



दिल्ली ट्रांस्को लिमिटेड DELHI TRANSCO LIMITED

पंजीकृत कार्यालय : शक्ति सदन, कोटला रोड, न्यू दिल्ली-110002

(Regd. Office Shakti Sadan, Kotla Road, New Delhi-110002)

कार्यालय उपमहाबन्धक (एस.ओ.)

Office of Dy. General Manager (SO)

एस एल डी सी बिल्डिंग, मंटो रोड, न्यू दिल्ली-110002

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No. F./DTL/207/14-154/Mgr(SO)/90

Dated : 05.03.2015

General Manager (O&M)-1, DTL, Parkstreet, 220kV S/Stn., New Delhi
General Manager (O&M)-2, DTL, Jhandewalan, Delhi-110055
General Manager (Planning), DTL, Shakti Deep Bldg. Jhandewalan Delhi-110055
General Manager, BTPS
General Manager, CCGT, Bawana
General Manager, GT
General Manager, RPH
General Manager, Pragati
General Manager (SLDC)
Superintending Engineer (Operations), NRPC
Sh. Mukesh Khanna, AGM, (CTU-PLG), PGCIL, Saudamini, 1st Floor, A-Wing, Plot-2, Sec-29, Gurgaon
Sh. Rajiv Porwal- Chief Manager, NRLDC
Sh. Ajay Kumar óVice President, BRPL Sh. S.S Sondhi, -Head System Operation, BRPL
Sh. Mukesh Dadhich, Head System Operation, BYPL
Sh. P. Devanand, Head System Operation, TPDDL
Sh. Chaman Lal, SE(Elect) NDMC, room no-1712, 17th Floor, Palika Kendra New Delhi-01
Ms. Kiran Gajrani, Executive Engineer (utilities), MES

Subject : Minutes of meeting held on 18.02.2015 regarding Reactive Power Compensation Study for Delhi Power System – by CPRI.

Dear Sir,

The Minutes of the meeting held on 18.02.2015 regarding Reactive Power Compensation Study for Delhi Power System by CPRI is enclosed for ready reference and further necessary action please.

Thanking you,

Yours faithfully

Encl. as above

(DARSHAN SINGH)
Manager (System Operation)

Copy for favor of kind information to:-

- 1) Secretary, DERC
- 2) Chairperson, New Delhi Municipal, Palika Kendra, Sansad Marg, New Delhi
- 3) MD,DTL
- 4) Managing Director, Indraprastha Power Generation Company Ltd (Genco) /Pragati Power Corporation Ltd (PPCL), Himadri, Rajghat Power House, New Delhi-110002
- 5) Member Secretary, NRPC
- 6) Director (operations), DTL
- 7) Director (Tech.), IPGCL
- 8) GM (NRLDC)
- 9) COO(CTU-PLG&Cost Engg) PGCIL Saudamini, 8st Floor,B-Wing, Plot No- 2, Sec- 29, Gurgaon (Haryana)
- 10) CEO,BSES Rajdhani Power Ltd, BSES Bhawan, Nehru Place, New Delhi-110019
- 11) CEO BSES Yamuna Power Ltd, Shakti Kiran Building, Karkardooma, Delhi-92
- 12) CEO,TPDDL,33kV Grid S/Stn, Hudson Lane, Kingsway Camp,Delhi-9
- 13) Chief Engineer , Delhi Zone (CEDZ) MES, Palam Road, Delhi Cantt, New Delhi- 10
- 13) Addl. Secretary (Power), GNCTD

Subject : Minutes of meeting held on 18.02.2015 regarding Reactive Power Compensation Study for Delhi Power System – by CPRI.

A Meeting was convened under the Chairmanship of Dir. (O) on 18.02.2015 at 11:00 in SLDC Conference room. The list of participants is enclosed as Annexure.

The gist of discussions and decision are as under :-

- 1.) SLDC representative welcomed all the participants and requested for fruitful discussions so as to arrive at a decision for implementation of the Study carried out by M/S CPRI.
- 2.) Upon query by Chair whether all Discoms had carried out detailed study of CPRI report, all discoms representative informed that detailed study of CPRI report has not yet been carried out by them. As such they will submit their observation in writing to SLDC Delhi by 28.02.2015 for forwarding the same to CPRI through Planning Department of DTL.
- 3.) It was also desired by all discoms that Planning deptt. may explore the possibility of calling representative of CPRI in next Meeting so that issues could be discussed with them. DTL Planning Department agreed for the same.
- 4.) Representative of PGCIL informed that problem of overvoltage is being studied by them and it has been planned to install Reactors in 400kV System. He further informed that installation of Reactors at 400kV DTL substations was not in their plan and DTL should rather install Reactors at 220 kV level to take care of Reactive Power problem of Delhi control area.
- 5.) As per observation of NRLDC representative, there were certain clarifications required from CPRI. For example while considering peak load conditions of 2012 wherein CPRI has shown existing capacitors MVAR as 1000MVA and load conditions of around 4500MW and 1300MVAR was being imported from ISTS Grid. Therefore, consideration of 1000MVAR capacitors only against installed capacity of approximately 3500MW may have to be looked into.
 - a) Further, as per the old planning Criteria of 1994, the reactive Power drawal through ICTs should be minimized and it should be zero at voltage level of 0.975 PU or below. Thus, clearly approx 1300 MVAR shortfall is reflected in Delhi system in the studied case itself.
 - b) Further, Delhi met a demand of approx 6000 MW during the last year, the CPRI study should have extrapolated the demand and worked out the capacitor requirements correspondingly.

- c) On the issue of high voltages and excess reactive power in Delhi system, it was mentioned that load variation in Delhi range from 1200MW in winter to 6000 MW in summer and therefore, reactive power requirement also varies to a large extent. Further, the cable system in Delhi also generates lot of reactive power during lean load period of winter months. Thus switchable capacitor bank is the good idea proposed by the CPRI for system like Delhi. In regard of high voltage and reactive power compensation, CTU had earlier done study for reactive power and same was discussed in the meeting of standing Committee as well as well as at RPC fora. NRLDC representative also stated that a new study of capacitor requirement for the year 2015-16 is already in process. Therefore, the data may be submitted by SLDC Delhi for the capacitor requirement for 2015-16.

To summarize :

- 1 It was agreed that all Discoms would submit their observations after detailed study of CPRI report by 28.02.2015 which would be forwarded to CPRI for their comments. Planning Department would arrange CPRI participation in the next meeting.
- 2 Since regional capacitor study for 2015-16 is already under way by NRLDC, Delhi SLDC should involve in study by providing requisite data.

SLDC expressed thanks to the participants for the fruitful discussions.

(DARSHAN SINGH)
Manager (System Operation)