



उत्तर क्षेत्रीय विद्युत समिति

(आई.एस.ओ. 9001:2000 प्रमाणित संगठन)

Northern Regional Power Committee

18-ए, शहीद जीत सिंह मार्ग, कटवारिया सराय, नई दिल्ली-16

18-A, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi-16

सं0-एनआरपीसी/अधी.अभिं.(प्रचा)ओसीसी/38/2009

दिनांक:- 24/06/2009

Subject: Minutes of 39th OCC Meeting.

विषय : ओ.सी. सी. की 39वीं बैठक का कार्यवृत्त

The 39th OCC Meeting was held on 15th June, 2009 at NRPC, New Delhi. The minutes of the meeting have been issued. The same can be downloaded from NRPC's Website at <http://nrpc.gov.in>

Next (40th) OCC meeting will be held at 11:00 Hrs on 10th July, 2009 at New Delhi. The same is being hosted by North Delhi Power Limited (NDPL).

This issues with the approval of MS (NRPC)

(Ashok Kumar Rajput)

SE (Operations) & Member Convenor, OCC

(प्रचालन एवं अयोजक सदस्य (ओ.सी.सी).)

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सूचीनुसार पते-

चण्डीगढ़	अधीक्षण अभियंता (इलैक्ट्रीकल प्रचालन.)दूरभाष सं0-0177-274405,2743950
डी.टी.एल.	महाप्रबन्धक(ओ एण्ड एम), एसएलडीसी, 23236462,2323362, 23210950
आर.वी.पी.एन.	मुख्य अभियंता (वाणिज्य) अधी अभि एण्ड एसएलडीसी) 0181-2664440 फैक्स 172-2560622
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पीटीसीयूएल/यूपीसीएल	उप महा प्रबन्धक (एस.ओ.) फैक्स- 01352451160
यू.पी.पी.सी.एल.	मुख्य महाप्रबन्धक (पीएस),डीजीएम (एससी) फैक्स- 052202287880,2287882
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प्रबन्धक(ट्रॉंसमिशन),एनपीसीआईएल, मुम्बई ।	स्टेशन निदेशक, एनएपीएस;साइट निदेशक,आरएपीएस1से4;वरिष्ठ
एनटीपीसी	महा प्रबन्धक(ओएस),एनसीआर,नोयडा; अति.महाप्रबन्धक(ओएस), एनआर, लखनऊ; 09415501008
एसजेवीएनएल/एनजेएचपीएस	महाप्रबन्धक,सिंगरौली/रिहन्द/दादरी/ऊँचाहार/औरैया/अंटा/बदरपुर/फरीदाबाद/टान्डा
टीएचडीसीएल	अति.महाप्रबन्धक (सी एण्ड एसओ) फैक्स 01772673283
पॉवरग्रिड	उप महाप्रबन्धक (इलै), टेहरी फैक्स-01352430764-2438682
	कार्यकारी निदेशक(एनआर-I),नई दिल्ली;26853488, उप महाप्रबन्धक (ओएस)-

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26170385, 26108834.
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II)जम्मू, फ़ैक्स 0191-2370293.
कार्यकारी निदेशक(एनआर-1)उप महाप्रबन्धक(जीएम);26854861,4051,26569504, फ़ैक्स-
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वरिष्ठ उपाध्यक्ष(ट्रेडिंग) फ़ैक्स- 41659142
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LIST OF ADDRESSES

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J&K (PDD)	Chief Engineer (SO) Fax – 0191-2476213
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RVPN	Chief Engineer (LD); SE (SO&LD) – 0141-2740920
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Summary Record of Discussions of 39th Meeting of Operation Coordination Sub-Committee (OCC) of Northern Regional Power Committee held on 15th June, 2009, at NRPC, New Delhi.

The list of participants is enclosed at **Annex-I**.

Welcome

Member Secretary, NRPC welcomed the members of the committee. He informed the constituents/participants that during May, 2009, on account of heavy dust storm, more than 56 towers of various transmission lines belonging to PGCIL, DTL, PTCUL and UPPTCL got damaged. This had affected the grid security and also resulted into power outages in some parts of the Northern Region. Subsequent to the failures of transmission line towers and outages of transmission system some of the towers were revived by deploying the Emergency Restoration System (ERS). The situation had improved since then but the system is still in alert mode. He stated that due to these outages there were backing down of generation due to transmission constraint, reduction in inter-regional transfer capability and reduced redundancy in Northern Region (NR) transmission network. MS, NRPC emphasized that during the prevailing summer season the peak demand is on a rise. In view of this, there is an urgent need to closely monitor the grid operations and to aim at achieving the secured grid operations. He stated that both, peak as well as the energy shortages are being faced in the Region. He stated that by resorting to over drawl from the grid, there were many instances of violations of the provisions of the Indian Electricity Grid Code (IEGC) by some of the constituents. He advised constituents to follow better load management practices for managing energy and peak shortages and also to follow the instructions of NRLDC by the concerned.

Then he requested SE (O), NRPC to take up the regular agenda.

1.0 Confirmation of Minutes

OCC confirmed the minutes of its 38th OCC meeting held on 14th May, 2009 at Mount Abu, with the following modifications.

(A) THDC requested that the following statement may be added at para 16.0 of the minutes. "THDC emphasized that the additional line planned with the Tehri Pump storage project evacuation may be commissioned to increase the reliability of Tehri Hydro System. OCC was in agreement to the suggestion."

(B) NTPC requested table at para 4.1 under heading "Planned Maintenance Programme of Units at NTPC Stations for May-June 2009" may be modified for Dadri ST#2 as below:

Station	Unit	Capacity (MW)	Shutdown Period		No. of days	Work to be undertaken
			From	To		
Dadri	ST#2	154.20	05.05.09	29.05.09	25	Overhaul to rectify

(Gas)						high vibration problem
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Members agreed with the modifications and confirmed the minutes.

2.0 Grid Operations - Review and Discussion

2.1 Power Supply Position

NRLDC presented the summary of grid operations during May, 2009. NRLDC informed that in terms of consumption with respect to last year, during the month of May, 2009 Northern Region witnessed a growth of 14.8%. All the states except the states of Uttarakhand and HP witnessed a double digit growth. UP and Delhi also met the all time high consumption in a day i.e. 178 MUs on 18th May and 86 MUs on 16th May, 2009 respectively. On 12th June, 2009 Northern region as a whole had the all time maximum consumption of 665 MUs surpassing earlier maximum consumption figures of 657 MUs of 29th August 2008.

2.2 Frequency Profile

NRLDC informed that during May, 2009, 6.57 % of time the frequency of the grid remained below 49.2 Hz and even remained below 49.0 Hz for 1.06% of time. Average frequency during May, 2009 remained at 49.68 Hz. Details of frequency profile in NR during May, 2009 are indicated in the following table:

Table: Frequency Profile During, May, 2009

Frequency (Hz)	Duration (%)
<49.0	1.06
<49.2	6.57
<49.5	29.99
49.2-50.3	91.07
>50.3	2.36

2.3 Grid Code Violation Messages Issued by NRLDC: During the month of May, 2009 details of Grid Code (IEGC) violation messages issued by NRLDC to the constituents are given in following Table:

Table: Constituent Wise Grid Code (IEGC) Violation Messages

CONSTITUENT	MSG 'A'	MSG 'B'	MSG 'C'
UTTAR PRADESH	53	23	7
RAJASTHAN	15	4	3
HARYANA	30	8	0
HIMACHAL PRADESH	24	7	0
PUNJAB	32	6	0
UTTARAKHNAD	11	2	0
J&K	2	2	0
DELHI	6	0	0
CHANDIGARH	0	0	0

NRLDC further informed the usage of new SMS alert facility by NRLDC for quicker information to senior officers regarding low frequency overdrawal violation by respective State Control Area. This facility would help in faster response from the SLDCs. NRLDC showed the procedure of messages and Name & phone of officers (**list attached at Annexure-II**) to whom these messages are sent. NRLDC further requested all the utilities to check the names & number of the officers and any change/discrepancy may be informed to NRLDC for the rectification. NRLDC also requested that any change in the status in respect of name/phone numbers shall also be periodically informed to NRLDC for proper usage of the facility.

- 2.4 Overdrawl Below 49.2 Hz During May, 2009:** NRLDC informed the details of overdrawl by the constituents at frequency below 49.2 Hz. NRLDC stated that almost all the states have been overdrawing during the low frequency at one time or the other and smaller states like Uttarakhand and HP are also heavily overdrawing.

State/UT	MWh overdrawal below 49.2 Hz	Average overdrawal (MW) B	Average of Maximum overdrawal (MW) C
UP	18168	586	875
Punjab	4035	165	284
Rajasthan	2922	158	207
Haryana	2427	121	202
Uttarakhand	3885	131	179
HP	3091	110	159
Delhi	448	69	90
J & K	649	46	79
UT Chandigarh	720	34	45
Northern Region	19146	649	940

State wise/time block wise overdrawls, below 49 Hz during May, 2009 as required by CERC are given at **Annexure-III**.

- 2.5 Contingency Arising Due to Tripping of Multiple Transmission Lines During the Dust Storm**

The status of various lines which had tripped and revived later on through normal as well as ERS was informed during the meeting. Details are given

at **Annexure-IV and V**. It was further informed that there had been a number of shutdowns and tripping on lines revived through ERS on account of problems in ERS sections. In view of the above it was emphasized that though various lines which suffered damages have been revived but all the utilities shall remain alert and take prompt action in the event of any contingency.

On account of tripping of lines the following impact had been observed:

- Reduced redundancy in NR transmission network;
- Four 400 kV trunk lines are out in East-West corridor of Northern Region;
- Critical loading on other parallel lines;
- Opening of 400 kV Delhi ring at Ballabgarh; and
- Considerable unequal loading on two parallel series compensated lines (namely 400 kV Kanpur-Ballabgarh and 400 kV Panki-Muradnagar) in east-west corridor.

