.
 4. The completion cost of the scheme shall be submitted to DoE, GoHP for approval within 3 months from the Commercial Operation Date (COD) of the plant.
 5. The Project Promoters/Project Authorities shall give free accessibility to the officers and staff of DoE, GoHP to have on the spot assessment of various aspects of the project.
 6. The firm financial package and tie-up of balance inputs/clearances shall be completed within the period as stipulated in the HP Govt. power Policy, 2006 and subsequent amendments thereof /Implementation Agreement.
 7. In case the time gap between the Techno-Economic Clearance of the scheme and actual start of work on the project is three years or more, a fresh Techno-Economic Clearance shall be obtained from DoE, GoHP before start of actual work.
 8. The DoE, GoHP reserve the right to revoke the concurrence if the conditions stipulated above are not complied with to the satisfaction of the GoHP.

BY ORDER OF THE GoHP



Chief Engineer,
Directorate of Energy, GoHP,
New Shimla-171009(HP).

No. DOE/CE(TEC)/TEC-Lingti SHP/2013- 401-09

Dated: 20/04/13

Copy for information and necessary action to the:

1. Principal Secretary (MPP & Power) to H.P. Govt., Shimla-171002.
2. Principal Secretary (NES) to H.P. Govt., Shimla-171002.
3. Secretary, Ministry of Non-Conventional Energy Sources (MNES), Block No.14, CGO Complex, Lodhi Road, New Delhi-110003.
4. Director, Environmental & Scientific Technologies, Narayan Villa, Near Wood Villa Palace, Shimla-171002.
5. General Manager(C&D), HPPTCL, Borowalia House, Khalini, Shimla-171002.
6. Chief Engineer (SO&P), HPSEB Ltd, Vidyut Bhawan, Shimla-171004.
7. Chief Engineer(Commercial), HPSEB Ltd, Vidyut Bhawan, Shimla-171004.
8. Chief Executive Officer, Himurja, 8A-SDA Complex, Kasumpti, Shimla-171009.
9. M/S Parshanti Hydro Energies Pvt. Ltd., Sai Sankalp, Near PNB, Bagher Road, VPO Panchrukhi, Tehsil Palampur, District Kangra-176103(HP).


Chief Engineer,
Directorate of Energy, GoHP,
New Shimla-171009(HP).

PARSHANTI HYDRO ENERGIES PVT. LTD.

Auth. Sign.


Director

66

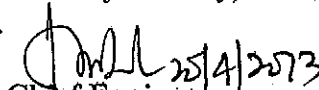
ANNEXURE-I

Lingti SHP (500 KW) in Distt Kangra of Himachal Pradesh of "M/S Parshanti Hydro Energies Pvt. Ltd., Sai Sankalp, Near PNB, Bagher Road, VPO Panchrukhi, Tehsil Palampur, District Kangra-176103 (HP)"

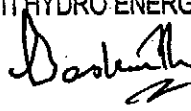
ABSTRACT OF COST ESTIMATE

Sr. No.	Description of works	Amount (In Rs lac)	
(a)			
1.	Civil works i/c preliminary Expenses	135.92	Price Level December, 2012
2.	Electro Mechanical works	184.00	
3.	Transmission works	60.00	
	Sub Total (a)	379.92	
(b)			
1.	Escalation	7.53	
2.	Interest During Construction(IDC)	25.10	
3.	Financial Charges (FC)	3.03	
	Sub Total (b)	35.66	
	Total (a+b)	415.58	
(c)	LADC @1.00 % of (a+b)	4.16	
	Grand Total (a+b+c)	419.74	
		Say Rs. 420.00 lac	

(Rupees four hundred twenty lac only)


 Chief Engineer,
 Directorate of Energy, GoHP,
 New Shimla-171009(HP).

PARSHANTI HYDRO ENERGIES PVT. LTD.


 Auth. Sign.

Director

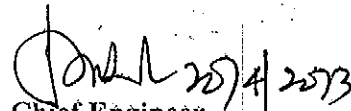
69

ANNEXURE-II

Lingti SHP (500 KW) in Distt Kangra of Himachal Pradesh of "M/S Parshanti Hydro Energies Pvt. Ltd., Sai Sankalp, Near PNB, Bagher Road, VPO Panchrukhi, Tehsil Palampur, District Kangra-176103 (HP)".

