Dated: 25.11.08

## Government of India Northern Regional Power Committee (An ISO 9001:2000 Certified Organisation)

18-A, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi-110016

#### No. NRPC/SE(O)/Insulators/14/11/08

To

- 1 CMD, DTL, New Delhi, Fax No 011 23234640
- 2.. MD, HVPNL, Panchkula ,Fax No 0172 2560640
- 3 CMD, RRPVNL, Jaipur ,Fax No 0141- 2740168
- 4. MD, UPPCL, Lucknow Fax No 0522- 2287880
- 5. Chairman, PSEB ,Fax No 0175-2213199
- 6. MD, PTCUL, Fax No 0135-2768867
- 7. Chairman, HPSEB, Fax No 0177-2813563
- 8. Principal Secretary(power), J&K, Fax No 0191-2545447
- 9 Chairman, BBMB, Chandigarh, Fax no 0172- 2549186, 2652820
- 10 Chief Engineer, Chandigarh
- 11 Mr. B. A. Chaudhari, Power Link Transmission Limited, Floor Kanchen junga Building 18 Barakhamba Road, New Delhi
- 12 GM(O&M), PowerGrid, NR-I/NR-II

<u>Subject:</u> Minutes of the meeting taken by Member Secretary, NRPC on 14.11.08 for cleaning and replacement of porcelain insulators by polymer insulators in Northern Region.

A special meeting was taken by Member Secretary, NRPC on 14.11.08 for cleaning and replacement of porcelain insulators by polymer insulators in Northern Region. A copy of summary record of discussions of the above meeting is enclosed for information and necessary follow-up please.

(R.P. Aggarwal) S.E (O)

Copy for information to:

- 1. SA to Chairperson, CEA
- 2 SA to Member (GO&D), CEA

# <u>Summary record of meeting regarding cleaning and replacement of porcelain insulators with polymer insulators in Northern Region taken by Member Secretary(M.S.), NRPC on 14.11.08</u>

List of participants is enclosed at Annex I

M.S., NRPC welcomed the participants of special meeting to discuss the progress of Insulators replacement and pre-winter maintenance of 400 kV and 220 kV lines of Northern Region. M.S., NRPC stressed that constituents should expedite the replacement of porcelain insulators with Polymer on the critical lines as decided in the meeting taken by Secretary (power) MoP on dated 9<sup>th</sup> March, 08 and Chairman CEA, on dated 30<sup>th</sup> April, 08 and also adhere to the target as decided in the NRPC meeting held on 30<sup>th</sup> September, 08. He requested the constituents to give the status on the progress made so far.

#### DTL

DTL stated that they have plan to replace the insulators of 400 kV lines of Delhi with Polymer insulators for which they have given the contract to POWERGRID. POWERGRID have called the tender for procurement of Polymer insulators which was to open on 7<sup>th</sup> Nov., 08. On the query from NRPC, DTL&POWERGRID representative agreed to submit the present status in this regard. The installation will be taken up after the procurement for which a separate tender would be invited. DTL stated that replacement by polymer insulators cannot be completed in this winter.

For pre-winter maintenance of 400 kV & 220 kV lines, they have taken up hot line washing as well as manual cleaning of insulators. This is likely to be completed by Dec, 08. DTL stated that in line with recommendation of inquiry committee dated 27<sup>th</sup> Jan 07, they are providing bird guards on their lines. The work of providing bird guards on 15 towers out of 50 towers has been completed. The balance work would be completed within one month.

#### **BBMB**

BBMB stated that procurement order for 11000 anti-fog insulators have been placed for which delivery is expected in December, 2008 and work of replacement shall be done by Feb., 09. In addition to above, tender for 37,000 anti-fog insulators have been opened. Purchase order for the same is likely to be placed in Dec., 08 and supply is expected in Jan., 09. The work of replacement shall be carried out in Feb-March 09. They intimated that anti-fog insulators have been installed on Panipat-Dhulkot circuit I&II and 220kV switch yard at Panipat. BBMB intimated that specification for polymer insulators to be installed by them is under finalization and they are likely to complete the installation work of polymer insulators by September, 09.

#### HVPNL

HVPNL stated that they have planned to install anti-fog insulators on their 14 nos. 220 kV D/C lines in NCR area. They have issued LoI for 58050 anti-fog insulators and delivery is expected by March, 09. They will submit the installation programme shortly to NRPC.

#### **UPPTCL**

UPPTCL stated that they are planning to replace the polymer insulators on four nos. of 400 kV lines and nine nos. 220 kV lines and they are procuring around 2555 nos. of polymer insulators. Tenders have been opened and order is likely to be placed by Dec., 2008.