Through snapshot dumps of the system, the critical line loadings and vulnerable areas of the system were shown. Also shown were the various measures being taken and to be taken for safe operation of the grid.

2.6 Low Voltage Conditions in the Grid and Reactive Power Management: NRLDC informed that due to increase in weather related inductive load and consequently heavy reactive power drawl by the utilities, the system voltages are dropping to dangerously low levels. The voltage profile at Panipat, Dadri and Muradnagar during the month of June, 2009 was specifically shown during the meeting. During certain instances, the voltages observed at these locations was even below 375 kV. To mitigate the low voltage problems in the grid NRLDC has initiated various actions, which include issuing the instructions to take out of service the fixed line reactors from various lines and change in transformer tap positions. In addition to switchable bus and line reactors which are switched off regularly based on the system operating conditions a total of 863 MVAR of line reactors had been taken out of service through above measures.

NRLDC requested all the utilities to ensure the following:

- Switching in of Capacitor Banks in States' network;
- Full exploitation of reactive power generation at load centre generation (without sacrificing active power generation);
- Identification of high reactive power drawing loads so that the same may be shed quickly during critically low voltage conditions; and
- Commissioning of adequate number of Under Voltage Load Shedding Relays (UVLSRs).

2.7 Impact of Transmission Element Outages on System Voltages Under Critically Low Voltage Conditions: NRLDC emphasized the need for maintaining a good voltage profile in the system. At the operating point

farther from the knee point on P-V curve, there would be lesser impact of small changes in network. For the operating point nearer the knee point on the P-V curve, even very small perturbation would result in to major impact on the system. Thus, under critically low voltage conditions even small perturbation can become catastrophic. NRLDC explained that in NR such situations have been experienced a number of times. Collapse of Punjab system on 10th June, 2007 was one of such events. Similar situation was observed on 10th June, 2009 during which tripping of Flexible AC Transmission System (FACTS) device on 400 kV Kanpur-Ballabgarh line and outage of 400 kV Anpara-Unnao line had resulted in system voltage drops of the order of 6 kV and 11 kV respectively at various well connected (having fault level of the order of 20000 MVA buses in NR. The event was presented in detail and seriousness of issue was emphasized. The constituents were requested to reduce the reactive power drawl from the grid by taking requisite measures.

2.8 Main Grid Incidents of May, 2009

(a) Grid Failure at Narora Atomic Power Station (NAPS) on 06-05-2009:

NAPS had intimated that on 06-05-2009 in order to regulate power flow at Harduaganj, on the instruction of SLDC, Lucknow 220 kV Harduaganj-Atrauli line was opened from Harduaganj since 22:38 Hrs. At 22:49 Hrs, 220 kV Simbhaoli line was opened from NAPS end on NRLDC instructions to regulate overloading in Western UP system. After opening of 220 kV Simbhaoli line, power flow from Simbhaoli to Narora-Khurja system stopped. It resulted into further overloading on 220 kV Harduaganj-Khurja line. The 220 kV Harduaganj-Khurja line tripped at 22:50 Hrs, it led to separation of 220 kV Naroa, Atrauli, Khurja, Muradnagar and adjoining 220 kV grid system. As there was no power feed in the separated sub-system, there was a complete grid supply failure at NAPS and adjoining sub-system.

NRLDC stated that better coordination was required between UP, SLDC Lucknow, NAPS and NRLDC to avoid similar situation in future. It was also stated by NRLDC that on 06-05-2009 NAPS did not inform to NRLDC that Harduaganj-Atrauli line had already been opened from Harduaganj on the instruction of SLDC, Lucknow. MS, NRPC once again emphasized that system strengthening and better co-ordination in the grid operation was required

(b) Outage of Important 400 kV and 220 kV Lines

MS, NRPC stated that during May, 2009 there were many incidences of collapse of transmission lines' towers. The failure of towers had taken place on the transmission lines belonging to DTL, PTCUL, PGCIL and UPPTCL. In order to take a stock of the situation arising out of the outages in the transmission system on account of towers' failure and to suggest remedial measure to overcome the crisis situation a meeting of the Crisis Management Group (CMG) was held on 28th May, 2009 at NRPC, New Delhi. The meeting was chaired by Member (GO&D), CEA. CMG decided that the lines which have suffered damages and had gone

out of service be revived on ERS or on normal towers. Time frame for reviving the lines on ERS and also on normal towers was deliberated upon and time lines were fixed. The decisions of the crisis management group are as follows:

- i. Revival of lines by PGCIL and other constituents should be taken up on war-footing and the lines which are under outage conditions should be brought back before 15th June, 2009. The status in this regard would be closely monitored by NRPC Secretariat. (Action – PGCIL, UPPTCL, DTL, RVPNL, NRPC and WRPC);
- ii. Reliability of 400 kV Muradnagar sub-station of UPPTCL should be ensured by UPPTCL. (Action - UPPTCL);
- iii. Narela substation of DTL should be fed from Panipat (BBMB) side till the revival of Mandaula ICT. (Action - DTL);
- iv. The ICT at Mandaula needs to be revived as early as possible, preferably before 30th June, 2009. (Action - PGCIL);
- v. Constituents might be requested to control overdrawl in view of system constraints. (Action - All constituents); and
- vi. Voltage level at Panipat , Haryana system and Punjab system needs to be closely monitored by NRLDC (Action - BBMB, HVPNL, PSEB and NRLDC).

PGCIL stated that there was some delay in restoration of damaged towers as was agreed to in the CMG Meeting. MS, NRPC requested PGCIL to give the reasons for delay for restoration of tower. PGCIL informed that their Corporate Engineering Division is working on it. It was also informed that the standing committee of CEA is investigating the issue of failure of towers. MS, NRPC requested power grid to restore these critical on normal towers at the earliest. Representative of PDD, J&K opined that in view of the vast damage to the towers the transmission line design may need a review.

(c) Tripping of Jhakri and Baspa Hydro Generating Stations along with all the 400 kV circuits emanating from Jhakri on 19.05.2009.

The tripping of Jhakri/Baspa was discussed in detail. A preliminary report as prepared by NRLDC was also deliberated. It was decided that an expert group comprising of members from HPSEB, NJPS, NRLDC, PGCIL and NRPC may be formed to analysis the incidents in details and submit the report in OCC in four weeks time.

(d) Outage of Muradnagar Sub-station of UPPTCL on 19th May, 2009-Reliability Issue

NRLDC has reported that at 21:17 hours on 19th May, 2009 all the 400 kV circuits at Muradnagar tripped/-reportedly opened manually leading to a severe crisis in the Northern Grid. Representative from UP stated that a fire was seen on 19th May, 2009 in the switchyard and in panic operators on duty opened all the feeders. UP was requested to forward the details of investigation by them into the incident.

(e) Tripping at Parichha TPS on 28th May, 2009

UP representative informed that 220 kV Orai-Mainpuri line tripped on

operation of distance protection. The 220 kV Orai-Kanpur (PG) line was already under breakdown since 20th May 2009 due to damage of towers caused by thunder storm. The 220 kV Parichha-Orai line also tripped on distance protection. 220 kV Parichha-Saifai line was the only line available for evacuating 500 MW, it also tripped on over current protection from Saifai end. He stated that after tripping of this line the power started flowing on Parichha –Orai- Jhansi which also tripped and an island was formed. NRLDC pointed out that there was frequent incidents of loss of generation at Paricha due to evacuation problem. The tripping had taken place on 28th May 2009 at 1705 hrs, 12th April 2009 at 1225 hrs, 7th March 2009, 14th May 2008, 3rd April 2008, 4th March 2008 and 2nd March 2008. They informed that Real time data from 220 kV Orai and 220 kV Safai is not available and Disturbance Recorder and Event logger output are also not available from Paricha, Mainpuri, Orai & Safai. MS, NRPC requested UP ,SLDC to look into the issues and take remedial measure. The strengthening of the evacuation system of Parichha was again emphasized.

(f) Grid Incident in Delhi System on 22nd May, 2009: NRLDC informed that Delhi system was experiencing frequent tripping which is a Cause of Concern. They stated that the area was frequently islanding but island was not able to survive. MS, NRPC requested Delhi SLDC to share the different Islanding Schemes in Delhi System and efforts to minimize such tripping in next OCC meeting.

(g) Tripping at Anpara – on 18th and 20th May, 2009

The following tripping incidences were observed at Anpara on 18th May 2009 at 1713 hours:

1. 400 kV Anpara-Obra line
- 2 400 kV Anpara-Sarnath line
3. 400 kV Anpara-Singrauli line
4. 200 MW Unit No. 1 at Anpara

Again on 20th May, 2009 at 1518 hours the above tripping incidences were repeated. As a result of above trippings the transmission lines evacuating generation from Singrauli-Rihand Complex were critically loaded and for short time even the generation at Singrauli-Rihand complex had to be restricted to control the situation.

MS, NRPC requested UP to submit the details of these trippings along with specific reason, details of flags/SOEs (Sequence of Events) and DR print-outs to NRPC secretariat. NRLDC informed that the simultaneous tripping in two different corridor effects on system operation where there were contradictory requirement for change of power order on Rihand-Dadri bipole. Anpara TPS (UPRVPNL) was requested to take necessary measures to avoid such trippings in future.

(h) Blackout at 220 kV Hiranagar Sub-station Twice on 17th May 2009

NRLDC has reported that 220 kV Hiranagar sub-station suffered blackout on two occasions on 17th May, 2009 at 1125 hours and the second occurred at 1625 hours. Supply in both the instances was restored through 220 kV Gladni-Hiranagar line at 1220 hours and 1725 hours respectively. About 100 MW load was affected for close to two hours and the entire peak load of Hiranagar (160 MW) had a single infeed for about nine hours.