LIST OF STATUTORY AND ADMINISTRATIVE CLEARANCES REQUIRED

Sr. No.	ITEM	AGENCY	REMARKS
1.	WATER AVAILABILITY	1. State Govt. 2. CWC	Interaction between State Govt. Deptt. & CWC required. Relevant Irrigation Act of the State & Central Water Commission.
2.	SEB CLEARANCE	1. SEB 2. State Govt.	Indian Electricity Act, 2003.
3.	POLLUTION CLEARANCE WATER AND AIR	State/ Central Pollution Control Board	Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981.
4.	FOREST CLEARANCE	1. State Govt. 2. Min. of E&F GOI	Coordination with State Forest Deptt./ Min. of Environment & Forest (MoE&F) regarding Forest (Conservation) Act, 1980.
5.	ENVIRONMENT	1. State Govt. 2. Min. of E&F GOI	As per item (3) & (4) & Govt. Policy in force.
6.	REGISTRATION	Registrar of Companies	Under Indian Companies Act, 1950.
7.	REHABILITATION & RESETTLEMENT OF DISPLACED FAMILIES BY LAND ACQUISITION	1. State Govt. 2. Min. of E&F GOI	
8.	EQUIPMENT PROCUREMENT	DGTD, CCI&E	Import & Export Acts.


 Chief Engineer,
 Directorate of Energy, G&HP,
 New Shimla-171009(HP).

PARSHANTI HYDRO ENERGIES PVT. LTD.

Auth. Sign.


 Director

Lingti SHP (500 KW) in Distt Kangra of Himachal Pradesh of "M/S Parshanti Hydro Energies Pvt. Ltd., Sai Sankalp, Near PNB, Bagher Road, VPO Panchrukhi, Tehsil Palampur, District Kangra-176103 (HP)".

SALIENT FEATURES

I LOCATION

State	Himachal Pradesh
District	Kangra
Village	Alanbagh (Rakh)
River/Khad	Lingti khad
Proposal	Weir site on Lingti khad at EL. \pm 1710.00 m and power house on the right bank of Lingti khad at EL \pm 1630.00 m.
Accessibility By Road	15.00 km from Palampur and 5 km. from Palampur – Dharmshala – Rakh Road.
Railway station	BG-Pathankot 100 km., NG- Malan 20 km.
Airport	Gaggal, Kangra 35 km.
Geographical co-ordinates	Diversion site Power house
• Longitude	76.4912° E 76.4864° E
• Latitude	32.1609° N 32.1588° N
SOI topo sheet	53 E/5

2 HYDROLOGY AND CLIMATE

Name of stream	Lingti khad
Tributary/ Basin	Neogal khad/ Beas basin
Catchment area	3.22 sq km
Design Discharge	0.75 cumecs
Design Flood	33.65 cumecs
HFL	Weir site Power house site
	EL \pm 1712.28 m EL \pm 1630.51 m

3 PROJECT STRUCTURES

3.1 DIVERSION WEIR

Type	Trench type weir
Trash Rack/River bed level	EL \pm 1710.0 m
Size	12.00 m long, 2.00 m wide
Design discharge	1.08 cumecs i/c flushing and overloading dis.

3.2 CONVEYANCE CHANNEL (From Intake and Desilting tank)

Type	Open cut & Cover type
Size	1.20 m x 0.675 m
Length	\pm 50.00 m
Design Discharge	1.08 cumecs i/c flushing and overloading dis.
Velocity	1.75 m/sec
Slope	1 in 175

3.2 DESILTING TANK

Type	Surface RCC hopper type
Size	15.00 m x 3.00 m x 1.65 m
Particle size to be removed	All particles above to 0.20 mm size
No. of chambers	One
Flushing pipe	300 mm dia.

3.3 POWER CHANNEL (From Desilting tank and Forebay)

Type	MS Pipe
Size	750 mm dia.

PARSHANTI HYDRO ENERGIES PVT. LTD.

Auth. Sign.

