HIMURJA
13540
Dy. No.
Date 29/11/2018
Govt. Energy Dev. Agency SHIMLA

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

OFFICE ORDER

Directorate of Energy (DoE), Govt. of Himachal Pradesh, is pleased to accord Techno Concurrence to Lower Bhagair SHP (1.00 MW) on Bhagair Khad, a tributary of Kiunr nallah which is further a tributary of Ravi river in Ravi Basin in District Chamba (H.P.), allotted to "M/s Shiv Shakti Enterprises, Anurag Kutir, Lower Dohru, Ghuggar, PO & Tehsil Palampur, Distt . Kangra-176061", at an estimated cost of Rs. 747.00 lac (Rupees Seven hundred and forty seven lacs) 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 actual 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 Concurrence.
   c) Change in Indian law resulting in change to 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 Concurrence is subject to the fulfillment of the following conditions:

i) Completion cost / Concurrence 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 Concurrence.

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) Fulfilment 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) In case, changes are made in design parameters during construction due to site conditions or otherwise, the same shall be intimated and got Concurred from DoE, GoHP before implementation of such changes.

vii) 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 Shiv Shakti Enterprises, Anurag Kutir, Lower Dohru, Ghuggar, PO & Tehsil Palampur, Distt . Kangra-176061".

viii) No additional cost shall be allowed due to Resettlement & Rehabilitation (R&R) Plan.

ix) Normal operation life of the hydro power plant shall be as per provisions of CWC/CEA guidelines or CERC/HPERC regulations.

x) The statutory and administrative clearances as per Annex-II shall be obtained before execution/ implementation of the project.

xi) 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.

xii) 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

xxiv) LADC/LADF amount and activities shall be implemented as per Power policy of HP Govt., 2006 and subsequent amendments thereof.

xxv) 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 and subsequent amendments thereof.

xxvi) The Concurrence is based on the reports and data furnished by the developer 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 broad technical aspects of the project proposal in the DPR have been scrutinized and it does not cover the examination of the detailed designs and 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 within 3 months from the Commercial Operation Date (COD) of the plant.
5. The Project Promoters/IPP shall give free accessibility to the officers and staff of DoE, GoHP to have on 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 Concurrence to the scheme by DoE, GoHP and actual start of work by the IPP is three years or more, a fresh Concurrence of DoE, GoHP shall be obtained by the IPP 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

24/11/2018

Chief Engineer,
Directorate of Energy, GoHP,
New Shimla 71009(HP).

No. DoE/CE(Energy)/TEC- Lower Bhagair / 2018- 8636 - 44 **Dated:-** 26/11/18

Copy for information and necessary action to the:

1. The Principle Secretary (MPP & Power) to H.P. Govt., Shimla-171002 (HP).
2. The Principle Secretary (NES) to H.P. Govt., Shimla-171002 (HP).
3. The Secretary, Ministry of Non-Conventional Energy Sources (MNES), Block No.14, CGO Complex, Lodhi Road, New Delhi-110003.
4. The Director, Environmental & Scientific Technologies, Narayan Villa, Near Wood Villa Palace, Shimla-171002 (HP).
5. The General Manager(C&D), HPPTCL, Himfed Bilding, Tutikandi, Shimla-171004 (HP).
6. Chief Engineer (System Operation), HPSEB Ltd, Vidyut Bhawan, Shimla-171004(HP).
7. The Chief Engineer(Commercial), HPSEB Ltd, Vidyut Bhawan, Shimla –171004 (HP).
8. The Chief Executive Officer, Himurja, 8A-SDA Complex, Kasumpti, Shimla-171009 (HP).
9. M/s Shiv Shakti Enterprises, Anurag Kutir, Lower Dohru, Ghuggar, PO & Tehsil Palampur, Distt . Kangra-176061.

24/11/2018

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

ANNEXURE-I

Lower Bhagair SHP (1.00 MW) in District Chamba of Himachal Pradesh allotted to "M/s Shiv Shakti Enterprises, Anurag Kutir, Lower Dohru, Ghuggar, PO & Tehsil Palampur, Distt . Kangra-176061"

Sr. No.	Description of works	Amount (In Rs. Lac.)	
(a)			
1.	Civil works i/c other Misc. Expenses	322.68	Price Level June, 2018
2.	Electro Mechanical works	302.81	
3.	Transmission works	15.44	
	Sub Total (a)	**640.93**	
(b)			
1.	Interest During Construction (IDC)	63.27	
2.	Escalation	28.82	
3.	Financial Charges(FC)	6.51	
	Sub Total (b)	**98.60**	
	Total (a+b)	**739.53**	
(c)	LADC @ 1.0% of (a+b)	7.40	
	GRAND TOTAL (a+b+c)	**Rs. 746.92 lac**	
		Say Rs. 747.00 lac	

(Rupees seven hundred and forty seven lacs only)

24/11/2018

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

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/HPPTCL, 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/HPPTCL as per the final decision of the competent authority.

xiii) Whereas the HPSEBL/HPPTCL shall endeavour 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.

xiv) The powerhouse generating equipment as well as other electrical equipment to be provided by the IPP 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.

