

Ph. : 26513265
Fax : 26865206

e-mail : nrebops@yahoo.com
Website : www.nrpc.gov.in

भारत सरकार
Government of India
क्षेत्रीय विद्युत स म त
Northern Regional Power Committee
18-ए, शहीद जीत सिंह माग, कटवारिया सराय नई दिल्ली - 110016
18-A, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi-110016

उ. क्षे. वस./अधीक्षण अभियंता (चालने/insulators/2011 दिनांक 03.02.2011

To

1. CMD, POWERGRID, Gurgaon
2. Chairman, BBMB, Chandigarh, Fax No 0172- 2549186, 2652820
3. CMD, DTL, New Delhi Fax No 011 23234640
4. CMD, PSTCL, Ablawal, Patiala
5. MD, HVPNL, Panchkula Fax No 0172-2560640
6. CMD, RRPVNL, Jaipur Fax No 0141- 2740168
7. MD, UPPTCL, Lucknow Fax No 0522- 2287880/ED UPPTCL, Lucknow
8. Director (Electrical Engineering-PS), Railway Board, Rail Bhavan New Delhi-110001, Fax 011- 23387045,
9. CED, North Central Railway, Allahabad, 0532-2223211, 2230204
10. CEO, Powerlinks Transmission Limited, New Delhi, Fax-011-45459555
11. GM (O&M), POWERGRID, NR-I
12. GM (O&M), POWERGRID, NR-II

Subject: Minutes of the meeting on replacement of Porcelain insulators with Polymer/Antifog insulator and cleaning of Porcelain insulator in Northern Region

Sir,

A meeting was held with the utilities of Northern Region on 17-01-2011 on the above subject.

Minutes of the aforesaid meeting are enclosed. Copy of the same is also available on website of NRPC (www.nrpc.gov.in).

Yours faithfully

Encl: As above

(Ajay Talegaonkar)

SE (Operations)

**Minutes of the meeting taken by Member Secretary, NRPC on
17th January, 2011 regarding replacement of porcelain
insulators with polymer/antifog insulators on transmission
lines in NR.**

List of participants is enclosed at Annexure-I.

1. MS, NRPC, welcomed the participants in the special meeting to review the progress of replacement of porcelain insulators with polymer/antifog insulators and cleaning of porcelain insulators in the Northern Region. He recalled the recommendations of the enquiry committee for grid incidents that porcelain insulators should be replaced with polymer/antifog insulators depending on the level of pollution.

2. He cautioned utilities that they will have to be careful even up to March as in 2008 fog related incidents took place in the month of March.

3. SE (O), NRPC advised the utilities to make action plan for completion of work in the time bound manner. He requested the utilities to submit the weekly status on every Thursday to NRPC secretariat on replacement and cleaning of insulator. He stated that despite special meetings and discussions in the OCC, the reports regarding status of replacement and cleaning of porcelain insulators is not being received regularly in the NRPC Secretariat.

4. To analyses the tripping of transmissions lines it was decided to modify the format for submission of data related to replacement and cleaning of insulator and make it more comprehensive. Accordingly the revised format has been prepared and available at NRPC website (www.nrpc.gov.in). (Copy enclosed as Annex- II)

5. Summary of Progress made by various utilities as updated in the meeting is enclosed as **Annexure-IIIA & Annexure-IIIB**. The utility-wise status as updated during the meeting is as under.

6 Railways

6.1 Northern Central Railways

No representative from Northern Central Railways attended the meeting. Progress of work in Northern Central Railways as available with NRPC Secretariat is attached as **Annex-IVA**.

6.2 Northern Railways

No representative from Northern Central Railways attended the meeting. Progress of work in Northern Central Railways as available with NRPC Secretariat is attached as **Annex-IVB**.

7. Punjab

7.1 Representative of Punjab State Transmission Co. Ltd. (PSTCL) stated that they had already completed replacement work of Stage-I and work of Stage-II is 56% complete.

Details of progress made by PSTCL in Porcelain insulators are enclosed at **Annexure-V**.

8. Haryana

8.1 Representative of HVPNL intimated that work on all 25 lines identified in stage-I is 57% complete and 51% work on stage-II is complete. Progress of work in Haryana under stage-I and list of lines identified for stage-II as furnished in the meeting are attached as **Annex-VIA, VIB**.

9. POWERGRID

9.1 Representative of POWERGRID stated that under stage-I, they had identified 54 lines in Stage-1, out of which 81 % work is complete and rest of the work is going on depending on availability of shutdowns.

9.2 The progress of replacement of insulators in respect of POWERGRID is enclosed as **Annexure-VIIA, VIIB**.

10. POWERLINKS

10.1 Representative of POWERLINKS stated that their replacement as well as cleaning work is complete. Status of POWERLINKS is enclosed as **Annexure-VIII**.

11. RVPNL

11.1 Representative of RVPNL stated that their replacement work is complete. Status of RVPNL is enclosed as **Annexure-IX**.

12. BBMB

12.1 Representative of BBMB stated that for 400 kV 400 kV S/C Dehar-Panipat Line and S/C Dehar-Bhiwani Line matter of replacement is under review as

POWERGRID has shown inability to procure insulators as per BBMB specifications. He further stated that retendering process is going on for 220KV insulators for Rohtak Road-Narela ckt-I & Ckt-II. He further stated that manual cleaning on 45 critical lines and hotline cleaning on Switch yard at 400 kV Panipat Substation of BBMB is complete. Status of BBMB is enclosed as **Annexure-X**.

13. DTL

13.1 Representative from DTL stated that they had completed the cleaning work on all critical locations. Progress of work in Delhi as available with NRPC Secretariat is attached as **Annex-XI**.

14. UPPTCL

14.1 Representative of UPPTCL stated that their cleaning of porcelain insulators is being taken on critical locations and replacement work is going on. Progress of work in U.P. as available with NRPC Secretariat is attached as **Annex-XII**.

Next meeting will be held at NRPC, New Delhi on 11.02.2011 at 16:00 Hrs

Meeting ended with vote of thanks to the Chair.

Annex-I**List of Participants of the Meeting on Polymer Insulator****In chair- Shri A K Aggarwal, MS, NRPC****POWERGRID**

Name of officer Shri.	Designa-tion	Organization	Mobile No.	Email id
Kuleshwar Sahu	Chief Mgr (OS)	POWERGRID NR-II	9419217140	kuleshwars@gmail.com
Mithlesh Kumar	AGM(O&M)	POWERGIRD NR-I	9873637111	Mithlesh-1955@powergridindia.com
S.Rasool	CM	PGCIL	9873549223	saquibrasool@rediffmail.com

NRLDC

D.K.Jain	DGM(SO-I)	NRLDC	9910344127	Dkj2009@yahoo.co.in
Rajiv Porwal	Chief Manager	NRLDC	9871581133	rajivporwal@gmail.com

PSTCL

G.S.Kohli	AEE	PSTCL	9646118294	gurbir_kohli@yahoo.co.com
-----------	-----	-------	------------	--

HVPN

N K Makkar	XEN	HVPN	9466219042	hvpnceoml@yahoo.co.com
------------	-----	------	------------	--

BBMB

Sawinder Singh	Dy. Dir/PR	BBMB	9646140207	powerc@bbmb.nic.in
----------------	------------	------	------------	--

UPPTCL

V K Srivastav	Advisor	UPPTCL	8004921159	vksrivastav@uppcl.org
G. Banerjee	EXN	UPPCL	9415233473	
S K Jain	SE, PS	UPPCL	9415609356	
B L Nangalia	SE(T&C)	UPPTCL	9412749817	

NRPC

Ajay Talegaonkar	SE(O)	NRPC		nrebops@yahoo.com
Naresh Kumar	AEE(O)	NRPC	9968808624	naresh1822@rediffmail.com

Status of Replacement of Porcelain Insulators with POLYMER Insulators

Name of the Organisation:

[illegible]

Status of Replacement of Porcelain Insulators with ANTIFOG Insulators

Name of the Organisation:

[illegible]

Status of Hotline Cleaning of Porcelain Insulators

Name of the Organisation:

[illegible]

Status of Manual Cleaning of Porcelain Insulators

Name of the Organisation:

[illegible]

Annexure - II

Summary of Replacement of Porcelain Insulators by Polymer / Antifog Insulators						
	Stage-I (Lines identified after grid incidence on 8th March 2008)		Stage-II (Lines identified after grid incidence on 2nd January 2010)			
Utility	Lines Identified (Nos)	Progress of Replacement of Insulator String (%)	Lines Identified (Nos)	Progress of Replacement of Insulator String (%)	Status as on	
HVPNL	25	57	17	51	16.01.2010	
POWERGRID	54	81	39	Nil	NR-II - 23.12.2010 & NR-I as on 25.01.2011	
BBMB	35	65	5	28	As on 23.01.2010	
DTL	6	67	*	-	As on 26.12.2010	
UPPTCL	38	18	*	-	As on 22.11.2010	
PSTCL	20	100	35	56	14.01.2011	
POWERLINK	1	100	-	-	Work Complete	
RVPNL	2	100	-	-	Work Complete	
North Central Railways					1126 Insulator strings replaced	
North Railways			-	-		

* Lines are yet to be identified in Stage-II

Summary of Cleaning of Insulators				
Utility	Status as on	Lines Identified (Nos)	No of Locations Identified	No. of Locations Completed/Lines
HVPNL	23.12.2010	47		47
POWERGRID	22.12.2010	36	3536	3536
BBMB	19.12.2010	45	7460	7423(99.51%)
DTL	26.12.2010	6	50	105(336 Strings Replaced)
UPPTCL	not available			
PSTCL	not available			
POWERLINK	27.01.2011	1	111	Work Completed
RVPNL	not available			
North Central Railways	03.12.2011			6160 insulator strings replaced.
North Railways	03.12.2011	4		70

Annexure-IVA

Status of replacement of Northern Central Railways as on 03.12.2010

Legend: Tension tower (TT), Suspension Tower (ST),
Tension String (TS), Suspension String (SS)

1.0 Progress of replacement of insulators:

1.1 66kV TR line

SN	Section	No. of TT	No. of ST	No. of TS	No. of SS	Progress of Replacement
1.	Ballabgarh TSS – Hodal TSS	NIL	NIL	NIL	NIL	There is no flash/broken insulator.

