

PUNJAB STATE TRANSMISSION CORPORATION LIMITED Regd. Office:- PSEB Head Office, The Mall, Patiala – 147001, Punjab, India O/o SE/Planning, PSTCL, Patiala

Fax/Ph:- 0175-2205502, Email:- <u>se-planning@pstcl.org</u> CIN-U40109PB2010SGC033814

Amendment No: 17/2023-24

To

1) Dy. CE/TS (Design), PSTCL, Patiala.

- 2) Dy. CE /Grid Construction, PSTCL, Ludhiana.
- 3) Dy. CE /TLSC, PSTCL, Patiala.

4) SE /Civil Works, PSTCL, Patiala.

/P-II/70A/27 Dated: ||.09.2023

Memo No. 522\25

Subject: Regarding planning of

Regarding planning of 1 No. 66 KV bay at 220 KV S/s G-1, MGG for providing permanent connection to M/s. Vardhman Adarsh Ispat Ltd.

The scope of work is planned as following:

Sr.	Name of	Scope of	Est.	Remarks
No.	Substation	Work	Cost	
			(in	
1.	220 kV S/s Mandi- Gobindgarh G-1.	Utilisation of existing 01 No. idle 66KV bay (C-5) for providing permanent connection to M/s.Vardhman Adarsh Ispat Ltd. at 220KV s/s Mandi-Gobindgarh G-1.	57.63 (includi ng civil works)	1. This work is being planned on basis of FCC decision vide memo No. 1000 dated 30-06-23. 2. Work is being planned as per the confirmation of space availability by ASE/Grid construction, PSTCL, Patiala office memo No. 1351 dated 11-05-23. 3. Estimated cost has been considered as per informed by Sr. Xen/ Grid Construction, PSTCL, Patiala vide his office memo No. 2307 dated 07-08-23 and SE/Civil works, PSTCL vide his office memo No. 1945 dated 07-08-23. 4. This work shall be executed as Contributory work & the cost shall be borne by the consumer as per FCC decision dated 30.06.2023. The work to be taken in hand only after the deposit of requisite amount by firm. 5. This work shall be included in the transmission works for the FY 23-24. 6. The work is subject to the ratification by BODs

This issues with the approval of Technical Committee of PSTCL comprising Director/ Technical and Er. Anil Kaplush, Independent Director of PSTCL.

Dy. CE/Planning
PSTCL, Patiala.

CC: - 526/32 /P-II/70A/27 Dated: | .09.2023

- 1) Director/Technical, PSTCL, Patiala.
- 2) Chief Engineer/TS, PSTCL, Patiala.
- 3) Chief Engineer/Planning, PSPCL, Patiala.
- 4) Chief Engineer/P&M, PSTCL, Ludhiana.
- 5) Chief Engineer/P&M, PSPCL, Ludhiana.
- 6) Dy. CE/Transmission Planning, PSPCL, Patiala.
- 7) Dy. CE /P&M Circle, PSTCL, Ludhiana.



To

M/s Vardhman Adarsh Ispat Pvt. Ltd., Sirhind Side, G. T. Road, Mandi Gobindgarh.

Memo No.: /000 /SWS/Rid No. 20289

Dated: 30/06/2023

Sub: Revised - M/s Vardhman Adarsh Ispat Pvt. Ltd., Sirhind Side, G. T. Road, Mandi Gobindgarh having A/c no. K21-GB11-61478 applied extension of 16860 kW/17600 kVA CD, having its existing load of 3240 kW/2500 kVA, to make total load of 20100 kW/20100 kVA. Category type – Power Intensive (Rid no. 20289).

Ref: CE/DS Central Zone PSPCL Ludhiana office memo no. 5429 dated 05.06.2023.