NRLDC raised following issues in the meeting:

- Non Availability of Disturbance Recorder and Event Logger Output from Hiranagar & Sarna with respect to this incident **despite NRLDC request.**
- Problem in main and transfer bus **circuit breaker** at 220 kV **Sarna.**
- Non Availability of **Real time Data** from Hiranagar. (Regularly pointed out by NRLDC in the OCC meetings.)
- Potentially Harmful event from the point of view of **reliability of Salal HEP** generation in particular and **Northern Regional Grid** in General.

MS, NRPC requested PDD, J&K to take corrective action and also ensure the data availability from Hiranagar substation. The representative of J&K agreed to look into the matter.

2.9 Performance of UFRs and df/dt relays

RRVPL, PSEB, DTL and BBMB submitted the details of operation of UFRs in their systems. It was pointed out that sufficient load relief was not provided by the UFRs in first stage (48.8 Hz) when the frequency dipped below 48.8 Hz. RRVPL for instance provided maximum load relief to the extent of 104.5 MW on 29.4.09 at 23:23 hrs. against the expected relief of 120 MW. Similarly, PSEB provided a maximum relief of 78.51 MW at 23:05 on 13.05.09 against their recommended value of 180 MW. BBMB had intimated that maximum load relief was 80 MW in the month May, 09. DTL had submitted that maximum relief due to UFR operation was 110 MW at 15:23 Hrs. on 28.05.09. UP did not submit details of operation of UFRs and had only indicated that load relief due to operation of UFRs meets the requirement of recommended load relief. MS, NRPC clarified that the load relief as recommended by NRPC is the minimum required and constituents should ensure to provide at least the recommended relief.

NRLDC informed that total relief of only 71 MW was obtained against planned relief of 800 MW on 13th May 2009 at 23:03 hrs when frequency was below 48.8 Hz. Haryana stated that there is some mismatch in the load relief shown by NRLDC. NRLDC stated that UFR installed at lower voltage feeder may not capture by their SCADA and there might be some mismatch with the actual total relief obtained. GM, NRLDC suggested that for authentication of actual load relief obtained, the states can analyse their load before and after when frequency goes below 48.8 Hz. He suggested that all constituents may prepare a report for the incidence of a particular day in a month when frequency goes below 48.8 Hz and send it to NRPC/NRLDC for analysis. Constituents agreed for the same. It was decided that all constituents would submit a report for the incidence on

13th May at 23.03 Hrs when frequency was below 48.8 Hz and send it to NRPC/NRLDC.

SE (O), NRPC requested constituents to submit the information regarding procurement **action of additional 30% UFRs** on their feeders and df/dt relays, which were to be installed.

(A) Constituents submitted the following details:

1. **Rajasthan:** RRVPNL intimated that purchase order (PO) for 52 Nos. UFR's and 17 Nos. df/dt relays to cover more feeders for load relief in Rajasthan system had been placed on 13.3.2009 on M/s Areva T&D India Ltd., On inspection done the 52 Nos UFRs and 17 nos. df/dt relays, UFR has been rejected and 17 Nos df/dt have been cleared for dispatch. The dispatch instruction for df/dt relays were being issued.

2. **Punjab:** PSEB stated that additional 21 UFRs had already been installed in PSEB system and rest 4 would be kept in spare. PSEB intimated that order for 35 numbers df/dt relays had been placed & inspection completed and the same is expected any time.

3. **HP:** HP stated that they had installed 3 Nos. df/dt relays in their system.

4. **DTL:** DTL stated that all 5 Nos. stage-I df/dt relays with 0.1 Hz/sec had been installed in their system.

5. **Haryana:** HVPNL had intimated that out of 22 UFRs required, purchase order for 13 UFRs had been placed and 5 UFRs (out of 13) had been received and commissioned. They further stated that order for five additional UFRs would be placed soon and 4 relays were being repaired. For six Nos. df/dt relays, they informed that these would be installed during July, 2009.

6. **UP:** UPPTCL stated that as they had sufficient relays in their system, they were not planning for new relays.

7. **Uttarakhand:** In 37th OCC meeting, PTCUL was asked to provide load relief for 3rd stage UFR (100 MW). PTCUL had stated that UFRs had been arranged and would be commissioned by May, 2009. For df/dt relays, PTCUL had stated that the numerical relays already installed in their system are to be set for df/dt operation..

8.0 **J&K:** No information.

9.0 **Chandigarh:** No information.

2.10 Notified Power Cuts on Industry and Supply of Power to Agricultural Sector

Details of Notified power cuts on industries and supply of power to agricultural sector for the month of May, 2009 were circulated in the meeting for information of the constituents.

3.0 Performance of Shunt Capacitors

3.1 The statement of progress of installation of shunt capacitors for 2008-09 is enclosed at **Annexure-VI**.

Power utilities were requested to update the status for following:

- Capacitor under installation and time schedule of installation;

- Order placed (with delivery schedule);
- Under Procurement with likely date of placement of order;

(A) **Rajasthan:** Rajasthan had submitted that tenders for purchase of 324 MVAR HT Shunt Capacitor Banks were opened and the case was processed but no bidder could qualify the technical bid. Retendering is under process. The balance capacitor banks are to be installed by the Discoms.

(B) **Haryana:** HVPNL had informed that 470 MVAR shunt capacitors would be installed in their system but tenders were rejected on account of commercial issues, and re-tendering is being done. NIT placed on 10th June 09. Additional 430 MVAR shunt capacitors would be installed by their Discoms.

(C) **Punjab:** PSEB intimated that they had placed the purchase order on M/s ABB on 04.12.2008 for supply of 138.682 MVAR capacitor banks. 26 MVAR capacitors have been received in June, 2009.

They had further intimated that a tender inquiry floated for procurement of capacitor units (333.25 MVAR) was opened on 30.04.2009 and bid evaluation was under progress.

(D) **Uttarakhand:** In 37th OCC meeting PTCUL had intimated that 33.2 MVAR Capacitor Banks had been ordered on M/s BHEL Bhopal and M/s Shreem Capacitors, Maharashtra. They had also stated that banks are expected to be delivered in one and half months and defective capacitors in the system would be revived by the end of June, 2009.

(E) **Delhi:** DTL informed that they had only 10 MVAR (33 kV) defective Capacitor Bank in their system, which will be replaced in four months time. DTL has also constituted a committee to look into the working of capacitors and other issues for maintaining the voltage profile. NDPL intimated that all capacitors in their system are functional.

(F) **J&K:** In 39th OCC meeting J&K informed that they have received the bid offers from three vendors for 932 MVAR shunt capacitors. Out of which they have planned to procure 531 MVAR in phase –I and 401 MVAR in phase –II . The order for installation of capacitors would be placed after completing the process of evaluation of tenders. Price bid is to be opened in June, 2009 and installation would be done in three months time, thereafter. Earlier due to poor response of the bidders they were not able to add any capacitors in their system.

Other power utilities agreed to submit the details to NRPC secretariat through e-mail.

3.2 Monthly Target for revival of defective Capacitor

Around 1872 MVAR are defective which need revival at an early date. Constituents are requested to submit monthly target for the revival of the capacitors in their system. About 282 MVAR capacitor banks are defective in PSEB system and action is being taken by PSEB to revive them. DTL informed that they had only 10 MVAR (33 kV) defective Capacitor Bank in their system, which will be replaced in four months time. Rajasthan had submitted that the 368.896 MVAR capacitors were defective in their system. Other power utilities were requested to submit the details of defective capacitors regularly to NRPC secretariat.

4.0 Maintenance Programme of Generating Units and Transmission Lines

4.1 Generating Units

The following shutdowns were approved for the month of June-July, 2009.

Planned Maintenance Programme of Units at NTPC Stations for June-July 2009:

Station	Unit	Capacity (MW)	Shutdown Period		No. of days	Work to be undertaken
			From	To		
Anta	GT#3	88.71	06.06.09	20.06.09	15	4000 VOH Inspection
	GT#1	88.71	22.06.09	29.06.09	08	8000 VOH Inspection
	GT#2	88.71	01.07.09	27.08.09	(52+6)	Major O/H (R&M) including 3 days each for pre-& post-O/H PG Tests
	ST	153.20	20.07.09	31.07.09	12	Minor Inspection
Dadri (Gas)	GT#4	130.19	11.05.09	14.06.09 (expected by 07.06.09)	35	Major Overhaul completed ST#2 shutdown in progress.
	GT#3	130.19	06.07.09	12.07.09	07	8000 EOH Inspection
Tanda	U#3		01.07.09	20.07.09	20	Overhauling
Tanda	U#4		26.07.09	08.10.09	43	Overhauling
Rihand	Unit 2 500 MW		25.07.09	31.07.09	07	For boiler license renewal

4.2 Transmission Lines

PGCIL submitted the following Shut down required during June, 2009 for their Transmission lines which were approved in the OCC meeting.

S.N.	LINE/EQUIPT	DURATION				MODE	PURPOSE
		FROM		TO			
		DATE	TIME	DATE	TIME		
220KV LINES							
1	220kv Auraiya-Sikandra-I	25.06.09	7:00	25.06.09	18:00		To replce the jumper in line & retrofitment of M-I&II.
2	220kv Auraiya-Sikandra-II	26.06.09	7:00	26.06.09	18:00		To replce the jumper in line & retrofitment of M-I&II.
ICT , HVDC & SVC							
1	ICT-II at MND	23.06.09	8:00	23.06.09	18:00		AMP.
1	ICT-III at Bawana	30.06.09	8:00	30.06.09	18:00		AMP.
400kv & 220kv BUS							
1	220kv BUS-II at MRT	18.06.09	8:00	18.06.09	18:00		AMP activities

2	220kv Transfer Bus - at MRT	16.06.09	8:00	16.06.09	18:00		AMP activities
3	400KV Main bay of Meerut line at Muzaffarnagar S/S	6/20/2009	8:00	6/20/2009	18:00		AMP activities

PGCIL further requested to approve following shutdown for stringing and construction which was deferred till the lines already on shutdown due to thunder and storm revive.