#### **RAJASTHAN**

RAJASTHAN stated that they are replacing 200 anti-fog insulators at 15 locations on BTPS-Alwar line and work is likely to be completed by 15<sup>th</sup> Dec., 2008.

#### **POWERLINKS**

On a query by Powerlinks, SE (O) clarified that the issue of capitalization of cost of replacement was discussed at the special Northern Region Power Committee (NRPC) Meeting held on 22.07.08, wherein it was agreed that the PGCIL might take up the work of replacement of insulators by polymer insulators. The expenditure incurred by PGCIL may be capitalized and recovered through tariff.

Powerlinks informed that their lines were commissioned in May, 06 and as such porcelain insulators are in good condition, however, if these are being replaced to increase reliability of line during heavy fog in winter, its expenditure ought to be capitalized and recovered through tariff as agreed for PGCIL. NRPC confirmed that the same would also be applicable to Powerlinks. With regard to "DEEMED AVAILABILITY", for long outages needed for replacement of insulators, it was informed that the matter would be appropriately dealt with by the Member Secretary, NRPC, as and when situation arises.

POWERLINKS stated that they have two lines in NR namely Bareilly-Mandola D/C line. There are 118-suspension tower and 52 tension towers. The insulators for these lines are expected to be delivered by Dec., 08 and they are planning to replace these insulators by Jan., 09 and to replace the polymer insulators on these lines they would need around 28 days outage.

#### **POWERGRID**

POWERGRID NR II stated that they have replaced 2000 insulators on their lines namely Hisar-Bawana and Bawana-Bahadurgarh. POWERGRID have placed orders for about 36,000 Polymer insulators and delivery is expected in parts starting Nov., 08. 4000 nos. are expected in Nov., 08, 5500 in Dec., 08 and balance in Jan., 09. The work of installation would be taken up in the next month.

POWERGRID, further, informed that manual cleaning of lines in NCR is in progress and would be completed by 15.12.08. Besides this, they have started helicopter washing of insulators also w.e.f 1.11.08 on the critical lines.

They have completed washing of insulators of 400 kV Meerut-Mandola I and 400kV Dadri-Mandola I. line. The Helicopter washing of 400 kV Dadri-Panipat I is under progress. The programme of Helicopter washing is placed at Annex.-II.

#### **NRLDC**

NRLDC stated that as per historical data they have found that whenever Relative Humidity (RH) increase to 85% or above and temperature falls below 10 degree Celsius, the chances of formation of fog increases which call for alertness on the part of O&M staff to avoid fog related trippings. They have received weather data from DTL's Minto Road station, Patiala station and Lucknow station. Data from other stations are not available through ULDC scheme because of non-functional of weather stations of the constituents. NRLDC emphasized that operators should keep a close watch on RH and temperature and when there are chances of fog formation, it should be ensured that suitable and competent officers and staff are available at the stations.

NRLDC stated that Pre-winter maintenance schedule of 400 kV UPPTCL lines and 220 kV lines of Punjab, Haryana, J&K have not been received. These constituents may expedite in submitting their maintenance schedule so that an appropriate shutdown schedule is prepared.

NRLDC stated that there are around 27 substations/Generating stations without RTU's, and some of the existing RTU's are not reporting/functioning. Constituent may connect these RTUs to the system. The Synchronization facility at the substations may be tested and be kept ready during winters.

#### **Manual Cleaning of Insulators**

M.S., NRPC emphasized that constituents should expedite cleaning of insulators manually and should complete the exercise by 15<sup>th</sup> Dec 08. S.E.(O), NRPC stated that the work is also being monitored by the OCC sub-committee of NRPC and he requested constituents to submit programme to NRLDC for coordinated shutdown schedule.

#### **Hot Line Washing**

DTL showed clips on Hot line washing undertaken by them in their 400 kV lines. DTL emphasize that hot line washing is economical, effective and fast method of insulator cleaning. UPPTCL requested DTL to share details of agency to which they have outsourced the work so that they may also avail hot line washing facility.

M.S., NRPC stated that constituents may submit the details of procuring and replacement of polymer insulators, cleaning/washing of insulators as per the pro-forma circulated in the meeting to NRPC Secretariat by 20 Nov., 2008. These Performa have also been available at NRPC website. Thereafter, the updated status should be submitted to NRPC every week on Monday through e-mail.

Meeting ended with thanks to the chair.