The subject cited case was discussed in the FCC Meeting held on 06.06.2023 as below:-

- i) To revise earlier accorded feasibility by allowing extension of 16860 kW/17600 kVA CD, having its existing load of 3240 kW/2500 kVA, to make total load of 20100 kW/20100 kVA by amending the feasibility condition mentioned at Sr. no. (i) of the earlier feasibility letter memo no. 461/66 dated 16.04.2019 by replacing existing 2 No. DC towers already existing in 66 kV Bassi Alloys SC line with 2 No. Multi Circuit Towers emanating from 220 kV S/St. G-1 MGG and by using existing 66 kV idle Bay C-5 at 220 kV S/Stn. G-1 MGG and output power from idle Bay for subject cited consumer will be taken by erecting 4 x 1/C U/G XLPE cable 240 mm² length 570 meters (approx.) from point A to B as per proposal sent by CE/DS Central Zone PSPCL Ludhiana vide memo No. 5429 dated 05.06.2023.
- ii) Load shall be released after checking the healthiness of equipment of existing idle 66 kV Bay C-5 by protection wing.
- iii) Load shall be released after taking consent/undertaking from the consumer that it will bear the expenditure of erection of 66 kV 4 x 1/C U/G XLPE cable 240 mm² length 570 meters (approx.) as detailed above.
- iv) FCC directed Dy.CE/DS Circle PSPCL Khanna to inform the applicant regarding expected delay in releasing the connection due to transmission works involved.
- v) The expenditure to erect 4 x 1/C U/G XLPE cable 240 mm² length 570 meters (approx.) shall be recoverable from the consumer.

All other terms and conditions of earlier accorded feasibility shall remain same.

ASE/Sales-4

For: CE/Commercial PSPCL, Patiala.

Endst. No. /oo//SWS/Rid No. 20289

Dated: 30/06/2023

Copy of the above is forwarded Dy.CE/DS Circle PSPCL Khanna for information and further necessary action.

Minutes of FCC meeting held on 06.06.2023 are as under:-

- I. <u>History :-</u> The feasibility of subject cited consumer was earlier accorded vide Commercial Office memo No. 461/66 dated 16.04.2019 with decision as below:-
- i. FCC decided to release extension of 16860 kW/17600 KVA CD, having its existing load of 3240 kW/2500 kVA, to make total load of 20100 kW/20100 KVA after erecting new 2nd Ckt 66 kV line having ACSR 0.2 sq. inch from point A to B 370 meter on already existing 66 kV Bassi Alloys feeder SC line emanating from 220 kV S/St. G-1 MGG subject to commission of 4th 1x100 MVA, 220/66 kV T/F at 220 kV S/Stn. G-1.
- FCC directed SE/DS Khanna to submit the proposal for shifting load of 66 kV S/Stn. Talwara to 220 kV Bassi Pathana to deload 220 kV S/Stn. G-1 and Planning org. to take the requisite action accordingly at the earliest.
- iii. FCC directed SE/DS Khanna to inform the consumer regarding expected time delay in the above said work and obtain consent of the consumer.
- iv. FCC further directed SE/DS Khanna to explore the possibility of Bus splitting at 66 kV S/Stn. Talwara and shifting the load to 66 kV S/Stn. Grain Market, in order to give immediate relief to 66 kV line from 220kV G-1 MGG to 66 kV S/Stn. Talwara.
- II. CE/DS Central Zone PSPCL Ludhiana vide office memo No. 4173 dated 05.05.2023 intimated that the TL Division Ludhiana had proposed augmentation of ACSR 0.2 sq" with ACSR 0.4 sq" of Gantry Span of 66 kV Bassi Alloy line and existing Bay of 0.2 sq" ACSR of 66 kV Bassi Alloy line with ACSR 0.4 sq" Bay for timely release of load to M/s Vardhman Adarsh Ispat and the same will be used in future expansion which is in the interest of PSPCL. With this augmentation, expected loading on the Bay and Gantry Span shall be loaded by 79.02%. Hence, load can be released from this Bay through 66 kV Bassi Alloy Gantry Span. Due to constraint of space, augmented/proposed Bay of 66 kV Bassi Alloy line having ACSR 0.4 sq" has been proposed to be shifted.