1.2 132kV TR line:

SN	Section	No. of TT	No. of ST	No. of TS	No. of SS involved	Progress of Replacement
1.	Naurangabad GSS – Mathura TSS	NIL	05	NIL	05	06 flashed & 5 broken disc replaced. Work completed
2.	Sikadara Agra GSS – Bhandai TSS	Nil	17	NIL	17	33 flashed & 8 broken disc replaced. Work completed
3.	Dadri-Sahibabad Ckt-I	27	50	159	117	Long Rod Polymer composite insulator (LRPCI) – 117 suspension and 33 in tension string.
4.	Dadri-Sahibabad Ckt-II	27	50	159	117	NIL
5.	Dadri-Dankaur Ckt-I	27	46	204	156	(LRPCI) – 156 suspension and 119 in tension string.
6.	Dadri-Dankaur Ckt-II	27	46	204	174	(LRPCI) – 174 suspension and 114 in tension Long Rod string.
7.	Dankaur-Khurja Ckt.I	18	76	126	243	(LRPCI) -180 suspension string.
8.	Dankaur-Khurja Ckt.II	18	76	126	249	NIL
9.	Aligarh Jn-Mandrak Ckt.I	12	50	87	171	(LRPCI) 57 suspension string.
10	Panki-Shikohabad					3000 porcelain type suspension insulator strings have been replaced in 2008-09

- 684 suspension and 266 tension type (total 950) BHEL make long rod composite polymer insulators as per PGCIL specification have been provided in 132kV TR line between Mitawali-Sahibabad.

1.3 **220kV TR line:**

SN	Section	No. of TT	No. of ST	No. of TS	No. of SS	Progress of Replacement
1.	NTPC Dadri – Dadri GSS	30	27	492	234 + 24 at DER/ GSS	Not required.
2.	Auraiya Switch Yard- Phaphoond GSS	24	12	372	120	Non Pollution area, therefore not planned for replacement.

2.0 **Progress of Provision of Additional Disc Insulator:**

2.1 **66kV TR line:**

SN	Section	No. of TT	No. of ST	No. of TS	No. of SS	Progress of provision of additional Disc Insulator
1.	Ballabhgarh TSS – Hodal TSS	30	117	369	819	Not yet Planned. At present 5 in suspension and 6 disc insulator in tension strings have been provided and no additional disc insulator is required to be provided in TR line.

2.2 **132kV TR line:**

SN	Section	No. of TT	No. of ST	No. of TS	No. of SS	Progress of provision of additional Disc Insulator
1.	Naurangabad GSS – Mathura TSS	10	13	64	76	At present 9 in suspension and 10 disc insulators in tension provided in TR line. Additional disc insulator not required in TR line.
2.	Sikadara GSS – Bhandai TSS	23	61	216	257	
3.	Sarsaul-Panki – Mitawali – Dadri – Sahibabad	–	–	–	–	NIL

2.3 **220kV TR line:**

SN	Section	No. of TT	No. of ST	No. of TS	No. of SS	Progress of provision of additional Disc Insulator
1.	Dadri/GSS – Dadri/ NTPC	30	27	492	234 +24 at Dadri GSS	Additional disc provided on Ckt-I, 105 strings (in 27 towers)

Status of Cleaning of Porcelain Insulators with POLYMER Insulators North Railways
Annexure-IVB

as on 03.12.2010

Status of Hotline Cleaning of Porcelain Insulators

Name of the Organisation: NR/TRD/DLI Division												
Sl. No	Name of Line, Voltage (Write each circuit separately)	Line Details			Insulator to be Cleaned			Progress		Schedule for		Remarks
		Length (Km)	Total Tower Location s (No)	Total Insulator Strings (No)	Length (Km)	Tower Location s (No)	Insulator Strings (No)	Tower Location s (No)	% of Tower Location	Start Date	End Date	
		NIL										

Status of Manual Cleaning of Porcelain Insulators

Name of the Organisation: NR/TRD/DLI Division												
Sl. No	Name of Line, Voltage (Write each circuit separately)	Line Details			Insulator to be Cleaned			Progress		Schedule for		Remarks
		Length (Km)	Total Tower Location s (No)	Total Insulator Strings (No)	Length (Km)	Tower Location s (No)	Insulator Strings (No)	Tower Location s (No)	% of Tower Location	Start Date	End Date	
1	132 KV Diwana-Taroari Ckt.-I.	61	1-213	1002	20	1-74	459	1-54	73%	12.11.10	15.12.10	
2	132 KV Diwana-Sahabad Ckt. II.	115	213 & 1-1	1533	20	1-74	465	1-50	68%	12.11.10	15.12.10	

Annexure-IVA

Status of cleaning of Northern Central Railways as on 03.12.2010

Legend: Tension tower (TT), Suspension Tower (ST),
Tension String (TS), Suspension String (SS)

1.0 Progress of cleaning of Insulator

1.1 25 kV TR line:

SN	Section	No. of TT	No. of ST	No. of TS	No. of SS	Progress of Cleaning
1.	Chunar PuVVNL- Chunar FP	2 TW plus 2 gantry- 12, 9-t Insulators.				NIL
2.	Jigna PuVVNL- Jigna FP	2 TW & 1 ST plus 2 gantry- 14, 9-t Insulator				NIL
3.	Rewa Road PuVVNL- Naini FP	4 TW & 22 ST plus 6 gantry- 114, 9-t Insulator				NIL
4.	Sirathu PuVVNL- Sirathu FP	2 gantry- 4, 9-t Insulator				NIL
5.	Malwan PuVVNL- Malwan FP	2 gantry- 4, 9-t Insulator				NIL

1.2 66kV TR line:

SN	Section	No. of TT	No. of ST	No. of TS	No. of SS	Progress of Cleaning
1.	Ballabgarh TSS – Hodal TSS	30 + 2 gantry	125	369	819	All insulators have been cleaned.

1.3 132kV TR line:

SN	Section	No. of TT	No. of ST	No. of TS	No. of SS	Progress of Cleaning
1.	Naurangabad GSS – Mathura TSS	10	13	64	76	All insulators have been cleaned.
2.	Sikadara GSS – Bhandai TSS	22	62	216	244	All insulators have been cleaned.
3.	Narayanpur PuVVNL to jeonathpur TSS	12	10	88	44	Agency for cleaning of 450 stings fixed. Work in Progress. PDC 15.12.2010.
4.	Patharia PuVVNL to Mirzapur TSS	7	2	64	12	
5.	Naini Complex PuVVNL to Bhirpur TSS	21	42	160	177	168(C)
6.	Manauri PuVVNL to Manauri TSS	10	2	96	20	NIL
7.	Radhanagar PuVVNL to Rasulabad TSS	18	51	152	212	204(C)
8.	Sarsaul-Panki	47	77	703	537	Agency for cleaning of 140 stings fixed. Work in Progress: 140(C)+353(D).
9.	Panki-Phaphoond	50	186	718	723	Cleaning being done departmentally. Progress: 996(D). PDC 15.12.10
10.	Phaphond-Mitawali	130	397	1914	3050	
11.	Mitawali-Dadri	146	428	2025	2946	Agency for Cleaning of 2421 suspension strings between Dadri-Sahibabad fixed & LOA issued on 12.10.10. Progress:1045(C)+738 (D) PDC 15.12.2010.
12.	Dadri-Sahibabad	27	50	343	229	

1.4 **220kV TR line:**

SN	Section	No. of TT	No. of ST	No. of TS	No. of SS	Progress of Cleaning
1.	NTPC Switch Yard-Dadri GSS	30	27	492	234 + 24 at DER/ GSS	LOA issued on 12.10.10 for cleaning of 258 suspension string between DER/NTPC to DER/GSS. Cleaning of Tension strings will start from 1.12.10 & will be completed up to 31.12.10.
2.	Auraiya- Phaphoond GSS	24	12	372	120	

Status of Replacement of porcelain insulators with polymer/antifog insulators Annexure-VIA

Name of the organization: HVPN								
Status as on: 06.01.11								
Sl. No	Name of line	Line Length		Length where insulators to be replaced				
		Kms/Towers	Total Insulator Strings (No.s)	Kms/Towers	Total Insulator Strings (No.s)	Insulator Strings replaced (No.s)	% completed	Status
	Stage-I							
1	220KV Sewah-PTPS Ckt-I	12	198	12	198	198	100	Completed
2	220KV Sewah-PTPS Ckt-II	12	198	12	198	198	100	Completed
3	220KV Sewah-PTPS Ckt-III	12.5	213	12.5	213	213	100	Completed
4	220KV Sewah-PTPS Ckt-IV	12.5	213	12.5	213	213	100	Completed
5	220KV PTPS-Sonepat Ckt-I	51.5	634	51.5	634	612	97	Completed
6	220KV PTPS-Sonepat Ckt-II	51.5	634	51.5	634	612	97	Completed
7	220KV Nuna-Majra-B/garh(400KV) Ckt-I	2.9	42	2.9	42	42	100	Completed
8	220KV Nuna-Majra-B/garh(400KV) Ckt-II	2.9	42	2.9	42	42	100	Completed
9	220KV Rohtak-B/garh Ckt-I	46	576	46	576	576	100	Completed
10	220KV Rohtak-B/garh Ckt-II	46	576	46	576	576	100	Completed
11	220KV Rohtak-PTPS Ckt-I	63	726	63	726	NIL	NIL	

12	220KV Rohtak-PTPS Ckt-II	63	726	63	726	NIL	NIL	
13	220KV Pali-Samaypur Ckt-I	10.5	342	10.5	342	240	70	
14	220KV Pali-Samaypur Ckt-II	10.5	342	10.5	342	240	70	
15	220KV Pali-Palla Ckt-I	13.9	414	13.9	414	150	36	
16	220KV Pali-Palla Ckt-II	13.9	414	13.9	414	150	36	
17	220KV Samaypur-Palwal Ckt-I	18.91	288	18.91	288	288	100	Completed
18	220KV Samaypur-Palwal Ckt-II	18.91	288	18.91	288	252	88	
19	220KV Badshahpur-Rewari D/C line	70.3	1410	70.3	1410	100	7	
20	220KV D/C Sec-52-A-Pali line	23/89	690	23/89	690	NIL	NIL	
21	220KV Badshahpur-Samaypur D/C	24/86	642	24/86	642	315	49	
22	220KV Badshahpur-Pali D/C	24/86	726	24/86	726	484	67	
23	220KV S/C Badshahpur-IMT Manesar	11.772	240	11.772	240	24	10	
24	220KV D/C Daultabad-IMT Manesar	17.996	594	17.996	594	594	100	Completed
25	220KV D/C Nuna-Majra-Daultabad	29.898	666	29.898	666	666	100	Completed
	Total		11834		11834	6785	57	
	Stage-II							
1	220KV PTPS-KARNAL	48	606	48	606	28	5	
2	220KV PTPS-Bastara	27	882	27	882	822	93	

