

**PUNJAB STATE TRANSMISSION CORPORATION LTD**

(Office: Engineer-In- Chief /P&M PSTCL, Ludhiana)

Office order No.: 70

Dated: 21/3/24

**Subject :- Submission of protection performance indices to NRPC Secretariat on monthly basis**

As per clause 15 (6) of IEGC 2023-

Users shall submit the following protection performance indices of previous month to their respective RPC and RLDC on monthly basis for 220 kV and above (132 kV and above in NER) system, which shall be reviewed by the RPC:

(a) The **Dependability Index** defined as  $D = Nc / Nc + Nf$

where,

Nc is the number of correct operations at internal power system faults and

Nf is the number of failures to operate at internal power system faults.

b) The **Security Index** defined as  $S = Nc / Nc + Nu$

Where,

Nc is the number of correct operations at internal power system faults

Nu is the number of unwanted operations.

c) The **Reliability Index** defined as  $R = Nc / Nc + Ni$

Where,

Nc is the number of correct operations at internal power system faults

Ni is the number of incorrect operations and is the sum of Nf and Nu

Each user shall also submit the reasons for performance indices less than unity of individual element wise protection system to the respective RPC and action plan for corrective measures. The action plan will be followed up regularly in the respective RPC.

In view of above, it is proposed that circles should submit above performance indices of previous month by 2<sup>nd</sup> day of next month to this office with details of trippings. These details will be prepared by concerned Sr.Xen's/Protection and will be taken as their performance.

*sd*

Engineer-in-Chief / P&M,  
PSTCL, Ludhiana.

Endst No.: 2372/80

Dated: 21/3/24

Copy of the above is forwarded to the following for information and necessary action please:-

1. CE/SLDC, PSTCL, Patiala.
2. Dy.CE/P&M Circle, PSTCL, Amritsar.
3. Dy.CE/P&M Circle, PSTCL, Bathinda.
4. Dy.CE/P&M Circle, PSTCL, Jalandhar.
5. Dy.CE/P&M Circle, PSTCL, Ludhiana.
6. Dy.CE/P&M Circle, PSTCL, Patiala.
7. Dy.CE/Communication, PSTCL, Ludhiana.
8. ASE/P&OS, Division, Ludhiana.
9. Sr.Xen/Tech to worthy Director/Technical, PSTCL, Patiala.

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Engineer-in-Chief / P&M,  
PSTCL, Ludhiana.