S.N.	LINE/EQUIPT	DURATION				MODE	PURPOSE
		FROM		TO			
		DATE	TIME	DATE	TIME		
400KV LINES							
1	Agra-Bassi-II&III	6/12/2009	6:00	6/13/2009	18:00	Daily	For stringing of Agra-Bhiwadi line
2	Mainpuri - BLB D/C	6/29/2009	6:00	6/30/2009	18:00	Daily	For stringing of Balia-Bhiwadi HVDC line
3	Agra-Muradnagar UPPCL line	6/19/2009	6:00	6/19/2009	18:00		For stringing of Balia-Bhiwadi HVDC line
4	Balia-Mau D/C Line	6/18/2009	6:00	6/18/2009	18:00		For stringing of Balia-Bhiwadi HVDC line
5	LKO-Sultanpur line	06/20/09	6:00	6/20/2009	18:00		For stringing of Balia-Bhiwadi HVDC line
6	400KV Sing-Allid Ckt-1	7/1/2009	6:00	7/8/2009	18:00	Cont.	Diversion of Line for construction of Anpra D
7	Sing-Anpra	7/1/2009	6:00	7/8/2009	18:00	Cont.	Diversion of Line for construction of Anpra D

5.0 Outage of Important Elements in NR for a Long Period

5.1 Availability of spare converter transformer for HVDC bi-pole Rihand-Dadri line

PGCIL informed the following status:

The status of four spare converter transformers in Rihand-Dadri HVDC system is as follows:

- i. One transformer is available as ready spare at Rihand end.
- ii. 2nd transformer was available at Dadri since 13.11.07. PGCIL informed that a converter transformer failed at Dadri end due to winding fault. The same was replaced by the spare converter transformer on 14th February, 2008. Order had been placed for its repair in the second week of August, 2008. A joint inspection on 15th July was done by BHEL and Power grid. BHEL would submit maintenance schedule.
- iii. 3rd transformer is now available as ready spare at Dadri. (ABB make)
- iv. 4th transformer had been dispatched from Vadodara to Rihand on 16.01.09 and had reached Rihand on 20.02.09.

Status of supply of two new converter transformers ordered on M/s BHEL

- i. New converter transformer had been delivered by BHEL and reached

Dadri.

- ii. The second converter transformer was under transit and would be Delivered in June, 2009.

5.2 Outage of Transmission Line and Other Elements

The status of Line/Bus reactors which were not available since a long time were discussed. Details are as under :

(a) 50 MVAR Bus Reactor at Gorakhpur

UPPTCL intimated that post insulator for the reactor had been arranged and BHEL had been called to complete the work. The work is expected to be completed by 30th June, 2009 .

(b) Tertiary reactors

UPPTCL had earlier informed in 28th OCC meeting in July 08 that there were 28 tertiary reactors in the Eastern UP out of which 5 numbers are defective. UPPTCL had submitted following status in the OCC meeting.

Sl. No.	Location	No. of Reactors	Status
1	Mau	2	Tender Process is going on
2	Bareilly	1	Inspection carried out,damaged beyond economic repair and new reactor needed, 18 months required to change the reactor
3	Sultanpur	1	New reactor has to be installed, put up for approval
4	Agra	1	Bushing has been ordered on BHEL,put up for approval

(c) Bus reactor at Sarojini Nagar, Lucknow (UPPTCL)

In the 33rd OCC meeting, UPPTCL informed that Bus reactor at Sarojini Nagar Lucknow was beyond economical repair (BER) and a new one needs to be purchased for this location.

UPPCL intimated that a meeting with PGCIL to discuss the issue has been proposed to be held with 10 days.

(e) High Voltage Problem at Anpara TPS

In the 34th OCC meeting, UPRVUNL intimated that as CB of Unit #4 was faulty, it had been replaced with the transfer CB. M/s Hitachi had submitted offer for repair of Circuit Breaker. UPRVUNL informed that order for repair and supply of spare parts of CB would be placed soon and delivery would be by August, 2009. UPRVUNL was requested to expedite the work.

(f) 315 MVA ICT at Bamnauli

DTL intimated that the 315 MVA ICT at 400 kV S/S Bamnauli had reached at the S/S in June ,09 and commissioning would be completed by Aug, 2009.

(g) 100 MVA 220/66 kV ICT at Narela

DTL had intimated that the burnt 100 MVA, 220/66 kV power transformer at Narela 220 kV S/S had been dismantled and removed from the foundation. A new transformer had reached at Narela S/S and repair work of transformer's foundation had been started. The transformer would be commissioned by 18th June, 2009.

(h) UPPTCL intimated the revival status of the following system elements:

- **400/220 kV ICT-2 at Obra:** UPRVUNL informed that purchase order for ICT had been placed on M/s BHEL. Work was expected to be completed by March, 2010.
- **50 MVAR Bus Reactors at Bareilly:** UPPTCL informed that it had been decided to install a new bus reactor (the defective one is BER) at this location. The financial approval for the same has been done.
- **Bus Reactor at Sarnath:** Bus Reactor at Sarnath which was normalized after a long time was again out of order for a considerable time (since 16th February, 2009) due to a reported problem in 'Y' phase bushing (damage) at Sarnath. During 39th OCC meeting held on 15th June 09, UPPCL intimated that the inspection of the defective reactor has been carried out by M/S Compton Greaves Limited.

6.0 Status of Commissioning of New Generating Units and Transmission Work

6.1 The status of commissioning of new generating units in 2009-10 as updated by the constituents in OCC meeting is as under:

Sl. No.	Unit	State	Company	Capacity (MW)	Expected Date of Commissioning
1	Guru Hargobind TPS-II (Unit-IV)	Punjab	PSEB	250	Syn on 31.07.08,
2	Giral Lignite-II (Unit-2)	Rajasthan	RRVUNL	125	Synchronised on 26.12.08;
3	Barsingsar Lignite	Rajasthan	NLC	2x125	08/2009 and 01/2010
4	Chhabra TPS	Rajasthan	RRVUNL	2x250	Unit -1 Synchronized on 16 th April 09, Unit #2 12/2009
5	Kota TPP	Rajasthan	RRVUNL	195	Syn 30 th May 09
6	Suratgarh TPS	Rajasthan	RRVUNL	250	Synchronized on 31.03.09
7	RAPP-5 and 6	Rajasthan	NPCIL	220	U#5: December, 2009 U #6: March, 2010. (Depending upon availability of fuel) Revival of U#2: July, 2009
8	Jallipa Kapurdi TPP	Rajasthan	Raj West Power Ltd (JSW)	8x135	06/2009 to 08/2010

9	Yamuna Nagar U#2	Haryana	HPGCL	300	Synchronised on 29th March, 2008..
10	Kahalgaon Stage-II, U#3	Bihar	NTPC	500	Synchronisation by July, 2009, CoD by Sep, 2009
11	NCP Project St-II U#5 &6	U.P.	NTPC	2X 490	11/2009 03/2010
12	Rithala CCPP	Delhi	NDPL	108	01/2010
13	Rajiv Gandhi Thermal Project (Khedar)	Haryana		2X600	Dec 2009 Feb 2010

6.3 Programme of Construction of Transmission Lines

6.3.1 PGCIL/RRVNL furnished following information in the meeting

- **400 kV Kankroli –Jodhpur:** PGCIL informed for Kankroli – Jodhpur line, the commissioning schedule is October, 2009.
- **220 kV Kankroli-Dewari:** RRVNL intimated that some litigation was going on some towers and for this hearing which was scheduled to be held on 13th April, 2009 had been shifted to 15th June 2009. Work is expected to be completed by July 2009.

6.3.2 Constituents submitted following status for commissioning of following lines

1.0 Commissioning of outlets from Roorkee (PG) Substation by PTCUL : PTCUL informed that these projects are delayed. PTCUL was asked to submit the targets of commissioning of outlets for Roorkee GSS to NRPC sect.

NRLDC informed that there was an disturbance in the uttrakhand system on 13.06.09. The 400 kV Roorkee-Rishikesh was under Shutdown. 220 kV Nara-Roorkee opened by UPPCL without intimation to RLDC/SLDC and there was a generation loss of Dharashu(290 MW), Chibro-Khodri(135 MW), Chilla (35 MW) and Kulhal (10 MW). Similar tripping had occurred on 23rd & 27th July 2008 and thus system strengthening as well as installation of UVLS schemes was again emphasized. The better coordination between the substation personnel is also desirable.

2.0 Commissioning of outlets from Kota (PG) Substation by RVPNL: RVPNL submitted following information

S	Name of 400 KV GSS (PG)	Lines/ out lets (220 KV) of RVPN	Status
.			
N			
o			
.			

1	Kota	1 400 KV D/C KTPS-Kota (PG) line to be charged on 220 KV	6.492 KM Line survey out of 6.492 KM 09 stub-setting out of 27 0 tower erected out of 27 0 KM Stringing out of 12.98CKM
		2 Termination of one ckt. of 220 KV D/C Kota (S) – Bhilwara at Kota (PG) (1 KM S/C).	2009-10
		3 Termination of 220 KV S/C Kota (s) – Duni line (LILO of Kota (s)-Jaipur line) (Sakatpura end) at Kota (PG) (1 KM S/C)	2009-10
2	Kankroli	1. LILO of existing 220 KV S/C Bhilwara – Kankroli line (5 KM D/C line)	Work is completed & line is in operation.
		2. 220 KV S/C Kankroli (PG) –Debari line.	63 KM Line survey out of 63 KM 200 stub-setting out of 200 195 tower erected out of 200 62.34 CKM Stringing out of 63 CKM
		3. 220 KV S/C Kankroli (PG)- Kankroli 220 KV (5 KM S/C line)	2009-10
3	Bhinmal	1 LILO 220 KV S/C Sirohi – Bhinmal line (5 KM D/C line)	Estimate under sanction.
		2 220 KV S/C line Bhimal (PG) –Bhinmal (220 KV) (10 KM S/C)	Estimate under sanction.
		3 220 KV S/C line Bhimal (PG) –Sanchore (220 KV) (70 KM S/C)	Estimate under sanction.