3	220KV Bastara-Safidon	23		23				
4	220KV DCRTP-Nilokheri D/Ckt	51.99	2820	51.99	2820	2820	100	Completed
5	220KV Nilokheri-Karnal	19	249	19	249	NIL	NIL	
6	220KV Bastara-Kaul line	56.143	1044	56.143	1044	1044	100	Completed
7	220KV Jhajji-PGCIL-Mohana D/Ckt	1.5	126	1.5	126	126	100	Completed
8	220KV PTPS-Safidon Ckt-1	29	296	29	296	NIL	NIL	

9	220KV PTPS-Safidon Ckt-2	29	296	45	296	NIL	NIL	
10	220KV PTPS-Safidon Ckt-3	23	367	23	367	NIL	NIL	
11	220KV PTPS-Jind Ckt-1	62	549	62	549	NIL	NIL	
12	220KV PTPS-Jind Ckt-2	62.215	576	62.215	576	NIL	NIL	
13	220KV Cheeka-Durala Ckt-1	50	633	50	633	NIL	NIL	
14	220KV Cheeka-Durala Ckt-2	50	633	50	633	NIL	NIL	
15	220KV Durala-Shahbad Ckt	17	126	17	126	NIL	NIL	
16	220KV Durala-Pehowa Ckt	25	363	25	363	NIL	NIL	
	Total		9566		9566	4840	51	

Disc Cleaning Annexure-VIB

Date	Name of Division	Name of S/Stn	Name of Line/Equipment	Time		Reason
				From	To	
02.11.10	XEN TS Faridabad	220KV Palli	220KV Palli-Samaypur Ckt-1	10:00	13:00	Disc Cleaning & Gen Mtc
02.11.10 to 15.11.10	XEN TS Gurgaon	220KV Badshahpur	220KV Palli-Badshahpur D/Ckt	9:30	17:30	Replacement of antifog disc
02.11.10	XEN TS Kaithal	220KV Kaithal	220KV Narwana -Kaithal Ckt-2	10:00	16:00	For cleaning disc and other mtc
03.11.10	XEN TS Ambala	220KV Tepla	220KV Tepla-Shahbad Ckt-2	9:00	17:00	Disc Cleaning & Gen Mtc
03.11.10	XEN TS Narwana	220KV Narwana	220KV Narwana-Kaithal Ckt-1	10:00	12:00	Disc Cleaning & Gen Mtc
03.11.10	XEN TS Hisar	220KV IA Hisar	220KV IA Hisar-PGCIL Mayyer Ckt-2	10:00	16:00	Disc Cleaning & Gen Mtc
04.11.10	XEN S/Yard -II PTPS PNP	220kv S/Yard-II PTPS	220KV PTPS-Jind Ckt- 1 & 2	16:30	17:00	For cleaning LAS
06.11.10	XEN S/Yard -II	220KV PTPS	220KV PTPS-Safidon Ckt-3	10:30	11:00	Cleaning of Disc
06.11.10	XEN S/Yard -II	220KV PTPS	220KV PTPS-Bastara S/Ckt	11:00	11:30	Cleaning of Disc
9.11.10	XEN TS Narwana	220KV Jind	220KV Jind-PTPS Ckt-2	9:30	11:30	Disc Cleaning & Gen Mtc
09.11.10	XEN TS Narwana	220KV Narwana	220KV Narwana-Hisar Ckt-1	10:00	12:00	Disc Cleaning & Gen Mtc
09.11.10	XEN TS Narwana	220KV Safidon	220KV Safidon-PTPS Ckt-3 (Unit 7 & 8)	9:30	16:30	Cleaning the disc & check the condition of clamp and jumper
9.11.10	XEN TS Kaithal	220KV Kaithal	220KV Kaithal-Nissing Ckt-2	10:00	16:00	Disc cleaning & general mtc
09.11.10	SSE 400KV BBMB Sewah	400KV Sewah	220KV PTPS-Sewah Ckt-1	8:00	17:00	Disc Cleaning & Gen Mtc
09.11.10	SSE 400KV BBMB Sewah	400KV Sewah	220KV PTPS-Sewah Ckt-4	8:00	17:00	Disc Cleaning & Gen Mtc
10.11.10	XEN TS Kaithal	220KV Kaithal	220KV Kaithal-NRW Ckt-1	10:00	16:00	Disc cleaning & general mtc
10.11.10	XEN TS Hisar	220KV IA Hisar	220KV IA Hisar-PGCIL Mayyer Ckt-2	10:00	16:00	Disc Cleaning & Gen Mtc
10.11.10	XEN TS Narwana	220KV Jind	220KV Jind-Safidon Ckt-1	9:30	11:30	Disc Cleaning & Gen Mtc
11.11.10	XEN TS Kaithal	220KV Kaithal	220KV Kaithal-Nissing Ckt-2	10:00	16:00	Disc cleaning & general mtc
11.11.10	XEN TS Narwana	220KV Safidon	220KV Safidon-Narwana Ckt-1	9:30	12:30	Disc Cleaning & Gen Mtc
13.11.10	XEN TS Karnal	220KV Nissing	220KV PTPS-Nissing Ckt-1	10:00	17:00	Disc cleaning & general mtc

13.11.10	XEN TS Kurukshetra	220KV Pehowa	220KV Pehowa-Kaithal Ckt-1	9:00	14:00	Disc Cleaning & Gen Mtc
15.11.10	XEN TS Karnal	220KV Nissing	220KV Nissing-Salimpur Ckt-2	10:00	17:00	Disc Cleaning & Gen Mtc
15.11.10	XEN TS Kurukshetra	220KV Pehowa	220KV Pehowa-Shahbad Ckt-1	9:00	14:00	Disc Cleaning & Gen Mtc
16.11.10	XEN TS Kaithal	220KV Kaithal	220KV Kaithal-Nissing Ckt-2	10:00	16:00	Disc cleaning & general mtc
16.11.10	XEN TS Hisar	220KV IA Hisar	220KV IA Hisar-PGCIL Hisar Ckt-2	10:00	16:00	Disc Cleaning & Gen Mtc
16.11.10	XEN TS Sirsa	220KV Sirsa	220KV Matana-Sirsa line	10:00	15:00	To wash the disc
16.11.10	XEN TS Faridabad	220KV Palli	220KV Palli-Gurgaon Sec-52 Ckt-2 & 220KV Bus no. 1	10:00	15:00	Disc Cleaning & Gen Mtc
16.11.10	XEN TS Madanpur	220KV Madanpur	220KV Madanpur-Tepla ckt-1	9:30	17:00	Cleaning of Disc
16.11.10	XEN TS Narwana	220KV Narwana	220KV Hisar-Narwana line	10:00	12:00	Cleaning of Disc
16.11.10	XEN TS Rohtak	220KV Nunamajra	220KV Nunamajra-Daultabad Ckt-1	9:00	12:00	Cleaning of Disc
17.11.10	XEN TS Rohtak	220KV Nunamajra	220KV PGCIL-Nunamajra Ckt-1	9:00	12:00	Disc Cleaning & Gen Mtc
18.11.10	XEN TS Panipat	220KV PTPS	220KV PTPS-Sewah Ckt-1	10:00	17:00	Disc cleaning & general mtc
18.11.10	XEN TS Karnal	220KV Nissing	220KV PTPS-Nissing Ckt-2	10:00	17:00	Disc cleaning & general mtc
18.11.10	XEN TS NARWANA	220KV Narwana	220KV Hisar-Narwana line	11:00	13:00	Disc Cleaning & general Mtc.
20.11.10	XEN TS Faridabad	220KV Palli	220KV Bus no-II	10:00	13:00	Disc Cleaning & general Mtc.
20.11.10	XEN TS Karnal	220KV Nissing	220KV Nissing-Salempur Ckt-1	10:00	17:00	General Mtc of Bay equipment & cleaning of disc insulator
20.11.10	XEN TS Panipat	220KV Panipat	220KV PTPS-Sonepat Ckt-1	8:00	17:00	Cleaning of antifog disc
20.11.10	XEN TS Narwana	220KV Safidon	220KV PTPS-Safidon Ckt-2 Unit no - 5-6	7:00	18:30	Disc cleaning
20.11.10	XEN TS Kurukshetra	220KV Pehowa	220KV Pehowa-Kaithal Ckt-1	9:00	15:00	Disc cleaning and general mtc
22.11.10 to 27.11.10 (on cont. basis)	XEN TS Panipat	220KV PTPS, PNP	220KV PTPS-Sewah Ckt-2	7:00	19:00	Disc cleaning and general mtc
21.11.10	XEN TS Kurukshetra	220KV Durala	220KV Durala-Cheeka D/Ckt	10:00	16:30	Disc cleaning and general mtc
22.11.10	XEN TS Karnal	220KV Nissing	220KV Nissing-PTPS Ckt-1	10:00	17:00	Cleaning the disc
22.11.10	XEN TS Narwana	220KV Safidon	220KV Safidon-Bastara Ckt-4 old	7:30	17:30	Disc cleaning
22.11.10	XEN TS Kaithal	220KV Kaithal	220KV Kaithal-Nissing Ckt-1	10:00	16:00	Cleaning of disc and general mtc
22.11.10	XEN TS Kurukshetra	220KV Pehowa	220KV Pehowa-Durala Ckt-2	9:00	15:00	General mtc & Disc cleaning
22.11.10	XEN TS Narwana	220KV Jind	220KV Jind-Kirori Ckt-1	11:00	14:00	Disc cleaning at T. no. - 107, 108 & 109
22.11.10	XEN TS Panipat	220KV Sonepat	220KV PTPS-Sonepat Ckt-1	7:00	18:00	Disc cleaning
23.11.10	XEN TS Madanpur	220KV Madanpur	220KV Madanpur-Tepla Ckt-2	10:00	16:00	Cleaning the disc insulator and general mtc
23.11.10	XEN TS Kaithal	220KV Kaithal	220KV Kaithal-PGCIL Ckt-1	10:00	16:00	Cleaning the disc insulator and general mtc
23.11.10	XEN TS Karnal	220KV Nissing	220KV Nissing-PTPS Ckt-1	10:00	17:00	Cleaning of disc insulator
23.11.10	XEN TS Narwana	220KV Safidon	220KV PTPS-Safidon Ckt-1	7:30	17:30	Disc cleaning

