

BEFORE

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No.: 01/2010

In the matter of:

Uttarakhand Power Corporation Limited's proposal seeking approval of the Commission on scheduled load shedding with immediate effect in the State of Uttarakhand.

Coram

V.J. Talwar Chairman

Anand Kumar Member

Date of Order: 18th January 2010

ORDER

These proceedings relate to the proposal received from Managing Director, Uttarakhand Power Corporation Ltd. (UPCL) (vide their letter No. 05/MD/UPCL/PS-10 dated 15.01.2010), requesting for approval of the Commission for Scheduled Load Shedding in the State with immediate effect giving a proposed area wise roastering schedule.

It had come to the notice of the Commission that due to power shortage and low frequency in the grid UPCL is carrying out daily load shedding as a routine with irregular durations under the name of emergency load shedding in the State which is not

only causing considerable loss to industry and large commercial consumers but is also causing inconvenience to other consumers including domestic as they are unable to scheduled their activities with these irregular power cuts. The Commission, after taking note of the present acute shortage of power and consequent irregular unscheduled load shedding being carried out by UPCL throughout the State, directed UPCL on 12.01.2010 to submit a proper load shedding schedule latest by 15.01.2010. In response UPCL has submitted the present proposal.

2. UPCL in their proposal has stated the following:

- (i) The average daily energy demand of the State in the month of Jan. 2010 has gone up to about 26.20 MU in comparison to the energy availability from firm sources to the tune of 16.72 MU. The resultant energy gap of around 9.50 MU per day has been made up through the following arrangements:-
 - a) Advance Banking (to be returned) : Approximately 2.25 MU per day
 - b) Power purchase form AEL : Approximately 0.94 MU per day
 - c) Through Over drawl from Grid : Approximately 3.73 MU per day
 - d) Emergency Load Shedding : Approximately 2.63 MU per day
- (ii) The average daily energy demand of the State in the month of Dec. 09 has also gone upto about 24.70 MU (as compared to about 21.87 MU average in Dec. 08) in comparison to the present energy availability from firm sources to the tune of 16.70 MU. (For instance on 11th Jan 2010, the peak energy demand reached upto 27.20 MU). The resultant energy gap is being made up through the Returned banking power/Power purchase /Over drawal / Emergency Load Shedding.
- (iii) Due to the high supply - demand gap and low frequency prevailing in the Northern grid particularly from morning till late evening hours, UPCL had to resort to unscheduled roastering in the range of 120 to 200 MW as per directions of NRLDC, which has resulted in uncertain power availability to consumers and dissatisfaction.
- (iv) In the light of the ensuing conditions in order to optimally manage the power supply and in coming days as UPCL shall not be having enough power due

to increase in demand & reduction in hydro generation, the gap between demand & supply will increase. As public is also representing against the unscheduled emergency roastering, hence UPCL proposes a scheduled roastering plan to be implemented with immediate effect as per Annexure 'A'.

3. The major points of the proposed scheduled load shedding plan are as under.
 - a) In the light of getting additional allocation of 64 MW power round the clock from Central Government for meeting Kumbh demand, whole Kumbh area comprising of Haridwar, Rishikesh, Jwalapur, Shivalik Nagar is exempted from the scheduled load shedding,
 - b) All 132, 33 KV and 11 KV industrial & independent feeders emanating from primary and secondary substations shall be covered under scheduled roastering.
 - c) Exemptions from scheduled roastering shall be granted to those industrial consumers who opt for uninterrupted power supply during restricted hours at higher tariff as per Commission's Tariff Order.
 - d) All Hospitals & Water Works on independent feeders shall be exempted from load shedding.
4. It has, therefore, been requested that the Commission may approve the proposed schedule load shedding plan for immediate implementation with an advance public notice to be published in prominent Hindi & English news- papers of the State.
5. The proposed load shedding plan of UPCL and possible relief in demand from this schedule is placed at **Annexure - 1**.
6. The Commission notes that practically none of the measures for bridging the demand and supply gap in power as had been directed by the Commission in the previous orders have been successfully implemented by UPCL except for short term purchase of small quantities of power from AEL. The licensee needs to explore the other

options also such as DSM measures, short term purchases from power exchanges/other suppliers with prior approval of the Commission.

7. The Commission has examined the power supply position for December, 2009 as given in monthly reports at Central Electricity Authority's website (**Annexure-2**). These reports show that the State had an energy shortage of 53 MU i.e. 7.3% in December, 2009 and peak shortage of 240 MW i.e. 16.5% in the same month. The monthly generation reports for last three months (**Annexure-3**) downloaded from the website of Central Electricity Authority also confirms that the State generation for last three months has been around 75-85% of the planned generation for this year and is also of similar order in comparison to previous year. In fact, as per the data available on the website of India Meteorological Department the rainfall for current year has been much below the levels in the previous years. Further, State's own generation in the months of January, February and March 2010 has also been estimated to be only 230.6, 210.7 & 269.2 MUs (i.e. a total of 710.5 MUs) against the original targets of 278.25, 262.25 & 337.25 MUs (i.e. 877.75 MUs) owing to low discharges in the rivers as per UJVNL's recent projection submitted to the Commission. As such, the situation of shortages is not expected to improve in these three months. UPCL has also submitted a petition for approval of modifications in the RFP and PPA documents for case-I bidding for long term procurement of 300 MWs of power, which is being processed by the Commission. However, the same is not going to be of any help in the present crisis as the bid proposes the commencement of this power to take place w.e.f. 01.04.2011.