xv) O&M charges for maintenance of inter connection facilities at the interconnection sub-station shall be paid by the IPP to HPSEBL/HPPTCL throughout the period, the IPP runs the project and the same shall be reviewed at the beginning of every financial year.

xvi) For evacuation of power the Developer shall interface this project in joint mode with Kiunr (5.00 MW) SHP at 33 kV level up to 33/220/400 kV substation of HPPTCL at Lahal which is under construction.

xvii) The project line shall be provided, operated and maintained by the IPP at his own cost as per normal conditions after obtaining approval of HP Govt. under Section 68(1) of Electricity Act, 2003.

xviii) 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.

xix) The Developer 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 Dispatch Society, Totu, Shimla from compatibility point of view with existing SCADA system.

xx) The hydro generating units shall be capable of generating up to 110% of rated capacity (Subject to rate head being available) on continuous basis as per Sr. No. 7 (Part-II) of Ministry of Power (Central Electricity Authority) notification No. 12/X/STD (CONN) GM/CEA dated 15/10/2013 and subsequent amendments thereof.

xxi) The conditions on these lines shall have to be suitably included by the IPP in the PPA etc. apart from other standard conditions.

xxii) The observations of DoE, GoHP on the DPR and replies thereof shall form an integral part of the DPR.

xxiii) 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.

ANNEXURE-II

Lower Bhagair SHP (1.00 MW) in District Chamba of Himachal Pradesh allotted to "M/s Shiv Shakti Enterprises, Anurag Kutir, Lower Dohru, Ghuggar, PO & Tehsil Palampur, Distt . Kangra-176061"

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 and Air (Prevention & Control of Pollution) Act, 1981.
4	FOREST CLEARANCE	1. State Govt 2. Min. of E&F G.O.I.	Coordination with State Forest Deptt./ Min. of Environ. & Forest (MoE&F) regarding Forest (Conservation) Act, 1980.
5	ENVIRONMENT & FOREST CLEARANCE	1. State Govt 2. Min. of E&F G.O.I.	As per item (3) & (4) and 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 G.O.I.	
8.	EQUIPMENT PROCUREMENT	DGTD, CCI& E	Import & Export Acts.

24/11/2009

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

ANNEXURE-III

Lower Bhagair SHP (1.00 MW) in District Chamba of Himachal Pradesh allotted to "M/s Shiv Shakti Enterprises, Anurag Kutir, Lower Dohru, Ghuggar, PO & Tehsil Palampur, Distt . Kangra-176061"

SALIENT FEATURE

I	**LOCATION**		
	State	:	Himachal Pradesh
	District /Tehsil	:	Chamba
	River/Stream	:	Bhagair Khad, a sub tributary of Kiunr nallah which is further a tributary of Ravi basin.
	Vicinity/ Proposal	:	Diversion Weir site on Bhagair Khad at an EL ± 2365.00 m and Surface Power House on right bank of Bhagair Khad at an EL ± 2115.00 m near village Bhagair.
	Accessibility		
	• By Road	:	44 km (From Distt HQ Chamba) 3.0 km (Powerhouse from Kiunr village)
	• By Railway	:	BG – At Pathankot (Punjab)
	• Airport	:	185 km (At Gaggal, Distt. Kangra)
	Geographical co-ordinates		
	• Longitude		76° 20' 45.18" E to 76° 21' 7.17" E
	• Latitude		32° 24' 46.76" N to 32° 23' 52.18" N
	SOI Topo sheet		52 D/7
II	**HYDROLOGY**		
	Name of stream/khad	:	Bhagair Khad
	Tributary of/Basin	:	Tributary of Kiunr nallah / Ravi basin
	Catchment area up to diversion	:	6.00 Sq.Km
	Design Discharge	:	0.47 cumecs
	Design Flood Discharge	:	53.67 cumces
	HFL	:	**Weir site** EL ± 2368.00 m; **Powerhouse Site** EL ± 2112.00 m
III	**PROJECT COMPONENTS**		
A.	**DIVERSION STRUCTURE**		
	Type	:	Rectangular Drop Type Trench Weir
	River Bed Level	:	EL ± 2365.00 m
	Size of weir	:	10.00 m (Long), 1.50 m (Wide)
	Depth	:	Varies from 0.25 m to 1.50 m
	Design Discharge	:	0.47 Cumecs plus Flushing & OL
B.	**WATER CONDUCTOR SYSTEM (CONVEYANCE / FEEDER CHANNEL)**		
	Type	:	RCC Rectangular Channel
	Size	:	1.00 m (Wide) x 0.50 m (Depth)
	Design discharge	:	0.47 Cumecs plus Flushing & OL
	Length	:	± 15.00 m
	Velocity of flow	:	1.30 m/sec
	Bed slope	:	1:350

Generator(s)

• Type	:	Horizontal Shaft Synchronous type
• Number	:	One
• Rated output	:	1000 KW
• Power factor	:	0.85 (lag)
• Rated Frequency	:	50 Hz
• Rated Voltage	:	3.3 kV
• Overloading capacity	:	10%

H. TAIL RACE

Type	:	Rectangular
Length	:	±20.00 m
Size	:	1.50 x 1.20
Bed Slope	:	1 in 350 m

24/11/2017

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