23.11.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-1	7:30	18:00	Disc cleaning
23.11.10	XEN TS Kurukshetra	220KV Pehowa	220KV Shahbad-Durala ckt-2	10:00	15:30	Cleaning the disc insulator and general mtc
23.11.10	XEN TS Narwana	220KV Jind	220KV Jind-Kirori Ckt-2	12:00	16:00	Disc cleaning
24.11.10	XEN TS Rohtak	220KV Nunamajra	220KV Nunamajra-PGICL Ckt-2 & Bus Bar no-2	9:00	13:00	Preventive mtc.
24.11.10	XEN TS Faridabad	220KV Palli	220KV Palli-Palla Ckt-1	10:00	13:00	Disc cleaning and general mtc
25.11.10	XEN TS Karnal	220KV Nissing	220KV Nissing-PTPS Ckt-1	10:00	17:00	For cleaning the disc insulator
24.11.10	XEN TS Ambala	220KV Shahbad	220KV Shahbad-Jorrian Ckt-2	8:30	16:00	Disc cleaning and general mtc
24.11.10	XEN TS Narwana	220KV Safidon	220KV Safidon-PTPS Ckt-3	7:30	17:30	Disc cleaning
24.11.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-1	7:00	18:00	Disc cleaning
24.11.10	XEN TS Karnal	220KV Karnal	220KV PTPS-Karnal line	10:00	14:00	Repair of conductor B/w T. no.- 85 & 86 and disc cleaning
25.11.10 to 26.11.10	XEN TS Panipat	220K PTPS	220KV PTPS-Sewah Ckt-1	7:00	19:00	For disc cleaning and general mtc
25.11.10	XEN TS Narwana	220KV Safidon	220KV Safidon-PTPS Ckt-2 Unit 5-6	7:30	17:00	Disc cleaning
25.11.10	XEN TS Ambala	220KV Shahbad	220KV Shahbad-Jorian Ckt-1	8:30	16:30	General mtc & Disc cleaning
25.11.10	XEN TS Madanpur	220KV Madanpur	220KV Madanpur-Tepla Ckt-2	9:30	17:00	Disc cleaning
25.11.10	XEN TS Hisar	220KV Hisar	220KV Hisar-Narwana line	9:00	17:00	Cleaning of line isolator
25.11.10	XEN TS Kurukshetra	220KV Pehowa	220KV Pehowa-Shahbad Ckt-1	9:30	15:30	General mtc & Disc cleaning
25.11.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-1	7:00	19:00	Disc cleaning
25.11.10	XEN TS Kaithal	220KV Kaithal	220KV Kaithal-Narwana Ckt-2	10:00	16:00	Disc cleaning and general mtc
25.11.10	XEN TS Rohtak	220KV Rohtak	220KV PTPS-Rohtak Ckt-1	9:00	16:00	Disc cleaning
26.11.10 to 01.12.10	XEN TS Panipat	220KV PTPS	220KV PTPS-Sewah Ckt-3	9:00	17:00	Disc cleaning and general mtc
26.11.10	XEN TS Kurukshetra	220KV Pehowa	220KV Pehowa-Kaithal Ckt-2	9:00	14:00	Disc cleaning and general mtc
26.11.10	XEN TS Narwana	220KV Safidon	220KV Safidon-Bastara Ckt-4 old	7:30	17:00	Disc cleaning
26.11.10	XEN TS Ambala	220KV Shahbad	220KV Shahbad-Jorian Ckt-1	8:00	16:30	Disc cleaning
26.11.10	XEN TS Narwana	220KV Jind	220KV PTP-Jind Ckt-2	10:30	14:30	Disc cleaning
26.11.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-2	7:00	18:00	Antifog disc cleaning
26.11.10	XEN TS Kaithal	220KV Kaithal	220KV Nissing-Kaithal Ckt-2	10:00	16:00	Disc cleaning
27.11.10	XEN TS Karnal	220KV Nissing	220KV Nissing-PTPS Ckt-1	10:00	17:00	Disc cleaning
27.11.10 to 30.11.10	XEN TS Bhiwani	220KV Bhiwani	220KV Prem nagar-Bapora Ckt-1	8:30	17:00	Disc cleaning
27.11.10	XEN TS Kurukshetra	220KV Pehowa	220KV Pehowa-Durala Ckt-2	9:00	13:00	For general mtc & Disc Cleaning
27.11.10	XEN TS Madanpur	220KV Madanpur	220KV Madanpur-Tepla Ckt-1	10:00	17:00	Disc cleaning
27.11.10	XEN TS Narwana	220KV Safidon	220KV Safidon-PTPS Ckt-1	7:30	17:00	Disc cleaning
27.11.10	XEN TS Ambala	220KV Shahbad	220KV Shahbad-Jorian Ckt-1	8:30	16:30	Disc cleaning
28.11.10	XEN TS Kaithal	220KV Cheeka	220KV PGCIL Ckt-1	8:00	17:00	Disc cleaning and general mtc
29.11.10	XEN TS Karnal	220KV Nissing	220KV Nissing-PTPS Ckt-1	10:00	17:00	Disc cleaning

29.11.10	XEN TS Narwana	220KV Safidon	220KV Safidon-PTPS Ckt-3 (Unit 7 & 8)	7:30	17:00	Disc cleaning
29.11.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-1	7:00	18:00	Disc cleaning
29.11.10	XEN TS Narwana	220KV Jind	220KV Jind-PTPS Ckt-1	11:00	15:00	Disc cleaning
29.11.10	XEN TS Ambala	220KV Shahbad	220KV Shahbad-Jorian Ckt-1	8:30	16:00	Disc cleaning
29.11.10	XEN TS Hisar	220KV IA Hisar	220KV IA Hisar-Narwana line	9:00	17:00	Disc cleaning
29.11.10 to 30.11.10	XEN TS Bhiwani	220KV Bhiwani	220KV Prem Nagar-Bapora Ckt-2	9:00	17:00	Disc cleaning
30.11.10	XEN TS Madanpur	220KV Madanpur	220KV Madanpur-Tepla Ckt-1	10:00	12:00	Disc cleaning
30.11.10	XEN TS Ambala	220KV Shahbad	220KV Shahbad-Jorian Ckt-2	8:30	16:00	Disc cleaning & general mtc
30.11.10	XEN TS Narwana	220KV Narwana	220KV Narwana Bus coupler	10:00	12:00	General Mtc. & Disc Cleaning
30.11.10	XEN TS Narwana	220KV Safidon	220KV Safidon-PTPS Ckt-2 Unit 5-6	7:30	17:00	Disc cleaning
30.11.10	XEN TS Karnal	220KV Nissing	220KV Nissing-PTPS Ckt-1	10:00	17:00	Disc cleaning
30.11.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-1	7:00	18:00	Disc cleaning
30.11.10	XEN TS Rohtak	220KV Rohtak	220KV PTPS-Rohtak Ckt-2	9:00	16:00	Disc cleaning
30.11.10	XEN TS Hisar	220KV IA Hisar	220KV Hisar-Kirori Ckt-2	11:00	14:00	Disc cleaning
01.12.10	XEN TS Sirsa	220KV Sirsa	220KV Matana-Sirsa line	10:00	14:00	For washing and cleaning of disc insulator
01.12.10	XEN TS Narwana	220KV Saffidon	220KV Safidon-Bastara line	7:30	17:00	Disc cleaning
01.12.10	XEN TS Ambala	220KV Shahbad	220KV Shahbad-Jorian Ckt-2	8:30	16:30	Disc cleaning
01.12.10	XEN TS Rewari	220KV Rewari	220KV Badshahpur-Rewari line & 220KV Bhiwadi-Badshahpur line	12:00	16:00	For cleaning of disc on T.no-12 & 13
03.12.10	XEN TS Panipat	220KV PTPS	220KV PTPS-Sewah Ckt-3	7:00	19:00	Disc cleaning and general mtc
01.12.10	XEN TS Sirsa	220KV Sirsa	220KV Matana-Sirsa line	10:00	14:00	For washing and cleaning of disc insulator
01.12.10	XEN TS Narwana	220KV Saffidon	220KV Safidon-Bastara line	7:30	17:00	Disc cleaning
01.12.10	XEN TS Ambala	220KV Shahbad	220KV Shahbad-Jorian Ckt-2	8:30	16:30	Disc cleaning
01.12.10	XEN TS Rewari	220KV Rewari	220KV Badshahpur-Rewari line & 220KV Bhiwadi-Badshahpur Ckt	12:00	16:00	For cleaning of disc on T.no-12 & 13
02.12.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-1	7:00	18:00	Disc cleaning
02.12.10	XEN TS Narwana	220KV Safidon	220KV Safidon-PTPS Ckt-1 Unit 5-6	7:30	17:00	Disc cleaning
02.12.10	XEN TS Narwana	220KV Jind	220KV Jind-Saffidon Ckt-2	11:00	15:00	Disc cleaning at T. no.- 53, 54 & 55
03.12.10	XEN TS Karnal	220KV Nissing	220KV Nissing-PTPS Ckt-1	10:00	17:00	Disc cleaning
03.12.10	XEN TS Y/Nagar	220KV Jorian	220KV Jorian-DCRTP Ckt-2	10:00	17:00	Disc cleaning
03.12.10	XEN TS Narwana	220KV Safidon	220KV Safidon-PTPS Ckt-III	8:00	17:00	Disc cleaning
03.12.10	XEN TS Panipat	220KV PTPS	220KV PTPS-Sewah Ckt-3	7:00	19:00	Disc cleaning
03.12.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-1	7:00	18:00	Disc cleaning
03.12.10	XEN TS Ambala	220KV Shahbad	220KV Shahbad-Jorian Ckt-1	8:30	16:00	Disc cleaning and general mtc
03.12.10	XEN TS Kaithal	220KV Kaithal	220KV PGCIL-Kaithal Ckt-2	10:00	16:00	Disc cleaning