Further, field office stated that after erection of new Bay with 0.2 sq" ACSR for 2nd Circuit, load of M/s Vardhman Adarsh Ispat line shall be shifted on this Bay as per existing feasibility accorded vide memo No. 461/66 dated 16.04.2019.

Dy.CE/DS Circle PSPCL Khanna vide clarification dated 10.05.2023 stated that 66 kV CTs of existing 66 kV Bassi Alloys line are rated as 400-200/1-1 Amp capable of taking the load of 45720 kVA. As per sketch, load of M/s Bassi Alloys is 11200 kVA, load of M/s Jagat Metals is 8000 kVA and load of M/s Bhawani Castings is 12500 kVA amounting 31700 kVA. Proposed load of M/s Vardhman Adarsh will be 20100 kVA after extension. Therefore, the total load on bay will be 51800 kVA after releasing extensions to the consumers. Therefore, CTs of this bay have to be augmented with 800-400/1-1 Amp. It is pertinent to mention here that M/s Global Multimetals had also applied for 6500 KVA load, which was proposed to be released on this 66 kV Bassi Alloys line, but the applicant had not deposited 20% ACD and his A&A forms were not registered so this application stand cancelled in Window. Also, it has been stated that erection work of 2nd circuit of M/s Vardhman Adarsh is near completion.

FCC deliberated the above case in its meeting held on 11.05.2023 and decided as under:-

 To allow extension of 16860 kW/17600 kVA CD, having its existing load of 3240 kW/2500 kVA, to make total load of 20100 kW/20100 kVA temporarily by relaxing the feasibility

F€C Letter 06.06.2023 Vardhman Adarsh

condition mentioned at Sr. no. (i) of the earlier feasibility letter memo no. 461/66 dated 16.04.2019 after augmentation of ACSR 0.2 sq" with ACSR 0.4 sq" of Gantry Span of existing 66 kV Bassi Alloy line and Bay of 0.2 sq" ACSR of 66 kV Bassi Alloy line with ACSR 0.4 sq" Bay and after replacing existing 2 No. DC towers already existing in 66 kV Bassi Alloys feeder SC line with 2 No. Multi Circuit Towers emanating from 220 kV S/St. G-1 MGG till the 66 kV Bay of M/s Vardhman Ispat line is not erected as per proposal sent by CE/DS Central Zone, PSPCL Ludhiana vide memo No. 4173 dated 05.05.2023 and clarification sent by Dy.CE/DS Circle PSPCL Khanna vide memo No. 7558 dated 10.05.2023.

- Load shall be released after the augmentation of existing CTs of capacity 400-200/1-1 Amp with 800-400/1-1 Amp of 66 kV Bassi Alloys line.
- iii) As it is measure to facilitate the early release of connection, the expenditure to augment the system from ACSR 0.2 sq" to 0.4 sq" as detailed above shall be recoverable from the consumer as already consented by him.
- iv) FCC directed Dy.CE/DS Circle PSPCL Khanna to send the revised proposal, if any, in consultation with CE/TS PSPCL and CE/TS PSTCL in order to release the load of M/s Vardhman Adarsh Ispat on regular basis at the earliest.

III. Present Case:-

CE/DS Central Zone PSPCL Ludhiana vide memo No. 5429 dated 05.06.2023 has intimated that in view of above decision of FCC meeting held on 11.05.2023 Sr. No. iv, CE/TS PSTCL Patiala vide his office memo No. 289 dated 24.05.2023 addressed to CE/Commercial PSPCL Patiala has intimated that a Committee consisting of ASE/Grid Construction PSTCL Patiala and Sr.Xen/P&M Division-1, PSTCL Mandi Gobindgarh visited the site of 220 kV S/Stn. G-1 MGG on 16.05.2023. Committee stated in its MoM that the erection of new Bay is not advisable due to space constraints at site but there are 3 No. 66 kV Bays lying idle which can be utilized for releasing connection of M/s Vardhman Ispat Pvt. Ltd. and the output of the idle Bay shall require to be taken up through 66 kV Power cables as there is space constraint for erection of TL Towers by PSPCL. But there is no reference of use of 66 kV power cables in FCC decision and CE/TS PSTCL Patiala has requested to revise the feasibility decision accordingly for providing permanent connection to M/s Vardhman Adarsh Ispat.