For Bhi nmal s/s PGCIL stated that their s/s was ready but there was no evacuation lines by RVPNL. RVPNL asked to submit the time line for commissioning of evacuation lines from Bhinmal GSS.

6.3.3 Delay in Commissioning of 220 kV Nalagarh-Mohali D/C (100 ckt. km)
220 kV Nalagarh – Mohali D/C is a part of the Jhakri transmission system and was scheduled to come by Dec-2004. The commissioning was delayed due to forest clearance pending and court case in respect of land acquisition. In last OCC meeting PSEB had informed that Environment and Forest clearance has been obtained from MOE&F. PSEB had also intimated that in the case regarding stay at one location in HP had been dismissed by the Session Court and it had to

be filed again in the High Court. PSEB informed that a high level committee is set up to resolve the issue. New route is being explored to avoid the disputed location. HPSEB informed that as per Gazette notification dated 24.12.2003 PGCIL is empowered to acquire any land for their use. MS, NRPC advised PSEB to explore all options to resolve the long pending issue.

7.0 Strengthening and up gradation of the transmission, sub transmission and distribution system by Constituents.

SE (O), NRPC informed Constituents that the programme for strengthening and up gradation of their transmission, sub-transmission, and distribution system matching with the load growth and generation capacity addition programme during the financial year 2009-10 had been received from PTCUL, Punjab (partly), HP, Haryana (partly), Rajasthan (partly) and DTL have submitted the required information. MS, NRPC requested UP and other constituents to send the information to NRPC secretariat.

8.0 Under voltage load shedding (UVLS)

The status submitted by different constituents was as under:

1. **Punjab:** - PSEB stated that 10 Nos. relays have been installed in their system.
2. **Haryana:** In the 38th OCC meeting held on 14-05-2009 Haryana stated that the report of study of their system had come and as per this study there was no problem of low voltage in their system. However, if there was an apprehension of low voltage in their system, HVPNL might consider installing UVLSRs at lower voltage level, particularly on feeders with high reactive load so that these loads might be disconnected in case of low voltage situations, to maintain appropriate voltage at grid locations. HVPNL may indicate the numbers and locations where they would like to provide UVLSRs with time line to NRPC Secretariat.
3. **Delhi:** - DTL stated that UVLSRs had been commissioned in their system and settings were finalized and submitted to NRPC Secretariat.
4. **Uttarakhand** :- In 39th OCC meeting PTCUL had intimated that they had one relay at Rishikesh sub-station with setting at 176 kV (220 kV level) with reactive load relief of 50 MVAR.
5. **UP:** UPPTCL informed that out of 13 UVLSRs, 6 had already been installed and balance 7 UVLSRs have been received and are under installation.
6. **Rajasthan:** NRLDC stated that some parts of Rajasthan such as Heerapura, Bassi etc are experiencing low voltage problem, so Rajasthan should install UVLSRs in their system. Rajasthan was requested to install relays in consultation with NRLDC/PGCIL.

9.0 Replacement of Porcelain Insulators by Polymer/Antifog Insulators in High pollution Areas of NR

All the constituents were once again requested to provide line wise status for Replacement of Porcelain Insulators by Polymer/ Antifog Insulators in high pollution areas of NR through e-mail to NRPC Secretariat on weekly basis. It was also intimated that this information was also being monitored by Ministry of Power (MoP) on regular basis. The latest status as submitted

by the constituents is attached at **Annexure-VII**. MS, NRPC requested all constituents to complete the work before September, 2009.

10.0 Implementation of Recommendations of Report of Inquiry Committee on Grid Disturbance in Northern Region on 7th and 9th March 2008.

The status as submitted by the constituents in the meeting for implementation of recommendations of report of Inquiry Committee on grid disturbance in NR on 7th and 9th March, 2008 is given at **Annexure-VIII**.

11.0 Implementation of decisions of Crisis Management Group (CMG) meeting held at 22nd Dec, 2008

Member (GO&D), CEA & Chairman of Crisis Management Group (CMG) had a meeting on 22nd Dec, 08. The status submitted by constituents in the meeting for implementation of decisions is enclosed at **Annexure-IX**.

12.0(A) Captive Power Injection in the Grid

Punjab had intimated that no open access application was rejected during May, 2009. NRLDC and Rajasthan the details for open Access rejection during month May 09(Annexure X) . UP submitted that in UP no organisation had yet approached for sale of power from their captive power plant to UP or to other States. However various sugar mills located in UP and having co-generation plant sell power to UP. During the month of May, 09 the total energy and average power received from the co-generation plants of sugar mills in UP in terms of Energy was 37.20 MU (operational fig.) and average Power was 50 MW(operational fig.).

(B) Power Injection in the Grid From Renewable Energy Sources (RES)

All constituents were requested to submit the information regarding injection of power in the Grid by Renewable Energy Sources (RES) during every month for onward transmission to CEA/MoP. For the month of May 2009, Rajasthan had submitted the information(Annexure XI).

13.0 Power Supply Position for the Area of State Falling Under National Capital Region (NCR)

Union Territory of Delhi, Haryana Sub-Region, Rajasthan Sub-Region had submitted the power supply position of National Capital Region. UP was requested to send information regarding UP Sub-Region falling under NCR in the format attached with Agenda every month to NRPC secretariat.

Delhi, Rajasthan, Haryana submitted following details for May, 2009.

S.N.	Sub Region	Requirement (MW)	Availability (MW)	Shortage (MW)	Energy Requirement (MU)	Energy availability (MU)	Shortage (MU)
1	Delhi	4139	4107	32	2360	2341	19
2	Alwar,	330	300	30	2683	2439	244

	Rajasthan						
3	Haryana						
	Panipat	350	300	50	8.4	7.2	1.2
	Sonipat	280	220	60	6.7	5.2	1.5
	Rohtak	250	210	40	6.0	5.0	1.0
	Jhajjar	230	200	30	5.5	4.8	0.7
	Gurgaon	490	456.6	33.33	11.4	10.96	.8
	Faridabad	425	400	25	10.21	9.6	.6
	Rewari	114	111.5	2.5	2.74	2.68	0.06

14. Report in Respect of Planned Outage of Generating Units: MS, PSEB, Rajasthan and BBMB submitted the report for planned outage of generating units i.e. scheduled date of outage vis-a-vis the actual date of outage and if there is any exception. SE(O), NRPC requested all constituents to send exception report to NRPC in the format available in Agenda.

15.0 Any Other Item with the Permission of the Chair

(A) Transmission System Availability Verification:

NRLDC informed that the information submitted by PGCIL NR-I, NR-II & POWERLINK regarding transmission system availability verification has been placed on NRLDC website (<http://nrlcdc.org> under the menu availability verification). All the stakeholders are requested to communicate their Comments/Objections/Discrepancies (with supporting documents) regarding

- a. Non inclusion of outages
- b. Number of outages
- c. Duration of outages
- d. Reason of outages &
- e. Attribution of outages etc

to NRLDC by 18th June 2009. The comments can also be forwarded on e-mail to nrlcdcso@gmail.com. MS, NRPC also requested constituents to verify and send their comments to NRPC and NRLDC before 18th June, 2009.

16.0 Date and Time of Next Meeting

Next meeting of OCC would be held at 11:00 AM on 10th July, 2009 at , New Delhi hosted by NDPL.

Annexure -I

List of Participant for 39th OCC Meeting, New Delhi
In Chair: A.K. AGGARWAL, MS, NRPC

NRLDC

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Smt. Kavita		NRLDC		

PGCIL

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Shri Anoop Singh	Chief Manager	POWERGRID-NR-II	9419211836	anoops@powergrid.com
Shri T.C.Sarmah	DGM (PESM)	POWERGRID-NR-I	9650391854	tcs10@indiatimes.com
Shri A.K. Arora	DGM (O&M)	POWERGRID	9873549214	akarora@powergrid.com
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BBMB

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PSEB

Shri Vardeep Singh	Dy. Director/PC	PSEB	9646118011	ddpc-pseb@rediffmail.com
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Sh. Ajay Uppal	DGM	SJVNL	9418075288	uppalajay58@yahoo.com
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HPGCL

Shri R.K. Arora	SE/T	HPGCL	9357156161	arorapranau1990@yahoo.co.in
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UJVNL

Shri Purushottam Singh	GM (E&E)	UJVNL	09837274922	gm-engg-ujvn@yahoo.com
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BSES

Shri Haridas Maity	Manager	BSES	9350110156	haridas.maity@retiancede.com
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Name	Designation	Organization	Contact No./ Mobil No.	E-mail
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NHPC

Shri Virendra Kumar	Dy. Manager (E)	NHPC	09818659766	virendrakumar@nhpc.nic.in
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Shri S. Srivastava	GM (OS)	NTPC- NRHQ- Lucknow	09415501008	sanuelsrivastava@ntpc.co.in
Shri Y. Sriniwas	DGM (OS)	NTPC-NR- Noida	9868391088	ysriniwas@ntpc.co.in
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Sh. A.K.Jindal	Sr. Manager	NTPC- NCRHQ Noida	01290- 2410078 9868390991	akjindal@ntpc.co.in akjindal 9 @ yahoo.com

UPPCL

Shri Gautam.	EE, Power	UPPCL	09415233473	
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Banerjee	System			
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UPRVUNL

Shri Gyan Prakash Sirvastave	Ex. Engineer	UPRVUNL	9415900939	Srivastava-gns.@rediffmail.com
Shri S.K. Vidyarthi	Ex. Engineer	UPRVUNL	9415900221	sunilkumarvidyarthi@gmail