03.12.10	SE O&M-II PTPS	220KV PTPS, PNP	220KV PTPS-Sewah Ckt- 1,2 & 4	15:00	16:00	For hot line washing of S/Yard equipment
04.12.10	XEN TS Karnal	220KV Nissing	220KV Nissing-PTPS Ckt-1	10:00	17:00	Disc cleaning of the insulator
04.12.10	XEN TS Narwana	220KV Safidon	220KV Safidon-PTPS CKT-2	8:00	17:00	Disc cleaning
04.12.10	XEN TS Panipat	220KV PTPS	220KV PTPS-Sewah Ckt-3	7:00	19:00	Disc cleaning
04.12.10	XEN TS Kaithal	220KV Cheeka	220KV Cheeka-PGCIL Ckt-1	9:00	17:00	Disc cleaning
04.12.10	XEN TS Y/Nagar	220KV Salempur	220KV Salempur-DCRTP Ckt-2	9:00	16:00	Preventive mtc
04.12.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-1	7:00	18:00	Disc cleaning
06.12.10	XENTS Narwana	220KV Safidon	220KV Safidon-Bastara Ckt-4	8:00	17:00	Disc cleaning
06.12.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-1	7:00	18:00	Disc cleaning and general mtc
06.12.10	XEN TS Panipat	132KV PTPS PNP	220KV PTPS-Sewah Ckt-4	7:00	19:00	Disc cleaning
06.12.10	XEN TS Narwana	220KV Narwana	220KV Narwana-Safidon Ckt-2	10:00	17:00	For disc cleaning
07.12.10	XEN TS Karnal	220KV Nissing	220KV PTPS-Nissing Ckt-1	10:00	17:00	Disc cleaning
13.12.10	XEN TS Madanpur	220KV Madanpur	220KV Madanpur-Kunihar Ckt	9:00	17:00	For disc cleaning
07.12.10	XEN TS Kurukshetra	220KV Pehowa	220KV Pehowa-Shahbad Ckt-1	9:00	15:00	Disc cleaning and mtc. at T. no. 28 to 51 to tightening the jumper
07.12.10	XEN TS Narwana	220KV Safidon	220KV Safidon-PTPS Ckt-1 Unit 5-6	9:00	17:00	Disc cleaning
07.12.10	XEN TS Narwana	220KV Narwana	220KV Narwana-Safidon Ckt-2	10:00	17:00	Disc cleaning
07.12.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-1	7:00	18:00	Disc cleaning
07.12.10 to 10.12.10	XEN TS Panipat	220KV PTPS	220KV PTPS-Sewah Ckt-4	7:00	19:00	Disc cleaning
09.12.10	XEN TS Karnal	220KV Nissing	220KV PTPS-Nissing Ckt-2	10:00	17:00	For cleaning the disc insulator
08.12.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-2	7:00	18:00	Disc cleaning
09.12.10	XEN TS Karnal	220KV Nissing	220KV Nissing-PTPS CKT-2	10:00	12:00	Cleaning the disc insulator
09.12.10	XEN TS Narwana	220KV Narwana	220KV Narwana-Safidon Ckt-2	9:30	17:00	Cleaning the disc insulator
09.12.10	XEN TS Kurukshetra	220KV Durala	220KV Durala-Cheeka D/Ckt	10:00	14:00	Disc cleaning and general mtc
09.12.10	XEN TS Kaithal	220KV Kaithal	220KV PGCIL-Kaithal Ckt-2	10:00	15:00	Disc cleaning and general mtc
09.12.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-2	7:00	18:00	Disc cleaning
09.12.10	XEN TS Y/Nagar	220KV Salempur	220KV DCRTP-Salempur Ckt-2	10:00	15:00	Preventive mtc
10.12.10	XEN TS Narwana	220KV Jind	220KV Jind-PTPS Ckt-1	11:00	16:00	Disc cleaning
10.12.10	XEN TS Y/Nagar	220KV Jorian	220KV Jorian-DCRTP Ckt-1	10:00	14:00	Disc cleaning
10.12.10	XEN TS Kaithal	220KV Kaithal	220KV Kaithal-Nissing Ckt-2	10:00	16:00	Disc cleaning and general mtc
10.12.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat ckt-2	7:00	18:00	Disc Cleaning
10.12.10	NTPC LTD	220KV FGPP	220KV FGPP-Palla Ckt-1	9:00	17:00	
11.2.10	XEN TS Karnal	220KV Nissing	220KV PTPS-Nissing Ckt-2	10:00	17:00	Disc cleaning
11.2.10	XEN TS Kaithal	220KV Durala	220KV Durala-Cheeka Ckt- 1 & 2	10:00	16:00	Disc cleaning
11.12.10	XEN TS Y/Nagar	220KV Abdullapur	220KV A/Pur- Railway Traction Ckt-1	10:00	15:00	Disc cleaning and general mtc
11.12.10	XEN TS Y/Nagar	220KV Salempur	220KV DCRTP-Salempur Ckt-1	10:00	16:00	Preventive mtc
11.12.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-SNP Ckt-2	7:00	18:00	Disc cleaning
13.12.10	XEN TS Karnal	220KV Nissing	220KV PTPS-Nissing Ckt-2	8:00	13:00	Disc cleaning

13.12.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat ckt-2	7:00	18:00	Disc cleaning
14.12.10	XEN TS Karnal	220KV Nissing	220KV PTPS-Nissing Ckt-2	10:00	17:00	Disc cleaning
	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-2	7:00	18:00	Disc cleaning
14.12.10	XEN TS Y/Nagar	220KV Salempur	220KV DC RTP-Salempur Ckt-1	10:00	16:00	Preventive mtc
14.12.10	XEN TS Narwana	220KV Narwana	220KV Narwana-Safidon Ckt-2	9:00	17:00	Disc cleaning
15.12.10	XEN TS Narwana	220KV Safidon	220KV PTPS-Safidon Ckt-1	9:00	17:00	Disc cleaning
15.12.10	XEN TS Karnal	220KV Nissing	220KV PTPS-Nissing Ckt-II	8:00	13:00	Disc cleaning
15.12.10	XEN TS Y/Nagar	220KV Jorian	220KV Jorian-Abdullapur Ckt-I	10:00	16:46	Disc cleaning
15.12.10	XEN TS Kurukshetra	220KV Pehowa	220KV Kaithal-Pehowa Ckt-I	9:00	15:30	General mtc & Disc cleaning
15.12.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-2	7:00	18:00	Disc cleaning
16.12.10	XEN TS Karnal	220KV Nissing	220KV Nissing-PTPS Ckt-2	8:00	12:00	Disc cleaning
16.12.10	XEN TS Y/Nagar	220KV Jorian	220KV Jorian-Abdullapur Ckt-2	10:00	16:00	Line equipment & Disc cleaning of line and bay at 220KV Jorian
16.12.10	XEN TS Narwana	220KV Narwana	220KV Narwana-Safidon Ckt-2	9:00	17:00	Disc cleaning
16.12.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-2	7:00	18:00	Disc cleaning
16.12.10	XEN TS Karnal	220KV Nissing	220KV PTPS-Nissing ckt-2	8:00	13:00	Disc cleaning
17.12.10	XEN TS Kurukshetra	220KV Durala	220KV Durala-Cheeka D/Ckt	10:00	14:00	Disc cleaning and general mtc
17.12.10	XEN TS Narwana	220KV Narwana	220KV Narwana-Safidon Ckt-1	10:00	17:00	disc cleaning
17.12.10	XEN TS Badshahpur	220KV Badshahpur	220KV Palli-Badshahpur Ckt-1 & 2	10:00		Disc cleaning
18.12.10	XEN TS Karnal	220KV Nissing	22KV PTPS-Nissing Ckt-2	8:00	13:00	Disc cleaning
18.12.10	XEN TS Narwana	220KV Narwana	220KV Narwana-Safidon Ckt-1	10:00	17:00	Disc cleaning
18.12.10	XEN TS Narwana	220KV Safidon	220KV Safidon-PTPS Ckt-1 Unit 5-6	9:00	17:00	Disc cleaning
18.12.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-2	7:00	18:00	Disc cleaning
18.12.10	XEN TS Kurukshetra	220KV Pehowa	220KV Pehowa-Shahbad Ckt-1	9:00	15:00	Mtc. work
21.12.10	XEN TS Narwana	220KV Safidon	220KV Safidon-PTPS Ckt-2 Unit 5-6	9:00	17:00	Disc cleaning
20.12.10	XEN TS Karnal	220KV Nissing	220KV PTPS-Nissing Ckt-2	8:00	13:00	Disc cleaning
20.12.10	XEN TS Narwana	220KV Narwana	220KV Narwana-Safidon Ckt-1	9:00	17:00	Disc cleaning
20.12.10	XEN TS Kurukshetra	220KV Pehowa	220KV Pehowa-Kaithal Ckt-2	9:00	15:30	General mtc
20.12.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-2	7:00	18:00	Disc cleaning
21.12.10	XEN TS Kurukshetra	220KV Durala	220KV Durala-Cheeka D/Ckt	10:00	14:00	General mtc and Disc cleaning
21.12.10	XEN TS Karnal	220KV Karnal	220KV PTPS-Karnal line	10:00	15:00	Disc cleaning and removing the meast
21.12.10	XEN TS Kurukshetra	220KV Pehowa	220KV Pehowa-Kaithal Ckt-1	9:00	15:00	Disc cleaning
22.12.10	XEN TS Karnal	220KV Nissing	220KV Nissing-Salempur Ckt-1	9:00	17:00	Disc cleaning
22.12.10	XEN TS Sirsa	220KV Rania	220KV Fatehabad-Rania line	10:00	14:00	Clean & washing of Disc
22.12.10	XEN TS Karnal	220KV Karnal	220KV PTPS-Karnal line	10:00	0:00	Disc cleaning
22.12.10	XEN TS Panipat	220KV Sonapat	220KV PTPS-Sonapat Ckt-II	7:00	18:00	Disc Cleaning
27.12.10	XEN TS Madanpur	220KV Madanpur	220KV Madanpur-Baddi line	9:00	17:00	Disc cleaning
22.12.10	XEN TS Narwana	220KV Narwana	220KV Narwana-Safiodn Ckt-1	9:00	17:00	Disc cleaning
24.12.10	XEN TS Narwana	220KV Safidon	220KV Safidon-PTPS Ckt-2	9:00	17:00	Disc cleaning