Director

Length	± 325.00 m
Design Discharge	0.90 cumecs i/c overloading dis.
Slope	1 in 300
Velocity	2.00 m/s
3.4 FOREBAY	
Type	Rectangular RCC tank
Size	10.00 m x 5.00 m x 3.50 m(ED)
Design discharge	0.90 cumecs
Capacity	155.00 cum
Storage time	3.00 min.
Full Supply Level	EL ± 1706.75 m
Minm. Draw Down Level(MDDL)	EL ± 1703.50 m
C/L of penstock entry	EL ± 1702.75 m
3.5 PENSTOCK	
Type	Surface steel penstock
Size	550 mm dia.
Length	200.00 m
Thickness	6.00 mm to 18.00 mm (Varying)
Velocity	4.00 m/sec
Material	IS : 2062 grade "B"
Number of branches	Two
Size of branch penstock	350 mm dia. each
3.6 POWER HOUSE	
Type	Surface Power House
Size	12.00 m x 8.00 m
Installed Capacity	500 KW (2 units of 250 KW each)
Gross Head	± 76.75 m
Net head	± 73.75 m
C/L of turbine jet	EL ± 1633.00 m
Floor level	EL ± 1631.50 m
Turbine(s)	
• Type	Horizontal axis Francis
• Number	Two
• Rated capacity	260.41 KW
• Speed	1000 rpm
Generator(s)	
• Type	Horizontal axis Synchronous
• Number	Two
• Rated capacity	250 KW each
• Frequency	50 Hz
• Rated Voltage	415 volt
• Power Factor	0.9 lag
• Overloading Capacity	20 %
3.7 TAIL RACE	
Type	Rectangular section
Size	1.00 m x 0.75 m
Length	± 15.00 m

Chief Engineer,

Directorate of Energy, GoHP,

New Shimla-171009(H.P.)

PARSHANTI HYDRO ENERGIES PVT. LTD.

Auth. Sign.

Director

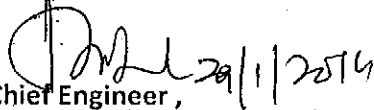
DIRECTORATE OF ENERGY
GOVERNMENT OF HIMACHAL PRADESH
SHANTI BHAWAN, SECTOR-VI, PHASE-III, NEW SHIMLA-171009(HP)

CORRIGENDUM

In partial modification to the Office Order endorsement No. DOE/CE(TEC)/Lingti SHP/2013-401-09 dated 20.04.2013 issued by Chief Engineer, Directorate of Energy(DoE), GoHP, New Shimla-171009(HP) vide which Techno Economic Clearance(TEC) of Lingti SHP (500 KW) in District Kangra(HP) was accorded, the evacuation proposal of Lingti SHP i.e. Clause 2 (xv) may be read as under :-

"For evacuation of Power the Lingti SHP (500 KW) shall be interfaced with the existing 11 kV distribution system of HPSEBL which is approximately 2.00 km from the power House site, by providing proper protection and metering system. However, being distribution line no deemed generation shall be allowed in the event of any failure in the 11 kV line of HPSEBL, as this arrangement has been made at IPPs request".

All other terms and conditions of Techno Economic Clearance(TEC) accorded vide Office Order endorsement No. DOE/CE(TEC)/Lingti SHP/2013-401-09 dated 20.04.2013 shall remain the same.


Chief Engineer,
Directorate of Energy, GoHP,
New Shimla-171009(HP).

No. DOE/CE /TEC-Lingti/ 2013-

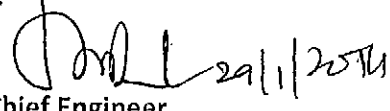
8228-36

8228-36

Dated:- 29/01/14

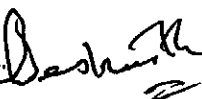
Copy for information and necessary action to the:

- 1) Principal Secretary (MPP & Power) to HP Govt., Shimla-171002(HP).
- 2) Principal Secretary(NES) to HP Govt., Shimla-171002(HP).
- 3) Secretary, Ministry of Non-Conventional Energy Sources(MNES), Block No.- 14, CGO Complex, Lodhi Road, New Delhi-110003.
- 4) Director, Environmental & Scientific Technologies, Narayan Villa, Near Wood Villa Palace, Shimla-171002(HP).
- 5) General Manager(C&D), HPPTCL, Borowalia House, Khalini, Shimla-171002(HP) with reference to his office letter No. 6194-96 dated 22.1.14.
- 6) Chief Engineer(SO&P), HPSEB Ltd., Vidyut Bhawan, Shimla-171004(HP).
- 7) Chief Engineer(Comm), HPSEB Ltd., Vidyut Bhawan, Shimla-171004(HP).
- 8) Chief Executive Officer, Himurja, 8A- SDA Complex, Kasumpti, Shimla-171009(HP).
- 9) M/s Parshanti Hydro Energies Pvt. Ltd., Sai Sankalp, Near PNB, Bagher Road, VPO Panchrukhi, Teh Palampur, District Kangra 176103(HP).


Chief Engineer,
Directorate of Energy, GoHP,
New Shimla-171009(HP).

PARSHANTI HYDRO ENERGIES PVT. LTD.

Auth. Sign.



Director