RVPNL

Name	Designation	Organization	Contact No./ Mobil No.	E-mail
Shri R.P. Katara	Addnl. SE (PC)	RVPNL	9414061049	ldrvpnl@yahoo.co.in
Shri. Navender Gehlot	Add.	RVPNL	9413383194	ldrvpnl@ yahoo.co.in

RAPS

Sh. Alok Kumar	Sr. Ex. Engineer	RAPS 3 &4	9413356585	alokm@npcil.co.in
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PDD, J&K

Sh. Ajay Gupta	CE MRRE	PDD J&K	09419`86011	ajay_gupta@ yahoo.com
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HVPNL

Shri Niraj Gulati	Chief Engineer(SO & Comml)	HVPNL, Panchkula		niraj_gulati@hotmail.com
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IPGCL

Shri Y.P. Arora	DGM (Opn)	IPGCL, New Delhi	9717694855	yparora@ipgcl-ppcl.nic.n
Shri SMTANGRI	DGM(Opn)IPS	IPGCL, New Delhi	9717698244	

DTL

Shri B.B. Sharma	G.M. (O&M)	DTL	09810299685	
Shri B.C. Mathur	G.M. (SLDC)	DTL	09818648217	mathurbc50@gmail.com
Shri Venugopal	Manager (T)	DTL	9871093902	DTLDA @ Rediffmail.com
Shri Hitesh Kumar	Manager	DTL	23345820 9871093707	Manager.protection@yahoo.com

NDPL

Sh. Ashish Kr. Dutta	Sr. Manger	NDPL	9871798566	ashis.dutta@mdpl.com
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PTCUL

Sh. Rakesh Jain	DGM(S.O.)	SLDC 400kV Sub- Stn. Rishikesh	9412075187	Slde@Radiffmail.com
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CEA

Sh. B.K. Jain	Director	CEA		
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HPPC

Atul Pasrija		HPPC Panchkula	09317722824	dgmetp.hppc@gmail.com
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NRPC

Name	Designation	Organization	Contact No./ Mobil No.	E-mail
Shri A.K. Aggarwal	MS	NRPC		
Shri A.K. Rajput	SE (O)	NRPC		rajput.ashok@gmail.com
Shri K.K. Arya	SE(S)	NRPC	9810455760	
Shri P.S. Mhaske	S.E.(C)	NRPC	9811490982	
Smt. Rishika Saran	EE (O)	NRPC	9868021299	nrebops@yahoo.com
Shri. Vikram Singh	EE (O)	NRPC	9868993151	nrebops@yahoo.com

(Annexure –II)
Issuance of SMS along with the issue of A, B or C message

Names & Phone nos of the officers to whom SMS are issued under different conditions

Name		Designation	Organisation	Msg Type			Mobile no.
	Punjab						
Shri	AJIT K. MATHARU	DIRECTOR(PR & C)	PSEB	A	B	C	919646118004
Shri	S.K. Jindal	CE (SO&C)	PSEB	A	B	C	919646118001
Shri	KS JOLLY	ADVISOR	PSEB	A	B	C	919646118002
Shri	S.C. Sabharwal	MEMBER (Trans)	PSEB		B	C	919646200055
Shri	H.S. BRAR	CHAIRMAN	PSEB		B	C	919646500009
	Haryana						
Shri	SANJAY KR. ARORA	PC	HVPN	A	B	C	919356273746
Shri	R C MALHOTRA	SE SLDC	HVPN	A	B	C	919357214739
Shri	NEERAJ GULATI	CE(SO & C)	HVPN	A	B	C	919356273741
		DIRECTOR(TECH.)	HVPN		B	C	
Ms	Jyoti Arora	MD	HVPN		B	C	
	Rajasthan						
Shri	M.K. JAIN	SE (SO & LD)	RRVPNL	A	B	C	919414063333
Shri	B.L.JAIN	Advisor (LD)	RRVPNL	A	B	C	919414064444
Shri	S.Dhawan	DIRECTOR (OPERTION)	RRVPNL		B	C	919414057777
Shri	Sudhansh Pant	CMD	RRVPNL		B	C	919414011866
	Delhi						
Shri	V. VENUGOPAL	DGM	DTL	A	B	C	919871093902
Shri	B.C. Mathur	GM (SLDC)	DTL	A	B	C	919818648217
Shri	AK KAUL	DIRECTOR(O)	DTL		B	C	919810299692

Shri	RAJENDRA KUMAR	CMD	DTL		B	C	919971748833
	UP						
Shri	VP TRIVEDI	SE(PS)	UPPCL	A	B	C	919415115118
Shri	ASHOK KUMAR	CE (PS)	UPPCL	A	B	C	919415115119
		DIRECTOR (Trans)	UPPCL		B	C	
Shri	Narendra Bhushan	Addl MD	UPPCL		B	C	919415019537
Shri	Navneet Sehgal	CMD	UPPCL		B	C	919415010500
	Uttrakhand						
Shri	RAKESH JAIN	DGM (SO)	PTCUL	A	B	C	919412075187
Shri	Arvind Kumar Gupta	CGM (O&M)	PTCUL	A	B	C	919720007735
Shri		MD	PTCUL		B	C	
	H.P.						
Shri	S GROVER	SE (PR)	HPSEB	A	B	C	919816096666
Shri	S.D. Rattan	CE (SO)	HPSEB	A	B	C	919418001953
Shri	SK CHOUDHARY	MEMBER (O)	HPSEB		B	C	919418499900
Shri	RAVINDER JAIN	CHAIRMAN	HPSEB		B	C	919418001131
	J&K						
Shri	Mustaq Ahmed	CE(M&RE)	PDD	A	B	C	919419015094
Shri	Ajay Gupta	CE(M&RE)	PDD	A	B	C	919419186011
		Development Commissioner	PDD		B	C	
Shri	SANDEEP NAIK	SECTERARY(PDD)	PDD		B	C	919419063625
	Chandigarh						
		SE (Elec. Operation)	Elect. Dptt.,	A	B	C	

			UT Chd				
Shri	Surinder Paul	CE	Elect. Dptt., UT Chd	A	B	C	919878504200
Shri	Sanjay Kumar	Secretary (Engg.)	Elect. Dptt., UT Chd		B	C	
	Copy for Information to						
Shri	D.K. Jain	DGM (SO-I)	NRLDC	A	B	C	919910344127
Shri	VK AGARWAL	GM	NRLDC		B	C	919818933799
Shri	SK SOONEE	ED(SO)	PGCIL		B	C	919899091115
Shri	A.K. Agrawal	Member Secretary	NRPC		B	C	919810848444

	Over Drawal by NR Constituents in MAY, 2009 OD when freq <=49 .2						Annexure –III)			
Date	Chandigarh		Delhi		Haryana		HP		J&K	
	OD	No. of OD Blocks	OD	No. of OD Blocks	OD	No. of OD Blocks	OD	No. of OD Blocks	OD	No. of OD Blocks
5/1/2009	0.02	3	0.01	1	0.00	1	0.06	3	0.03	3
5/2/2009	0.07	7	0.07	4	0.18	7	0.09	7	0.00	0
5/3/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/4/2009	0.14	15	0.17	7	0.32	12	0.69	15	0.00	3
5/5/2009	0.02	4	0.05	1	0.03	1	0.22	6	0.04	3
5/6/2009	0.07	9	0.08	4	0.08	3	0.40	16	0.14	13
5/7/2009	0.02	5	0.00	0	0.39	11	0.86	21	0.35	21
5/8/2009	0.16	18	0.22	9	0.28	10	0.70	24	0.06	9
5/9/2009	0.05	11	0.00	2	0.40	13	0.48	19	0.08	5
5/10/2009	0.01	4	0.01	2	0.20	5	0.08	5	0.00	0
5/11/2009	0.03	3	0.00	0	0.05	2	0.18	3	0.00	2
5/12/2009	0.01	1	0.00	0	0.00	1	0.05	1	0.00	0
5/13/2009	0.00	1	0.00	1	0.27	3	0.00	1	0.05	3
5/14/2009	0.11	11	0.02	4	0.18	8	0.12	7	0.01	3
5/15/2009	0.03	4	0.00	0	0.05	4	0.00	0	0.02	1
5/16/2009	0.01	1	0.00	0	0.02	1	0.03	1	0.00	0
5/17/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/18/2009	0.02	2	0.01	2	0.01	1	0.00	0	0.00	0
5/19/2009	0.05	4	0.03	2	0.02	1	0.02	3	0.00	0
5/20/2009	0.00	1	0.06	3	0.07	3	0.05	3	0.00	0
5/21/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/22/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/23/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/24/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/25/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/26/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/27/2009	0.01	1	0.03	1	0.11	2	0.01	2	0.00	0
5/28/2009	0.08	7	0.05	5	0.08	5	0.07	7	0.00	0
5/29/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/30/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/31/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
TOTAL	0.91	112	0.81	48	2.73	94	4.12	144	0.79	66