23.12.10	XEN TS Panipat	220KV Sonapat	220KV Sonapat-PTPS Ckt-2	7:00	18:00	Disc cleaning
23.12.10	XEN TS Narwana	220KV Narwana	220KV Narwana-Safidon Ckt-1	9:00	17:00	Disc cleaning
24.12.10	XEN TS Karnal	220 Nissing	220KV Nissing-Salempur Ckt-1	9:00	17:00	For cleaning the disc insulator
24.12.10	XEN TS Kaithal	220KV Cheeka	220KV PGCIL Ckt-1	10:00	16:00	Disc cleaning
24.12.10	XEN TS Karnal	220 Karnal	220KV Karnal-Unispur line	10:00	15:00	Disc cleaning and tree cutting
24.12.10	XEN TS Kurukshetra	220KV Pehowa	220KV Pehowa-Shahbad Ckt-1	9:30	15:00	General Mtc. & Disc Cleaning
24.12.10	XEN TS Panipat	220KV Sonapat	220KV Sonapat-PTPS Ckt-2	7:00	18:00	Disc cleaning
25.12.10	XEN O&M, BBMB, PNP	400KV BBMB PNP	220KV Sewah-PTPS Ckt-1	8:00	12:00	For replacement of Disc insulator
25.12.10	XEN O&M, BBMB, PNP	400KV BBMB PNP	220KV Sewah-PTPS Ckt-2	13:00	17:00	For replacement of Disc insulator

Annexure-VIIA

Status of Replacement of Porcelain Insulators with POLYMER Insulators								As on 25.01.2011 NR-I				
Name of the Organisation: -POWERGRID CORPORATION OF INDIA LTD												
Sl. No	Name of Line, Voltage (Write each circuit separately)	Line Details			Insulator to be Replaced by Polymers			Progress		Schedule for completion of balance work		Remarks
		Length (Km)	Total Tower Locations (No)	Total Insulator Strings (No)	Length (Km)	Tower Locations (No)	Insulator Strings (No)	Tower Locations (No)	% of Tower Location (%)	Start Date	End Date	
1	400 KV Meerut-Mandola-I	60	166	642	60	166	642	166	100%			
2	400 KV Meerut-Mandola-II	60	166	642	60	166	642	166	100%			
3	400 KV Dadri Mandola-I	46	124	468	46	124	468	124	100%			
4	400 KV Dadri Mandola-II	46	124	468	46	124	468	124	100%			
5	400 KV Dadri-Panipat-I	112	301	1107	112	301	1107	301	100%			
6	400 KV Dadri-Panipat-II	117	328	1233	117	328	1233	328	100%			
7	400 KV Dadri-M'Kotla	105	282	1020	105	282	1020	282	100%			
8	400 KV Dadri-G. NOIDA	13.1	37	144	13.1	37	114	37	100%			
9	400 KV G.NOIDA-Ballabgarh	42.7	107.5	426	42.7	107.5	426	107.5	100%			
10	400 KV Dadri - Maharaniabagh	58	67.5	255	58	67.5	255	67.5	100%			
11	400 KV Maharaniabagh-Ballabgarh	31	109	405	31	109	405	109	100%			
12	400 KV S/C Ballabgarh-Bhiwadi	60.887	163	630	50	132	435	132	100%			
13	400 KV M'nagar-Muradabad	132.961	357	1290	132.961	357	1290	357	100%			
14	400 KV S/C Kanpur-Ballabgarh	386	1026	3636	232	628	2229	628	100%			
15	400 KV S/C Agra-Ballabgarh	181.137	485	1728	181	485	1728	485	100%			
16	400 KV S/C Meerut-Muzaffarnagar	37.38	107	396	37.38	107	396	107	100%			
17	400 KV S/C Bhiwadi-Bassi -I	235	608		120	350	1149	350	100%			
18	400 KV S/C Bhiwadi -Bassi-II (LILO of Old Bassi-Hissar)	220	447		15	55	210	55	100%			
19	220 KV FGPP-Samaypur I	18	64	288	18	64	288	64	100%			
20	400 KV S/C Allahabad-Kanpur-I	218.036	584		4	13	39	13	100%			Carried out due to emergency
21	400 KV S/C Allahabad-Kanpur-II	219.188	591		4	13	39	13	100%			
22	400 KV Bly-Mbd-I	92.98	247		4.5	11	36	11	100%			
23	400 KV Mainpuri-Ballabgarh-I	236	648	2256	236	648	1452	609	94%	Recent S/D		
24	400 KV Dadri-Muradnagar	24	91	363	24	91	342	87.5	96%	Shall be taken in opportunity S/D		
25	400 KV Mainpuri-Ballabgarh-II	236	648		142	362	1215	354	98%			
26	400 KV S/C Hissar-Bhiwadi (up to LILO	151.841	406		166	360	1278	305	85%	4th Feb to 11th		

27	400 KV Lko (UPPCL) -Bly	279.39	673		4	10	30	6	60%	13 Feb 11	
28	220 KV FGPP-Palla I	16	54	225	16	54	225	38	70%	Shall be taken after receiving 70 KN polymer insulators in next	
29	220 KV FGPP-Palla II	16	54	225	16	54	225	32	59%		
30	220 KV FGPP-Samaypur II	18	64	228	18	64	228	33	52%		
31	LILO of 400 KV Ballabgarh-Bhiwadi at G'Gaon (D/C)	35	105	486	35	109	486	56	51%	be taken up in next s	
32	400 KV Bly-Mbd-II	91.85	252		43	108	468	60	56%	Will be taken up in next stage	
33	400 KV Agra-Bhiwadi-I	208	572		100	198	630	166	84%	Work under Progress	
34	400 KV Agra-Bhiwadi-II	209	572		100	205	630	0	0%		
35	LILO of 400 KV Bly-Mandola at Meerut				9	22	78	0	0%	Line yet to be constructed	
36	± 500 KV HVDC Rh-Dadri P-I	815	2142		354	885	974	725	82%	07 Feb 11	12 Feb 11
37	± 500 KV HVDC Rh-Dadri P-II	815	2142		354	885	974	831	94%	14 Feb 11	20 Feb 11
38	± 500 KV HVDC Ballia-Bhiwadi Pole-I	789.787	2159		150	400	440	148	37%	After completion of Earth electrode work	
39	± 500 KV HVDC Ballia-Bhiwadi Pole-II	789.787	2159		150	400	440	148	37%		

19232

8882

7625

86%

Annexure-VIIB

Status of Replacement of porcelain insulators with polymer/antifog insulators As on 23.12.2010									
S.No.	Name of line	Line Length		Length where insulators to be replaced				Status	
		Kms	Total Insulator Strings (No.s)	Kms	Total Insulator Strings to be replaced	Insulator Strings replaced (No.s)			
	Phase-I&II (Complete Replacement)							Completed	Balance
1	400 KV Bawana- Bahadurgarh Line	48.94	500	48.94	500	500	100%	Work completed	0
2	400 KV Bahadurgarh- Bhiwani line	84.37	839	84.37	839	839	100%	Work completed	0
3	400 KV Hisar- Bhiwani Line	35.33	387	35.33	387	387	100%	Work completed	0
4	400 KV Hisar- Bawana line	131.85	1295	131.85	1295	1295	100%	Work completed	0
5	220 KV Hisar- Hisar Link Line Ckt- I	13.77	193	13.77	193	193	100%	Work completed	0
6	220 KV Hisar- Hisar Link Line Ckt- II	13.77	187	13.77	187	187	100%	Work completed	0
7	400 KV Hisar- Fatehabad Line	83.60	828	84.00	828	828	100%	Work completed	0
8	400 KV Dadri- Malerkotla Line	193.48	1922	193.48	1922	1922	100%	Work completed	0
9	400 KV Hisar-Moga Line	209.17	1971	209.17	1981	1981	100%	Work completed	0
10	400 KV Hisar- Patiala Line	128.17	1710	128.17	1710	1710	100%	Work completed	0
11	400 KV Abdullapur- Bawana Line Ckt-I	167.00	1553	167.00	1553	1544	99%	Replacement of Polymer Insulator with Held due to ROW Problem at two locations.	9
12	400 KV Abdullapur- Bawana Line Ckt-II	167.00	1553	167.00	1553	1540	99%		13
	Total	1276.43	12937	1276.83	12947	12926			21
	Phase-II (Partial Replacement)								
13	400 KV Hisar- Kaithal Line	113.12	1032	113.12	366	352	96%		14
14	400 KV Jalandhar- Ludhiana Line	84.77	939	84.77	296	296	100%		0
15	400 KV Ludhiana- Malerkotla Line	35.74	387	35.74	345	247	72%	Work In Progress	98
16	400 KV Moga- Fatehabad Line	183.99	1755	183.99	735	615	84%		120
	Total	417.61	4113	417.61	1742	1510			232
	Phase-III (To be replaced Complete)								
17	400 KV Moga - Bhiwadi Line Ckt- I	350.00	3369	350.00	3369	0	0%	Erection LOA placed, 1st and IInd Lot Polymer Insulator reached Hisar/Moga, 3rd Lot Insulator Reached Delhi.	3369
18	400 KV Moga - Bhiwadi Line Ckt- II	350.00	3369	350.00	3369	0	0%		3369
	Total	700.00	6738	700.00	6738	0			6738
	Phase-IV (Balance Portion)								
19	400 KV Nalagarh - Kaithal line	199.85	2052	199.85	150	0	0%	Work In Progress	150
20	400 KV Nalagarh- Patiala Line	93.39	1083	93.39	150	24	16%		126
21	400 KV Nathpa Jhakri- Abdullapur Line Ckt- I	180.00	2421	0.00	0	0	0%		0
22	400 KV Nathpa Jhakri- Abdullapur Line Ckt-II	180.00	2421	0.00	0	0	0%		0
23	400 KV Patiala- Malerkotla	62.48	637	62.48	66	66	100%		0
24	400 KV Jalandhar- Amritsar	59.71	642	59.71	66	66	100%		0
25	220 KV Jalandhar-Hamirpur-I	124.00	1361	35.30	24	24	100%		0
26	220 KV Jalandhar-Hamirpur-II	124.00	1361	35.30	16	16	100%		0
27	400 KV Kaithal-Meerut- -I	164.00	1617	164.00	0	0	0%		0
28	400 KV Kaithal-Meerut- -II	164.00	1617	164.00	0	0	0%		0
	Total	1351.43	15212	814.03	472	196			276

