No. 15/9/2013-Trans Ministry of Power Sharam Shakti Bhawan, Rafi Marg, New Delhi

Dated, the 10th December, 2014

OFFICE MEMORANDUM

Subject:- New Transmission schemes to be taken up under compressed time schedule through regulated tariff mechanism route – reg.

Ref:- (i) CEA letter No. 100/EC(32)2013-SP&PA/2074-2084 dated 12.11.2014 (ii) CEA letter No. 100/EC(32)2013-SP&PA/2102 dated 17.11.2014

The undersigned is directed to inform that the competent authority in Ministry of Power has approved the following eight transmission schemes along with the broad scope for implementation by Power Grid Corporation of India Limited, the CTU, under compressed time schedule through regulated tariff mechanism.

- Scheme 1 :Creation of 400/220 kV substations in NCT of Delhi during 12th plan period.
 - (i) 4x500MVA, 400/220 kV GIS at Rajghat, Tuglakabad, Karmpura and Papankalan-I (The 400 KV Papankalan-I S/s would be created by upgrading the existing 220kV Papankalan S/S to 400kV)
 - (ii) LILO of Bawana -Mandola 400 kV D/C line on M/C tower at Rajghat.
 - (iii) LILO of 400 kV D/C Bamnauli Samaypur Over Head (C/H) line at Tughlakabad (with multi circuit(M/C) portion)
 - (iv) 400 kV Jatikalan More -Karmpura O/H D/C on M/C line
 - (v) 400 kV Bawana Karmpura O/H D/C on M/C line
 - (vi) LILO of one circuit of Bamanauli-Jhatikalan 400kV line at Papankalan-l

Scheme 2 :Establishment of 220/66kV, 2x160MVA GIS S/s at Sector 47, UT Chandigarh along with 220kV D/C line from Sector 47 to 400/220kV Panchkula substation of POWERGRID as an inter-state line

- (i) 2x160 MVA, Creation of 220/66 kV, GIS S/s at Sector 47, UT Chandigarh
- (ii) 220 kV D/C line from Sector 47 to 400/220kV Panchkula substation of POWERGRID

Scheme 3 :Northern Region System Strengthening Scheme(NRSS)-XXXIV.

(i) LILO of Agra – Bharatpur 220kV S/c line at Agra (PG).

<u>et</u>

- (ii) LILO of Sarna Hiranagar 220kV S/c at 400/220kV Samba substation.
- (iii) LILO of one circuit of 400kV Parbati pooling station Amritsar D/c lines at Jalandhar substation (PG).

Scheme 4: Constraints in 400kV bays extensions at 400 kV Vemagiri S/S.

- (i) LILO of both circuits of Gazuwaka/Simhadri-II Vemagiri(AP) 400kV D/C line at Vemagiri-II.
- (ii) Straighten Nunna- Gazuwaka 400kV D/C line (by disconnecting the LILO at Vemagiri-I) so as to make Nunna Vemagriri-II 400 D/C link.
- (iii) Use one LILO D/C portion (of Gazuwaka Nunna at Vemagiri-I) to connect with KV Kota (APTRANSCO is implementing KV Kota – Vemagiri 400 kV DC line).
- (iv) Second LILO D/C portion to be extended to Vemagiri-II (by PGCIL).

Scheme 5 : System Strengthening-XXIV in Southern Region

- (i) LILO of Kurnool-Thiruvalam 765 kV D/c at Cuddapah.
- (ii) Establishment of 765/400kV substation at Cuddapah with 2x1500 MVA transformers and 2x240 MVAR bus reactors each and requisite line bays & line reactors at Cuddapah for transmission schemes which are being implemented through TBCB.
- (iii) Cuddapah-Hindupur 400 kV (quad) D/C line with 80 MVAR switchable line reactor at Hindupur end (Hindupur S/s to be implemented by APTRANSCO).
- Scheme 6 :Connectivity for Kudankulam 3&4 (2x1000MW) with interstate transmission system.
 - (i) Extension of Kudankulam APP Tirunelveli 400kV Quad D/c line to Tuticorin Pooling Station along with necessary bay extension works at Tuticorin Pooling station.
- Scheme 7: HVDC Bipole link between Western region (Raigarh, Chhattisgarh) and Southern region (Pugalur, Tamil Nadu) Madakkathara, Trichur (Kerala).
 - (i) <u>+</u> 800 kV Rajgarh (HVDC Stn) Pugalur (HVDC Stn)- Madakkathara (HVDC Stn) HVDC bipole line.
 - (ii) Establishment of Raigarh HVDC Stn with 6000 MW HVDC terminals.
 - (iii) Establishment of Pugalur HVDC Stn with 4000 MW terminal, and Madakkathara, in Kerala HVDC Stn-with 2000 MW terminal and interconnection with existing 400kV AC S/s at Madakkathara.
 - (iv) Raigarh HVDC Station Raigarh(Existing) 400kV (quad) 2xD/c lines.



- (v) Pugalur HVDC Station Pugalur (Existing) 400kV (quad) D/c line.
- (vi) Pugalur HVDC Station Arasur 400kV (quad) D/c line with 80MVAR switchable line reactor at Arasur end.
- (vii) Pugalur HVDC Station Thiruvalam 400kV (quad) D/c line with 80MVAR switchable line reactor at both ends.
- (viii) Pugalur HVDC Station Edayarpalayam 400kV (quad) D/c line with 63 MVAR switchable line reactor at Edayarpalayam end.
- (ix) Edayarpalayam Udumalpeta 400kV (quad) D/c line.
- (x) Establishment of 400/220kV substation at Edayarpalayam with 2x500 MVA transformers at Edayarpalayam and 2x125 MVAR bus reactors.

Scheme 8 :Common Transmission System for Phase-II Generation Projects in Odisha.

- (i) LILO of both circuits of Rourkela Raigarh 400kV D/C (2nd line) at Jharsuguda (Sundargarh).
- 2. It is requested that necessary action may kindly be taken accordingly.

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To

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Copy forwarded to CMD, PGCIL, Gurgaon, for information and necessary action.

(S.Venkateshwarlu) Under Secretary (Trans)