MoM of Committee are reproduced as under.-

- The erection of new bay in only available space of yard area is not advisable as the same space is required for movement of loader/ crane into gantry side area of yard. Also, the fencing of yard area will be very near to the gantry tower, if new bay is erected. So, If the bay is erected in said space, the approach to gantry area for loader/ crane will not be feasible and it will be very difficult to deal with emergency breakdowns and other maintenance works.
- 2. There are 03 No. 66KV bays stand idle at present. One no. bay from these 03 No. idle bays may be utilized for release of connection to M/s. Vardhman Adarsh Ispat Pvt. Ltd. after checking healthiness of the equipment/ bay through protection wing.
- The output (i.e. output gantry) of the idle bay shall require to be taken up through 66 KV Power cables as there is space constraint for erection of TL/ TLSC towers.

CE/DS Central Zone PSPCL Ludhiana vide memo No. 5429 dated 05.06.2023 has proposed to release the load of consumer by using existing 66 kV idle Bay C-5 at 220 kV S/Stn. G-1 MGG and output power from idle Bay for subject cited consumer will be taken by erecting 4 x 1/C U/G XLPE cable 240 mm 2 length 570 meters (approx.) from point A to B as per sketch due to space constraint for erection of TL towers.

Also, it has been stated that Dy.CE/DS Circle PSPCL Khanna vide his probable office memo No. 7660 dated 12.05.2023 intimated that the subject cited consumer on 12.05.2023 has requested to release his load permanently through existing 66 kV Bassi Alloys Bay by augmenting ACSR 0.2 Sq" with ACSR 0.4 Sq". However, Circle office has recommended that the load of subject cited consumer at 66 kV Supply Voltage can be released temporarily from

A

existing 66 kV Bassi Alloys Bay by augmenting ACSR 0.2 Sq" with ACSR 0.4 Sq", but the subject cited 66 kV connection may be released permanently from existing idle Bay as per earlier accorded approval.

After deliberation FCC decided as under:-

- i) To revise earlier accorded feasibility by allowing extension of 16860 kW/17600 kVA CD, having its existing load of 3240 kW/2500 kVA, to make total load of 20100 kW/20100 kVA by amending the feasibility condition mentioned at Sr. no. (i) of the earlier feasibility letter memo no. 461/66 dated 16.04.2019 by replacing existing 2 No. DC towers already existing in 66 kV Bassi Alloys SC line with 2 No. Multi Circuit Towers emanating from 220 kV S/St. G-1 MGG and by using existing 66 kV idle Bay C-5 at 220 kV S/Stn. G-1 MGG and output power from idle Bay for subject cited consumer will be taken by erecting 4 x 1/C U/G XLPE cable 240 mm² length 570 meters (approx.) from point A to B as per proposal sent by CE/DS Central Zone PSPCL Ludhiana vide memo No. 5429 dated 05.06.2023.
- Load shall be released after checking the healthiness of equipment of existing idle 66 kV Bay C-5 by protection wing.
- iii) Load shall be released after taking consent/undertaking from the consumer that it will bear the expenditure of erection of 66 kV 4 x 1/C U/G XLPE cable 240 mm² length 570 meters (approx.) as detail above.
- iv) FCC directed Dy.CE/DS Circle PSPCL Khanna to inform the applicant regarding expected delay in releasing the connection due to transmission works involved.
- v) The expenditure to erect 4 x 1/C U/G XLPE cable 240 mm² length 570 meters (approx.) shall be recoverable from the consumer.

All other terms and conditions of earlier accorded feasibility shall remain same.

CC:-

1. CE/DS Central Zone, PSPCL, Ludhiana.

2. CE/Planning, PSPCL, Patiala.

3. CE/TS, PSTCL, Patiala.

4. CE/TS, PSPCL, Patiala.

ASE/Sales-4

For: CE/Commercial PSPCL, Patiala.