

## PUNJAB STATE TRANSMISSION CORPORATION LIMITED Regd. Office:- PSEB Head Office, The Mall, Patiala – 147001, Punjab, India

O/o SE/Planning & Communication, PSTCL, PATIALA.
Fax/Ph:- 0175-2205502, Email:- se-planning@pstcl.org
CIN -U 40109 PB 2010 S G CO 33814

To

CAO/ Finance & Audit,

PSTCL, Patiala.

Memo No. 932

/P-1/275

Dated 09, 08.19

Subject:-

PSERC Directives in the Tariff Order for FY- 2019-20 –

Ist Quarter (ending June 2019).

Enclosed please find herewith status of PSERC Directive Sr. No. 4.3 i.e. Loading status of PSTCL Transmission lines & Substations for 1st Quarter i.e. (ending June 2019) (Annexure-A).

This issues with the approval of Director/Technical.

DA: As above

Dy. CE/Planning & Communication, PSTCL, Patiala.

953/55

CC:-

1) Chief Engineer /TS, PSTCL, Patiala - for information please.

2) Sr. Xen. To Director/Tech. PSTCL, Patiala - for information please.

3) Addl. SE/IT, PSTCL, Patiala along with the copy of Annexure-A (Soft copy mailed to your official address) for uploading on web-site please.

| Sr.<br>No. | P&M Circle                                    |                                  | % loading as compared with the standard design Parameters of Conductor i.e. 45°C ambient temp. and 75°C conductor temp. | Remarks  | Remedial Action   |
|------------|---|----------------------------------|---|--|---|
| A)         | Loading<br>status of<br>PSTCL<br>Transmission |                                  |   |  | No remedial action  |
| 1.         | Bathinda                                      | 132KV<br>Baluana-<br>Bathinda    | 395A at 35°C ambient temperature (103.95%)  | Temporary overloading because 132KV Malout- Mukatsar was out on permit   | required  |
| 2.         | Jalandhar                                     | PGCIL<br>Kartarpur-<br>Kartarpur | 664A at 38°C ambient temperature (118.57%)  | Temporary higher side loading since system was on single bus-bar. There was reverse power fed to 400kv Nakodar (instead of feeding being source)  Higher side loading i within permissible | i) Higher side loading shall be controlled after LILO of 2 <sup>nd</sup> ckt. PGCIL Jalandhar – 220KV s/s Kartarpur, the work of which is under execution. However, till the execution of this work, bus-splitting has been done to control higher side loading. ii) For further load growth, augmentation of existing conductor of both circuits i.e. 220 kV DC line from 400 kV Jalandhar to 220 kV Kartarpur with HTLS conductor has already been planned to give relief to line loading |
|            |   | 132KV<br>Mahilpur-<br>Banga      | 397A at 42°C ambier temperature (104.19%)   | limits correspondin<br>to ambier<br>temperature  | g   |
| 3          |   | 220 KV G1-<br>Rajpura Ckt.       | 560A at 40°C ambient<br>temperature (100%)  | Temporary higher sid loading due to lesse generation availab at GGSSTP i.e. only units were ON   | required le   |
|            | Ludhiana                                      | 220 KV PGC<br>Lalton Ckt2        |   | - 1  | Replacement o conductor with HTL: conductor has alread been planned to give relief to line loading.   |
|            |   | 220 KV PG                        | /   |  | de No remedial action<br>nit required   |

|       | - Humbran                                    | 660A at 30°C ambient temperature (117.85%)  | Higher side loading is within permissible limits corresponding to ambient temperature | No remedial action required   |   |  |
|-------|--|---|---|---|---|--|
|       | of Theorem                                   | 220 KV<br>Doraha -<br>PGCIL   | 619A at 32°C ambient temperature (110.5%)   | Higher side loading<br>due to high load<br>intake by Sahnewal<br>ckt. I and Sahnewal<br>ckt. II was off from<br>other end | No remedial action required   |  |
|       | Amritsar                                     | 132 KV Sarna-<br>Gurdaspur  | 352A at 42°C ambient temperature (110%)   | Temporary overloading is due to increased demand of the area  | New grid 220KV<br>Gurdaspur has been<br>identified for 2020-23<br>for controlling the<br>overloading of this<br>section |  |
| 4     |  | 132 KV<br>Verpal- Mall<br>Mandi   | 420A at 41°C ambient temperature (110.52%)  | Higher side loading corresponding to ambient temperature is within permissible limits                                     | Augmentation of 0.2 sq inch conductor with HTLS conductor has already been planned to give relief to line loading.      |  |
|       | Patiala                                      | 220KV Sunam-<br>Bhalwan-Ckt.1   | 579A at 31°C ambient temperature (103%)   | Slight higher side loading seems to be of temporary nature due to high load intake at 220K Mansa/Jhunir                   | No remedial action required   |  |
| 5     |  | 220KV Sunam-<br>Bhalwan-Ckt.2   | 579A at 31°C ambient temperature (103%)   | end. However, Higher side loading is within permissible limits corresponding to ambient temperature                       |   |  |
| В)    | Loading<br>status of<br>PSTCL<br>Substations | All the 220KV as well as 132KV Substations of PSTCL remain loaded below 100%  |   |   |   |  |
| - No. | Note   | <ol> <li>The standard current rating of Panther conductor at 45°C ambient temperature &amp; 75°C conductor temperature is 381 A.</li> <li>The standard current rating of Zebra conductor at 45°C ambient temperature &amp; 75°C conductor temperature is 560 A.</li> <li>The standard current rating of Moose conductor at 45°C ambient temperature &amp; 75°C conductor temperature is 631 A.</li> </ol> |   |   |   |  |