Over Drawal by NR Constituents in MAY, 2009

OD when freq <=49.2 Hz

Date	Chandigarh		Delhi		Haryana		HP		J&K	
	OD	No. of OD Blocks	OD	No. of OD Blocks	OD	No. of OD Blocks	OD	No. of OD Blocks	OD	No. of OD Blocks
5/1/2009	0.02	3	0.01	1	0.00	1	0.06	3	0.03	3
5/2/2009	0.07	7	0.07	4	0.18	7	0.09	7	0.00	0
5/3/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/4/2009	0.14	15	0.17	7	0.32	12	0.69	15	0.00	3
5/5/2009	0.02	4	0.05	1	0.03	1	0.22	6	0.04	3
5/6/2009	0.07	9	0.08	4	0.08	3	0.40	16	0.14	13
5/7/2009	0.02	5	0.00	0	0.39	11	0.86	21	0.35	21
5/8/2009	0.16	18	0.22	9	0.28	10	0.70	24	0.06	9
5/9/2009	0.05	11	0.00	2	0.40	13	0.48	19	0.08	5
5/10/2009	0.01	4	0.01	2	0.20	5	0.08	5	0.00	0
5/11/2009	0.03	3	0.00	0	0.05	2	0.18	3	0.00	2
5/12/2009	0.01	1	0.00	0	0.00	1	0.05	1	0.00	0
5/13/2009	0.00	1	0.00	1	0.27	3	0.00	1	0.05	3
5/14/2009	0.11	11	0.02	4	0.18	8	0.12	7	0.01	3
5/15/2009	0.03	4	0.00	0	0.05	4	0.00	0	0.02	1
5/16/2009	0.01	1	0.00	0	0.02	1	0.03	1	0.00	0
5/17/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/18/2009	0.02	2	0.01	2	0.01	1	0.00	0	0.00	0
5/19/2009	0.05	4	0.03	2	0.02	1	0.02	3	0.00	0
5/20/2009	0.00	1	0.06	3	0.07	3	0.05	3	0.00	0
5/21/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/22/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/23/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/24/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/25/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/26/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/27/2009	0.01	1	0.03	1	0.11	2	0.01	2	0.00	0
5/28/2009	0.08	7	0.05	5	0.08	5	0.07	7	0.00	0
5/29/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/30/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
5/31/2009	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
TOTAL	0.91	112	0.81	48	2.73	94	4.12	144	0.79	66

(Annexure IV)
STATUS OF TRANSMISSION LINES TRIPPED IN STORM

S.no.	Name	Outage Date/Time	No.of towers damaged	Date of Restoration
1	400 kV Ballabgarh-G'Noida	15:51 hrs/10.05.09	6 D/Ckts	Still out
2	400 kV Ballabgarh-Maharanibagh	15:51 hrs/10.05.09	6 D/Ckts	17.05.09 (ERS – single conductor)
3	400 kV Unnao0Bareilly-1	23:10 hrs/10.05.09	2 D/Ckts	05.06.09 (normal towers)
4	400 kV Unnao-Bareilly-2	23:10 hrs/10.05.09	2 D/Ckts	05.06.09 (normal towers)
5	400 kV Allahabad-Mainpuri-I	18:51 hrs/11.05.09	5 D/Ckts	23.05.09 (ERS-single conductor)
6	400 kV Allahabad-Mainpuri-II	18:51 hrs/11.05.09	5 D/Ckts	16.05.09 (ERS-single conductor)
7	400 kV Dadri-Mandola-I	21:28 hrs/19.05.09	2 D/Ckts	26.05.09 (ERS-Twin conductor)
8	400 kV Dadri-Mandola-II	21:28 hrs/19.05.09	2 D/Ckts	Still out (To be normalized on normal towers)
9	400 kV Kanpur-Ballabgarh	21:29 hrs/21.05.09	Insulator hardware damaged	20.05.09
10	400 kV Kanpur-Ballabgarh	17:36 hrs/28.05.09	3 S/Ckts	05.06.09 (ERS-Twin conductor)
11	220 kV Bareilly-Dhona	23:02 hrs/10.05.09	1	Line charged on 14.05.09 skipping one tower-more sag

12	220 kV Bareilly-Pantnagar	22:59 hrs/10.05.09	1	15.05.09 (normal tower)
13	220 kV Sitapur-Sahjahanpur	23:10 hrs/10.05.09	1	10.06.09 (normal towers)
14	220 kV Merrut-Shatabdinagar	20:57 hrs/19.05.09	3 D/Ckts	27.05.09
15	220 kV Shatabdinagar-Modipuram	20:57 hrs/19.05.09	3 D/Ckts	27.05.09
16	220 kV Mandwar-Bharatpur	18:10 hrs/21.05.09	5	Still out
17	220 kV South of wazirabad-Kashmiri gate D/C	14:38 hrs/22.05.09	3 D/Ckts	One ckt restored on 24.05.09 by making T-off connection in Wazirabad-Geeta colony ckt-II
18	220 kV Orai-Kanpur	01:35 hrs/20.05.09	9	Still out
19	220 kV Orai-Paricha-I	17:10 hrs/28.05.09	3	09.06.09
20	220 kV Orai-Mainpuri	17:10 hrs/28.05.09	3	09.06.09
21	Orai-Paricha-II	17:10 hrs/28.05.09	3	11.06.09
22	Orai-Paricha-III	17:10 hrs/28.05.09	3	11.06.09
23	132 kV Baratpur-Nagar	18:10/21.05.09	5	Still out
24	132 kV Bharatpur-Nadbai	18:10/21.05.09	2	Still out

(Annexure V)

TRIPPINGS/SHUTOWN - ERS SECTION

S. No.	Name	Outage	Restoration	Remarks
1	400 kV Dadri-Mandola-I	15:41/01.06.09	20:18/01.06.09	Conductor snapping in ERS section
2	400 kV Dadri-Mandola	10:20/02.06.09	12:13/02.06.09	S/D for tightening of Jumpers in ERS section
3	400 kV Dadri-Mandola	16:58/03.06.09	19:52/03.06.09	S/D for tightening of Jumpers in ERS section
4	400 kV Ballabgarh-Maharanibagh	21:23/19.05.09	23:18/19.05.09	Y-phase earth fault
5	400 kV Ballabgarh-Maharanibagh	20:37/23.05.09	21:05/23.05.09	R-Y phase fault
6	400 kV Ballabgarh-Maharanibagh	21:23/23.05.09	22:00/23.05.09	B-N phase fault
7	400 kV Ballabgarh-Maharanibagh	14:27/10.06.09	15:21/10.06.09	R-Y Phase fault

Annexure –VI

PROGRESS OF INSTALLATION OF HT SHUNT CAPACITORS (RATED 11 KV AND ABOVE) IN NR AS ON**31th
may09****ANNEX-II**

STATE / UT	Requirement as per NRPC Studies	Installed as on 31.3.2009	Assuming 10 % defective & to be revived	Effective capacitors in service	New Capacitor to be added during 2009-10	Installed during 2009-10 upto 31th may09	Capacitors installed as on 31th may09	Balance to be installed during 2009-10	Capacitor revival till 31th may09	Capacitors to be revived 2009-10
	1	2	3	4	5=1-2	6	7=2+6	8=5-6	9	10=3-9
DELHI	2097	3476	348	3128	0	0	3476	0	0	348
HARYANA	4175	3359	336	3023	816	0	3359	816	0	336
PUNJAB	6479	5713	571	5142	766	27	5740	739	10	561
RAJASTHAN	4269	3761	376	3385	508	24	3785	484	0	376
UP	7261	5812	581	5231	1449	0	5812	1449	0	581
UTTRANCHAL	586	353	35	318	233	0	353	233	0	35
HP	551	514	51	463	37	0	514	37	0	51
J&K	1271	147	15	132	1124	0	147	1124	0	15
CHANDIGARH	157	127	13	114	30	0	127	30	0	13
TOTAL	26846	23262	2326	20936	4963	51	23313	4912	10	2316

MONTHLY PROGRESS OF INSTALLATION OF SHUNT CAPACITORS IN NR DURING 2009-2010

STATE / UT	APRIL	MAY	JUNE	JULY	AUGUST	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	Total
DELHI	0												0
HARYANA	0												0
PUNJAB	0	27.15											27
RAJASTHAN	24	0											24
UP	0												0
UTTRANCHAL	0												0
HP	0												0
J&K	0												0
CHANDIGARH	0												0
TOTAL	24												51

MONTHLY PROGRESS OF REVIVAL OF SHUNT CAPACITORS IN NR DURING 2009-2010

STATE / UT	APRIL	MAY	JUNE	JULY	AUGUST	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	TOTAL
DELHI	0												0
HARYANA	0	0											0
PUNJAB \$	0	10.262											10
RAJASTHAN	0	0											0
UP	0	0											0
UTTRANCHAL	0	0											0
HP	0	0											0
J&K	0	0											0
CHANDIGARH	0	0											0
TOTAL													10

Annexure -VII

**Status of replacement of porcelain insulators with polymer / antifog insulators
(As reported by constituents)**

As on :11/06/09

Name of the constituent	Voltage level	Lines where insulators to be replaced			Type of insulator (polymer/antifog)	Remarks
		Total Insulator Strings (Nos)	Insulator Strings replaced (No.s)	Scheduled completion date for replacement of balance insulators		
DTL	400kV	8212	nil	Sep-09	Polymer	Procurement for 400kV in process through PGCIL, order in 04/09, supply of first lot by June 09. Tenders for installation being floated . Work completion by Sep-09
	220kV	&	nil	*	Polymer/Antifog	Taking action for procurement of Antifog insulators
HVPNL	220kV	58050	*	May-09	Antifog	Work completion by Sept 2009
UPPTCL	400kV	1000	80	in progress	Polymer	total 1282 will be replaced , work in progress, 1165 insulators received, 117 awaited
	220kV	1000	629	in progress	Polymer/ antifog	total 1000 will be replaced , work in progress, 799 insulators received, 201 awaited
PGCIL NR-I	400kV	23102	10643	Sep-09	Polymer	12295 received so far.
	HVDC	4608	40	Oct-09	Polymer	
PGCIL NR-II	400kV	19512	2500	Sep-09	Polymer	11000 received so far, installation start from May 09
	220kV	360	0	15th Jun-09	Polymer	Insulators received
BBMB	400kV	2016	*	Nov-09	Polymer	Specifications to be finalised
	220kV	3541	*	Dec-09	Polymer	
	400kV	264	42	May-09	Antifog	Purchase order for 37000 insulators shall be placed in May 09, Expected receiving
	220kV	2654	224	May-09	Antifog	Oct.,09,replacement work completion Nov/Dec 09
POWERLINKS	400kV	1956	1956	Apr-09	Polymer	All insulators received.work completion : Apr-09
PSEB	220 &132 kV	13000	322	Oct/Nov 09	Antifog	Order placed for 13000 antifog insulators in April 09, Expected delivery- 3 months,. 5072 antifog are available in stock and rae being replaced

Note: 1) * - " Procurement is under process. Actual information to be submitted by respective constituents".