	Total	3745.47	39000	3208.47	21899	14738		0	7267
--	-------	---------	-------	---------	-------	-------	--	---	------

Status as on :

Annexure-VIII

[illegible]

Status as on : 06.01.2011

Status as on : 06.01.2011

Status of Hotline Cleaning of Porcelain Insulators												
Name of the Organisation: Powerlinks Transmission Limited												
Sl. No	Name of Line, Voltage (Write each circuit separately)	Line Details			Insulator to be Cleaned			Progress		Schedule for		Remarks
		Length (Km)	Total Tower Locations (No)	Total Insulator Strings (No)	Length (Km)	Tower Locations (No)	Insulator Strings (No)	Tower Locations (No)	% of Tower Location (%)	Start Date	End Date	
	1 No hot line insulator cleaning											

Status of Manual Cleaning of Porcelain Insulators												
Name of the Organisation: Powerlinks Transmission Limited												
Sl. No	Name of Line, Voltage (Write each circuit separately)	Line Details			Insulator to be Cleaned			Progress		Schedule for		Remarks
		Length (Km)	Total Tower Locations (No)	Total Insulator Strings (No)	Length (Km)	Tower Locations (No)	Insulator Strings (No)	Tower Locations (No)	% of Tower Location (%)	Start Date	End Date	
1	400 kV D/C Bareilly - Mandola	231.697	654	6316	39.136	111	1080	111	100	09.12.10	12.12.10	Cleaning of porcelain line insulator for (i) Ckt-I completed during outage of circuit between 10.12.10 & 12.12.10 & (ii) Ckt-II completed during outage of circuit between 13.12.10 & 14.12.10

Note: 1. We have completed cleaning of line insulators in pollution areas 14.12.10. As desired in the 57th OCC meeting, we are closely monitoring further deposition with help of binoculars/ by tower-top patrolling every 15days. However, because of rain during the last week of Dec-10, no further deposition was observed so far. Hence, we may not further require cleaning operation upto in this winter season.

Status of Replacement of Porcelain Insulators with POLYMER Insulators												
Name of the Organisation: RVPNL												
Sl. No	Name of Line, Voltage (Write each circuit separately)	Line Details			Insulator to be Replaced by Polymers			Progress		Schedule for completion of		Remarks
		Length (Km)	Total Tower Locations (No)	Total Insulator Strings (No)	Length (Km)	Tower Locations (No)	Insulator Strings (No)	Tower Locations (No)	% of Tower Location (%)	Start Date	End Date	
1	BTPS-Alwar-Ckt-I									Replacement work completed		
2	BTPS-Alwar-Ckt-II											

[illegible]

	CONVENTIONAL INSULATORS REPLACED WITH THE ANTIFOG INSULATORS ON THE LINES IDENTIFIED BEFORE JANUARY-2010 (STAGE-1)											
Name of the organization: Bhakra Beas Management Board										Status as on:		23.01.2011
Sr. No.	Name of line, voltage,S/C or D/C	Line Detail			Insulators to be replaced by Antifog			Progress		Schedule for replacement of balance	Remarks	
		Length (Kms)	Total Tower locations (Nos.)	Total Insulator Strings (Nos)	Length (Kms)	Tower locations (Nos.)	Total Insulator Strings (Nos)	Tower locations (Nos.)	% of Tower Locations (%)			
										Start Date	End Date	
1	220KV Dhulkot-Panipat ckt-I	130	433	1669	..	29	117	29	100%	..	...	The insulators identified in Stage-1 i.e. before January-2010 have been replaced 100%.
2	220KV Dhulkot-Panipat ckt-II	130	433	1669	..	29	117	29	100%	..	...	
3	220KV S/C Panipat-Ch. Dadri Line	115	342	1173	..	21	81	21	100%	..	..	
4	220KV S/C Kurukshetra-Panipat Line	77.08	233	786	..	28	105	28	100%			
5	220KV BUSES at 400KV S/S Panipat	...	...	240		...	240	...	100%			
6	220KV Bhakra-Jamalpur ckt -I	86.4	1-276	1034	11	32	204	32	100%			
7	220KV Bhakra-Jamalpur ckt - II	86.4	1-276	1034	11	32	204	32	100%			
8	220KV Jamalpur-Jalandhar ckt-I	64	1-214	960	9	27	87	27	100%	..	...	
9	220KV Jamalpur-Jalandhar ckt- II	64	1-214	960	9	27	87	27	100%	..	..	
10	220KV Pong-Jalandhar ckt- I	97.5	1-328	1204	4	12	36	12	100%			
11	220KV Pong-Jalandhar ckt- II	97.5	1-328	1204	4	12	36	12	100%			
12	220KV Jamalpur-Sangrur ckt- I	78	1-268	970	15	40	313	40	100%			
13	220KV Jamalpur-Sangrur ckt- II	78	1-268	970	15	40	313	40	100%			
14	220KV Hisar-Sangrur-I	139	477	1431	139	62	186	62	100%			
15	220KV Hisar-Sangrur-II	139	477	1431	139	62	186	62	100%			
16	220KV Bhiwani-Hisar-I	57.95	199	654	30	102	345	102	100%			
17	220KV Bhiwani-Hisar-II	57.95	199	654	30	102	345	102	100%			
18	220KV Bhiwani-Ch. Dadri-I	36.45	124	420	7.6	26	81	26	100%			
19	220KV Bhiwani-Ch. Dadri-II	36.45	124	420	7.6	26	81	26	100%			
20	220KV Bhiwani-Ch. Dadri-III	34.7	127	444	9.5	35	114	35	100%			

21	220KV Bhiwani-Ch. Dadri-IV	34.7	127	444	9.5	35	114	35	100%			
----	-------------------------------	------	-----	-----	-----	----	-----	----	------	--	--	--

THE CONVENTIONAL INSULATORS REQUIRED TO BE REPLACED WITH ANTIFOG INSULATORS ON THE LINES IDENTIFIED AFTER JANUARY-2010 (STAGE-2)

Name of the organization: Bhakra Beas Management Board									Status as on: 23.01.2011		Remarks		
S.No.	Name of line, voltage,S/C or D/C	Line Length						Status of Replacement					%age-wise work completed in Location
		Kms	No. of locations	Total Insulator Strings (Nos)	Length (Kms)	No. of locations	Total Insulator Strings required (Nos)	No. of locations	Insulator Strings replaced (Nos)	Schedule for replacement of balance			
										Start Date	End Date		
1	220KV Dhulkot-Panipat ckt-I	130	433	1669	..	142	608						Specifications under preparation. Insulators will be procured and installed before next foggy season.
2	220KV S/C Kurukshetra-Panipat Line	77.08	233	786	..	104	351						
3	220KV Dhulkot-Panipat ckt-II	130	433	1669	..	142	608	34				24%	
4	220KV S/C Panipat-Ch. Dadri Line	115	342	1173	..	41	126	41	126			100%	
5	220KV BUSES at 400KV S/S Panipat						45		45			100%	

Annexure-X

Status of Manual cleaning of insulators												
Name of the organization: Bhakra Beas Management Board										Status as 23.01.2011		
Sr. No.	Name of line, voltage,S/C or D/C	Line Detail			Insulators to be cleaned			Progress		Schedule for completion		Remarks
		Length (Kms)	Total Tower locations (Nos.)	Total Insulator Strings (Nos)	Length (Kms)	Tower locations (Nos.)	Total Insulator Strings (Nos)	Tower locations (Nos.)	% of Tower Locations (%)			
										Start Date	End Date	
1	400KV S/C Dehar-Panipat Line	261.8	772	4314	261.8	772	4314	772	100%			
2	400KV S/C Dehar-Bhiwani Line	312.15	943	4791	312.15	943	4791	943	100%			
3	220KV R/Road-Narela ckt-I	22	81	426	22	81	426	81	100%			
4	220KV R/Road-Narela ckt-II	22	81	426	22	81	426	81	100%			
5	220KV Panipat-Narela ckt-I	56.8	197	811	107	197	811	197	100%			
6	220KV Panipat-Narela ckt-II	56.8	197	811	107	197	811	197	100%			
7	220KV Panipat-Narela ckt-III	58	171	588	58	171	588	171	100%			
8	220KV Panipat-Dhulkot ckt-I	130	433	1669	130	433	1669	433	100%			
9	220KV Panipat-Dhulkot ckt-II	130	433	1669	130	433	1669	433	100%			
10	220KV S/C Panipat-Ch. Dadri Line	115	342	1173	115	342	1173	342	100%			
11	220KV S/C Kurukshetra Panipat Line	77.08	233	786	77.08	233	786	233	100%			
12	220KV Bhakra-Jamalpur ckt-I	86.4	276	1034	86.4	276	1034	276	100%			
13	220KV Bhakra-Jamalpur ckt-II	86.4	276	1034	86.4	276	1034	276	100%			
14	220KV Jamalpur-Sangrur ckt- I	78	271	970	78	271	970	271	100%			
15	220KV Jamalpur-Sangrur ckt- II	78	271	970	78	271	970	271	100%			
16	220KV Pong-Jalandhar ckt-I	97.5	328	1204	97.5	328	1204	328	100%			
17	220KV Pong-Jalandhar ckt-II	97.5	328	1204	97.5	328	1204	328	100%			
18	220KV Jalandhar - Dasuya ckt-IV	56	168	597	56	168	597	168	100%	..	..	
19	220KV Pong -Dasuya ckt-IV	40	120	462	40	120	462	120	100%			
20	220KV Jalandhar-Jamalpur ckt-I	64	214	960	64	214	960	214	100%		..	