LIST OF PARTICIPANTS I N THE SPECIAL MEETING, AT NRPC ON 14-11-08 ON REPLACEMENT OF INSULATORS

### In Chair, Sh A.K Aggarwal, MS, NRPC

Organization	Name of	Designation	Telephone	E- Mail Address
	Participant		Number	
NRPC	R.P Aggarwal	SE(O)		
	K.K Arya	SE(S)	9810455760	kkarya_2001@rediffmail.com
	Rishika Saran	EE(O)		
	Vikram Singh	EE(O)		
	Sarita Sewak	EE(O)		
DTL	A.K Kaul	GM,SLDC	9810299692	ashokk_kaul@yahoo.com
	P.P Singh		9971577677	
	Loveleen Singh		9810299686	mgr.txl@delhitransco.gov.in
BBMB	Sushil Kumar		9872885993	shillu33@yahoo.co.in
	Gupta			
HVPNL	R.C Malhotra	SE	9357214739	rcmalhotra_chd@yahoo.com
RVPNL	D.C Gupta		9414061474	
UPPTCL	Rajesh Kumar		9415005864	aarkay49@gmail.com
POWERGRID	Bhairab Pd.	GM(O&M)	26564734	bpgantayat@gmail.com
	Gantayat			
	Sanjeev Singh	GM(OS)	0124-	sanjeev@powergrid.com
			2571916	
	N.L Jain	Manager	9873119512	nljain_99@rediffmail.com
	R.B Singh		9416600522	rbsingh@powergrid.com
POWERLINKS	B.A Chaudhari	COO	9810221691	bachandhari@powerlinks.co.in
NRLDC	D.K Jain	DGM	9910344127	dkj2009@yahoo.co.in
	Alok Kumar	Manager	9999039321	alokwaghela@hotmail.com

#### Mandola Helipad

SI. No.	Name of the line	Line configuration	Proposed line section in KM	No. of days	Date		Remark
					from	То	
	400 KV D/C Meerut-				1st		
1	Mandola -I	V-V-V	30	6 Days	Nov.	6th nov.	Completed
2	400 KV D/C Dadri- Mandola-l	V V-VV-VV	20	7 days	7th Nov.	13th Nov.	Completed
3	400 KV S/C Dadri- Panipat-I	I-I-I	23	6 Days	14th Nov.	19th Nov.	Mandatory 100 hours maintenance from 11th to 13 th Nov.
	400 KV S/C Dadri-				20th	24th	
4	M'kotla	1-1-1	22	5 days	Nov.	Nov.	

#### Meerut Helipad

	400 KV D/C Meerut-				25th	30th	
1	Mandola -I	V-V-V	30	6 Days	Nov	Nov.	

#### Muradnagar Helipad

1	400 KV D/C Dadri- Mandola-I	V V-VV-VV	10	4 Days	4th Dec	7th Dec.	
2	400 KV S/C Dadri- Panipat-I	1-1-1	36	6 Days	8th Dec	13th Dec	
3	400 KV S/C Dadri- M'kotla	1-1-1	24	4 days	14th Dec	17th	Mandatory 100 hours maintenance from 18th to 19 th Dec.

#### Dadri Helipad

	400 KV S/C Dadri-				20th	24th
1	Panipat-I	I-I-I	20	5 Days	Dec	Dec
	400 KV S/C Dadri-				25th	28th
2	M'kotla	I-I-I	10	4 days	Dec	Dec
	400 KV D/C Dadri-				29th	31st
3	Mandola-I	V V-VV-VV	10	3 Days	Dec	Dec
	500 KV HVDC Rihand					
4	Dadri Pole-I &II	V V-VV	25	6 Days	1 st Jan	06th Jan

Panipat Helipad

SI. No.	Name of the line	Line configuration	Proposed line section	No. of days	Date		Remark
					from	То	
	400 KV S/C Dadri-						
1	Panipat-I	I-I-I	8	4 Days	7th Jan	10th Jan	
	400 KV S/C Dadri-				11th		
2	Malerkotla	I-I-I	12	4 Days	Jan	14th Jan	
							Mandatory 100 hours
	400 KV S/C Dadri-				15th		maintenance from 18th
3	Panipat-II	I-I-I	8	4 Days	Jan	18th Jan	to 19 th Jan.

#### Ballabhgarh Helipad

4	TOTAL			0 Days	71111 60	1 60
4	400 KV S/C Ballabhgarh- Bhiwari	I-I-I	20	6 Days	7th Feb	12th
3	400 KV S/C Kanpur- Ballabhgarh	I-I-I	30	5 Days	2nd Feb	6th Feb
2	400 KV D/C Mainpuri- Ballabhgarh-I	I-I-I	30	5 Days	27th Jan	31st Jan
1	400 KV S/C Agra- Ballabhgarh	I-V-I	30	5 Days	22nd Jan	26th Jan