2) & - " Actual information to be submitted by respective constituents".

3) As per NRPC meeting held on 30/09/2008, insulators replacement has to be completed by March, 2009.

Annexure VIII
Implementation of Recommendations of the Inquiry Committee on Grid Disturbance in Northern Region of 27th January, 2007

Sl. No.	Recommendations	Action by	Current Status
1	Classification of pollution levels of lines/line stretches by measurement of ESDD on insulator.	All constituents	PGCIL NR-I and NR-II : Got the study done NCR Area: should look into because it varies case to case basis.
2	Notifications by the respective state government that no brick kiln or any industrial unit or biomass or diesel based power plant having chimney height up to 30 meters be set up within 0.5 km of the 220kV or higher voltage transmission lines.	All State Govt.	Instruction issued by Haryana only. Other states were also requested in the meeting to issue necessary instructions
3	Review of pollution standard.	CEA to initiate action	Action being taken by CEA
4	Provision of bird guards on all towers.	STUs/CTU	Completed by PGCIL, DTL: Mostly completed UPPTCL, Rajasthan and Punjab: In Progress

Implementation of Recommendations of the Inquiry Committee on Grid Disturbance in Northern Region on 7th and 9th March 2008

Sl. No.	Recommendations	Action by	Current Status
1	Replacement of existing insulators by Polymer / Anti fog Insulators	(Action- All Constituents)	In progress by all constituents
2	Cleaning of insulators	(Action- STUs/CTUs)	In progress by all constituents
3	Monitoring of criticality of lines vis-a-vis cleaning/replacement process in NR	(Action- NRLDC and All SLDCs)	In progress
4	Alertness During high RH and Low Temperature conditions	Action- SLDC/ NRLDC	Reported to be implemented by SLDC/NRLDC
5	Railway supply reliability	Railways	-----
6	Operation of Minimum filter bank at HVDC Rihand – Dadri Bi-pole	(Action – PGCIL)	Instruction issued by PGCIL
7	Pollution control of diesel vehicle	All State Govt.	States were requested in OCC to initiate action.
8	Developing a fog forecasting model for power system in NR	(Action – NRLDC)	In progress: NRLDC is working to develop a model before next winter.
9	Chemical Analysis of deposits on Insulator Strings	(Action All constituents)	PGCIL (NR-I) have got the analysis done, NR-II has sent sample to CPRI and other agencies.
10	Recommendation of committee on Insulation requirement of EHV transmission lines of various voltage	All constituents	States were requested in OCC to implement
11	Pollution Mapping of the Country	PGCIL	POERGRID (NR-I) got the study done. PGCIL was requested to make a proposal for whole country. PGCIL stated that letter from CEA has been received and its Engg. Dept is working on it. PGCIL had written letter to CPRI. PGCIL requested states to cooperate in this matter.

Annexure IX

Implementation of Decisions of Crisis Management Group Meeting Held on 22nd December, 2008

Sl. No.	Decision	Action by	Current Status
1	The process of insulators cleaning shall be continued by all the constituents till March 2009 and increase the frequency of cleaning at critical locations.	(Action-All Constituents)	In progress by all constituents.
2	Constituents shall expedite the replacement of insulators by polymer/antifog on priority in critical stretches of 400kV and 220kV lines.	(Action-All Constituents)	In progress by all constituents
3	All incidents of auto closures / tripping shall be analyzed by the concerned constituent and details of these trippings and analysis shall be sent to NRPC/NRLDC along with disturbance recorder (DR) and event logger printouts.	(Action-All SLDCs/ PGCIL/Generators)	Information submitted by PGCIL, DTL & NTPC (NCR)
4	Operators at all substations, generators etc. shall adhere to the instructions of NRLDC/SLDCs immediately during contingency condition. Accountability should be fixed for non-adhering to the instructions of NRLDC's/ SLDC's in emergency conditions.	(Action- All Constituents)	States were requested in OCC to initiate action.
5	UPPTCL shall close 220kV BTPS- Noida- Gazipur- Sahibabad loop within 24 hrs.	(Action-UPPTCL)	Implemented on 16.01.09 Again put off on 24 th April 09, UPPCL informed that it would be restored on 19 th May, 2009
6	Reactors at Bareilly (PGCIL), Moradabad, Gorakhpur, Sarnath, and Bareilly (UPPTCL) should be revived at the earliest.	(Action- PGCIL, UPPTCL)	Bareilly (PG):Done Sarnath: Done Gorakhpur: By April, 2009
7	All generating stations shall absorb MVAR up to their capability to control the high voltage conditions.	(Action- All GENCOS)	In progress
8	PGCIL shall install temperature and humidity transducers at designated locations within a month.	(Action-PGCIL)	Done
9	To control high voltage at Dadri Bus , minimum capacitor bank shall be kept out of circuit by PGCIL when both poles of Rihand -Dadri HVDC bi-pole are out.	(Action-PGCIL)	Instruction issued by PGCIL
10	All effort shall be made by the constituents for maintaining data/ communication reliability during the crisis.	(Action- All Constituents)	In progress

Annexure-X

Sl. No.	Details of Rejection of Open Access for Captive Power by			Month- May 09 09
	States	Name of firm/ Plant/location	MW	Reasons for Rejection
1	Punjab	NIL	NIL	NIL
2	NRLDC	Heera ferro Alloys limited (Chattisgarh) (WR) to Jaipur Discoms (NR)	19 MW	Due to transmission constraint
3	Rajasthan	M/S Banswara Syntex Ltd.	7 MW	Details of point of injection certificate of IEX D.D. not furnished.

Panjab had submitted following details:

Transaction details for Energy from Captive projects (from 1.5.09 to 31.5.09)					
Intra State		Inter State		Inter Regional	
Firm/ Plant/ Location	MU	Firm/Plant/ Location	MU	Firm/Plant/ Location	MU
Details shall be submitted by third week of June-09 after receipt of Energy Bills.	-	NIL	NIL	Lakshmi Energy & Foods, Khamano, (Punjab)	- 19.34 4
				Rana Sugar Ltd. Vill. Butter Sewiyen (Distt. Amritsar)	
				Ambuja Cement Ltd Ropar	- 7.128
				Wahid Sandhar Sugar Mills Ltd. Phagwara	- 4.805
					- 2.005

- All the Projects in respect of Intra State injections are located in Punjab State.
- The energy shown above (Inter State and Inter Regional) has been scheduled.
- The energy from M/s Lakshmi was exported to Tamil Nadu through PTC (third party sale).
- Energy from M/s Rana was exported to Maharashtra through IAML (third party sale).
- Energy from Ambuja Cement Ltd. Ropar was exported to Maharashtra through Reliance Infrastructure Ltd.
- Energy from Wahid Sandhar Sugar Mills Ltd. Phagwara was sold through Power Exchange.
- No Open Access request was rejected during the month

RAJASTHAN RAJYA VIDYUT PRASARAN NIGAM LIMITED

Office of the Superintending Engineer(SO&L.D)

SLDC Building, Ajmer Road, Heerapura, Jaipur
 ■ 0141-2250403 Fax: 0141-2250073

Asmex. I-C

Message No: - *84* Date: *9.6.09* Time: *17.33* Hrs

From :
 Addl. Superintending Engineer(PC)
 RVPN,
 Heerapura, Jaipur.

To:
 (1) Member Secretary
 N.R.P.C
 New Delhi
 FAX:011-26865206
 E-mail:nrpccomml@yahoo.com
 (2) The Joint Secretary
 Ministry of New & Renewable Energy,
 CGO Complex, Lodhi Road
 New Delhi-110 003
 FAX: 011-24367413
 (3) The Chief Engineer
 Operation Performance Monitoring Div.
 Sewa Bhawan, R.K.Puram,
 New Delhi-110 066
 FAX:011-26107416,26732662

Month **MAY 09**

S.No.	Renewable Resources	Generation in L.U.
1	Wind	
	220 KV SUZLON (MADA)	325.22
	220 KV E/L S.S.BHOO - KITA	157.55
	132 KV ENERCON (TEMEDERAJ) - I	92.80
	132 KV ENERCON (TEMEDERAJ) - II	141.52
	33 KV RREC (DEOGARH)	4.61
	33 KV ENERCON (SIKAR)	16.73
	33 KV SUJLAN (JAISALMERCITY)	86.32
	33 KV SUJLAN (AMARSAGAR)	144.46
	33 KV RSMM (AMARSAGAR)	202.99
	33 KV RREC (MADA)	47.78
	33 KV RREC (PHALODI)	4.38
	33 KV RREC (BHEL JAISALMER)	1.92
	33 KV ENERCON (BADABAGH)	6.10
	33 KV RATNA BAGH	92.35
	Total (1)	1324.75
2	Bio-Mass	
	Chambal Power Ltd	20.44
	Kalpatru (Padampur)	48.92
	Kalpatru (Uniar)	43.44
	A.E.T.P.L.(Kotputli)	29.77
	Total (2)	142.57
3	SPV	N.A.
4	CPP	
	INJECTION TO STATE	
	BINANI	0.12
	HZL	49.17
	DSCL	397.04
	SCL	143.34
	RSWML	243.58
	SANGAM INDIA LTD.	28.96
	ACC	29.73
	BSL	52.98
	NSL	33.35
	ACW	32.81
	CCW	23.90
	AMBUJA	43.49
	GRASIM (JD+KTP)	42.95
	BWC	0.00
	SRSL	7.98
	SSL	6.76
	GINNI	15.58
	TOTAL (4)	1151.74
	Grand Total(1+2+3+4)	2619.06

msl
9.6.09
 ADDL.SUPERINTENDING ENGINEER (PC)
 RRVPNL, Heerapura, Jaipur.