Sr. No.	Name of line, voltage,S/C or D/C	Line Detail			Insulators to be cleaned			Progress		Schedule for completion		Remarks
		Length (Kms)	Total Tower locations (Nos.)	Total Insulator Strings (Nos)	Length (Kms)	Tower locations (Nos.)	Total Insulator Strings (Nos)	Tower locations (Nos.)	% of Tower Locations (%)			
										Start Date	End Date	
21	220KV Jalandhar-Jamalpur ckt-II	64	214	960	64	214	960	214	100%	..	..	
22	220KV Ganguwal-Dhulkot ckt-I	112	377	1590	112	377	1590	377	100%			
23	220KV Ganguwal-Dhulkot ckt-II	112	377	1590	112	377	1554	377	100%			
24	132KV Ganguwal-Kotla ckt-I	10.86	45	390	10.86	45	390	45	100%	..	..	
25	132KV Ganguwal-Kotla ckt-II	10.86	45	390	10.86	45	390	45	100%	..	..	
26	220KV Ganguwal-Jagadhari S/C	158.65	488	1772	158.65	488	1772	488	100%			
27	220KV Jagadhari-Kurukshetra	48.3	149	504	48.3	149	504	149	100%			
28	220KV Ballabgarh-BTPS-I	24.73	90	348	24.73	90	348	90	100%			
29	220KV Ballabgarh-BTPS-II	24.73	90	348	24.73	90	348	90	100%			
30	220KV Samaypur-Ch. Dadri S/C	116.4	401	1338	116.4	246	804	246	100%			
31	220KV Ballabgarh-Ch. Dadri S/C	119.9	408	1393	119.9	238	810	238	100%			
32	220KV Hisar-Sangrur-I	139	477	1431	139	477	1431	477	100%			
33	220KV Hisar-Sangrur-II	139	477	1431	139	477	1431	477	100%			
34	220KV Bhiwani-Hisar-I	57.95	199	654	57.95	199	654	199	100%			
35	220KV Bhiwani-Hisar-II	57.95	199	654	57.95	199	654	199	100%			
36	220KV Bhiwani-Ch. Dadri-I	36.45	124	420	36.45	124	420	124	100%			
37	220KV Bhiwani-Ch. Dadri-II	36.45	124	420	36.45	124	420	124	100%			
38	220KV Bhiwani-Ch. Dadri-III	34.7	127	444	34.7	127	444	127	100%			
39	220KV Bhiwani-Ch. Dadri-IV	34.7	127	444	34.7	127	444	127	100%			
40	220KV Ballabgarh-Samaypur-I	4.23	20	84	4.23	20	84	20	100%			
41	220KV Ballabgarh-Samaypur-II	4.23	20	84	4.23	20	84	20	100%			
42	220KV Ballabgarh-Samaypur-III	5.5	23	87	4.5	4	24	4	100%			
43	220KV Barnala-Lehra Mohabbat	37.88	113	435	37.88	113	435	113	100%			
44	220KV Bhatinda-Lehra Mohabbat	23.29	84	339	23.29	84	339	84	100%			
45	220KV Sangrur-Barnala S/C	38.14	110	372	38.14	110	372	110	100%			

Sr. No.	Name of line, voltage,S/C or D/C	Line Detail			Insulators to be cleaned			Progress		Schedule for completion		Remarks
		Length (Kms)	Total Tower locations (Nos.)	Total Insulator Strings (Nos)	Length (Kms)	Tower locations (Nos.)	Total Insulator Strings (Nos)	Tower locations (Nos.)	% of Tower Locations (%)			
										Start Date	End Date	

Note: Work completed

STATUS OF HOTLINE CLEANING OF PORCELAIN INSULATORS

Name of the organization: Bhakra Beas Management Board										Status as on :- 23.01.2011		
S.No.	Name of line, voltage,S/C or D/C	Line length			Insulators to be cleaned by Antifog			Progress		Schedule for Completion of		Remarks
		Length (Km)	Total tower locations (No)	Total Insulator Strings (No)	Length (Km)	Tower locations (No)	Insulator Strings (No)	Tower locations (No)	% of tower locations (%)	Start Date	End Date	
	Switch yard at 400 kV Sub station BBMB Panipat											
i	400 kV Yard			216			216		100%			
ii	200 kV Yard			432			432		100%			

Status of Replacement of Porcelain Insulators with POLYMER Insulators as on 26.12.10 Annexure-XI	
--	--

Name of the Organisation: DELHI TRANSCO LIMITED

[illegible]

Status of Hotline Cleaning of Porcelain Insulators(Critical 400 KV Towers) Annexure-XI

Name of the Organisation: DELHI TRANSCO LIMITED

[illegible]

Annexure-XI

Sub.-:Status of Manual Cleaning of Porcelain Insulators of 220 kv Lines of DTL,as on 28.12.2010.												
Name of the Organisation: DELHI TRANSCO LIMITED												
Sl. No	Name of Line, Voltage (Write each circuit separately)	Line Details			Insulator to be Cleaned			Progress		Schedule for		Remarks
		Length (Km)	Total Tower Locations (No)	Total Insulator Strings (No)	Length (Km)	Tower Locations (No)	Insulat or Strings (No)	Tower Locations (No)	% of Tower Location (%)	Start Date	End Date	
1	BML-PPK-I Ckt-I	8.3	51			10	34	1,2,5,21, 23A	50	20.12.10	5/1/2011	
2	BWN- NJF Ckt-II	21.11	77			12	42	146, 149,159,161, 162,163, 168, 169 & 179	66	19.12.10	5/1/2011	
3	SOW-Mandola Ckt-IV	14. 338	54			20	69	325,327, 332, 333, 334, 335, 46 to 49,&3 to 9	85	21.12.10	31.12.10	
4	BML-NRN Ckt-I	16. 800	99			10	36	87,88,89	30	22.12.10	22.12.10	
5	BML- PPK-II Ckt-II	5.9	38			10	39	46,47, 49, 58 & 61	50	23.12.10	5/1/2011	
6	BML-PPK-I Ckt-II	8.3	51			10	36	11,12,17, 18, 41-45, 48	100	26.12.10	31.12.10	
7	IP Stn. - RPH Ckt-I	1. 500	10			10	50	1 to 10,21 &23A	100	23.12.10		
8	PPG - Geeta Colony	4. 400	19			8	21	356, 356A, 358, 359, 360, 361	75	28.12.10	31.12.10	
9	SOW-Mandula Ckt-III	14.34	54			20	36	3,4,5,6,7,8,9,11,12, 13,14,15	60	29-12-10	15-1-11	
10	Gopalpur- Mandola Ckt.II	22.62	82			20	66	22 to 31 (except T.No.24) 37,287, 288		31-12-10	15-1-11	
11	Najafgarh- Kanjhawla		57			10	18	147, 154, 156, 161 & 162	50	18-12-10	15-1-11	

PROGRESS REPORT OF UPPTCL

Status of Replaced/Under Replacement of Porcelain Insulators with POLYMER Insulators

Name of the Organization:														
Sl.No.	Name of Line, Voltage	Line Details			Insulator to be Replaced by Polymers					Progress		Schedule for completion of		Remarks
		Length(Km.)	Total Tower Location No.	Total Insulator Strings No.	Length (Km.)	Tower Location No.	Insulator Strings Changed(No.)	Insulator Strings to be Changed(No.)	Total(Nos.)	Tower Location No.	% of Tower Location (%) % of Insulator Strings (%)	Start Date	End Date	
1	400 KV Unnao-Panki						60	60	120		50			Total 1928 nos. Insulator Strings changed, now LOI for the procurement of 9418 nos. Insulator Strings issued, these balance Insulator Strings are to be replaced during Dec/Jan 2011
2	400 KV Muradnagar-Muzaffarnagar						126	540	666		19			
3	400 KV Muradnagar-Panki						558	150	708		79			
4	400 KV Unnao-Agra						186	900	1086		17			
5	400 KV Agra-Unnao						0	270	270		0			
6	400 KV Unnao-Bareilly						0	2000	2000		0			
7	400 KV Anpara-Azamgarh-Mau, Anpara-Varanasi						0	700	700		0			
8	220 KV Muradnagar-Shamli						234	0	234		100			
9	220 KV Interconnecting No.(2) Muradnagar						24	0	24		100			
10	220 KV Modipuram-Mataur Ist Ckt						33	51	84		39			
11	220 KV NAPP-Khurja						69	126	195		35			
12	220 KV Muradnagar-Khurja						120	0	120		100			
13	220 KV Muradnagar-Secandarabad						102	0	102		100			
14	220 KV Shahibabad-Muradnagar						215	0	215		100			
15	220 KV Gr.Noida-Noida 2nd Ckt						201	312	513		39			
16	220 KV Modipuram-Mataur 2nd Ckt						0	9	9		0			
17	220 KV Baraut-Muradnagar						0	135	135		0			
18	220 KV Baraut-Shamli						0	162	162		0			
19	220 KV DC Shatabdinagar-Mataur						0	162	162		0			
20	220 KV Shahibabad-Modipuram						0	174	174		0			
21	220KV Parichcha-Bharthana						0	420	420		0			
22	220KV Parichcha-Orai						0	420	420		0			
23	220 KV Panki-Naubasta-Fatehpur						0	300	300		0			
24	220 KV Panki-Chibramau-Mainpuri						0	180	180		0			
25	220 KV Mainpuri-Safai-Bharthana-Parichha						0	180	180		0			
26	220 KV Shatabdinagar-Simbholi						0	132	132		0			
27	220 KV Khurja-Jhahangirabad SC line						0	72	72		0			
28	220 KV Obra-Allahabad						0	400	400		0			
29	220 KV LILO Khurja Muradnagar line at 220 KV Sikandrabad						0	60	60		0			
30	132 KV Panki-Naubasta						0	120	120		0			
31	132 KV Naubasta-Ghatampur						0	60	60		0			
32	132 KV Banda-Karvi						0	240	240		0			
33	132 KV Banda-Mahoba						0	240	240		0			
34	132 KV Karvi-Sirathu						0	240	240		0			
35	132 KV Parichha-Hasari						0	240	240		0			
36	132 KV Noida-Bhargal						0	120	120		0			
37	132 KV Noida-Surajpur						0	111	111		0			
38	132KV Gr.Noida-Surajpur						0	132	132		0			
Total							1928	9418	11346		17			

Note: Due to certain unavoidable constraints no officer is able to attend the meeting scheduled for 22.11.2010 in person. This progress report is being forwarded for your kind perusal