8. Taking note of the Power Supply position in the Northern region for 15.01.2010 as per NRLDC report, it is seen that against total requirement of 26.40 MU of the State of Uttarakhand, the demand met by the State was 23.90 MU which comprised of 14 MU from central sector, 6.60 MU from State's own generation and 3.30 MU of overdrawls. Despite these substantial overdrawls, the energy shortage faced by the State was as high as 2.50 MU/day. The position has been similar in last few days, when not only the State is continuously overdrawing for almost 24 hours of the day even after load shedding but

also the frequency of the grid is consistently low. Graphs downloaded from NRLDC website showing these overdrawals are given at **Annexure-4**.

9. The seriousness of the availability constraint can be seen from the fact that the overdraws by the State under low frequency (<49.20 Hz) have not been permitted by the Commission in its recent tariff order dated 23.10.2009. Overdraws below 49.2 Hz are prohibited and in complete violation of the provisions of Indian Electricity Grid Code (IEGC) dated 30.03.2009 which stipulates that *"..... provided that the States, through their SLDCs, shall always endeavour to restrict their net drawl from the Grid to within their respective drawl schedules, whenever the system frequency is below 49.5 Hz. When the frequency falls below 49.2 Hz, requisite load shedding shall be carried out the in the concerned State(s) to curtail the overdrawl."* A similar provision also exists in Regulation 4.2.2 (1) of the UERC (State Grid Code) Regulation, 2007 which provides for that *"The State Constituents shall endeavour to restrict their net drawl from the grid to within their respective drawal schedules whenever the system frequency is below 49.5 Hz. When the frequency falls below 49.0 Hz, requisite load shedding (manual) shall be carried out in the concerned Area/User to curtail the over-drawl."* The State Load Despatch Centre (SLDC) has sent copies of communications received from NRLDC in this regard for last few days, which require it to curtail load in the State in such adverse Grid conditions and warn for punitive action in case of violations. Some of such recent communications are placed at **Annexure-5**. The Commission feels that the provisions of IEGC and State Grid Code should be implemented without any deviation by UPCL to avoid any crippling/collapse of Grid irrespective of financial implication of the same. Accordingly, load shedding would be unavoidable in the present deficit scenario to prevent endangering of Grid.

10. In order to avoid inconvenience to the general public from unscheduled power cuts and to enable them to plan their routine according to scheduled power cut and also for maintaining the efficient supply, securing the equitable distribution of electricity in accordance with section 23 of the Electricity Act, 2003, the Commission feels it is expedient to approve scheduled load shedding plan in the current scenario.

11. After considering UPCL's proposal, the Commission in exercise of its power under section 23 of Electricity Act, 2003, has approved load shedding in the State as per the load shedding program submitted by Uttarakhand Power Corporation Limited with minor modifications (attached as **Annexure- 6** and **Annexure-7** to this Order) and with the following terms & conditions:

- a) Power cuts/restrictions shall be applied from 21.01.2010 to 31.03.2010. If so required, UPCL shall submit fresh proposal for load shedding in the State thereafter. UPCL shall inform this schedule to the consumers through a public notice in at least one English and two Hindi daily newspapers having wide circulation in the State. The notice must contain these terms and conditions apart from area wise roastering scheduled. The notified scheduled cut/restriction period shall be considered to be applicable only on or after the date of publication of such notice. UPCL shall also intimate the approved plan to the Industrial Associations individually immediately on receipt of this approval. Such Industrial Associations shall inform their respective members for compliance and restrict their drawals upto 15% of contracted load during the restriction period.
- b) Supply of industrial and independent feeders at 132 kV, 33kV or 11 kV emanating from Primary & Secondary sub-stations including SIDCUL Hardwar/Pantnagar shall not be cut. However, restriction in usage upto 15% of contracted load shall be applicable during the restricted hours (except the industrial consumers who have opted for supply during restricted hours at higher tariff) with applicable provisions of Tariff Order for violations. Irrespective of individual drawals on industrial feeder during restricted hours, UPCL shall be at a liberty to cut the feeder, if the situation so warrants, in case the overall loading on the feeder is more than 15% of the total contracted load of all the consumers on the feeder provided, however, that such feeder shall not be cut if continuous supply consumer(s) is/are connected to that feeder.
- c) Considering the gravity of present situation, no further consumer shall be allowed to opt for continuous supply during the period of Scheduled Restriction/Load Shedding.

- d) All possibilities of availability of the power for the State to be explored and UPCL should not underdraw from the Northern Grid under normal circumstances and will undertake load shedding in its area as per the approved load shedding plan only in case of shortfall in availability.
- e) Load shedding shall not be made for consumers not included in the scheduled programme. The approved load shedding program gives the ceiling of power cut and licensee should not impose restriction over and above these ceilings except under emergency conditions/instructions from NRLDC/Grid frequency being below 49.2 Hz.
- f) In case UPCL, while preparing day-ahead schedule or during the period of restriction/power cut, notes that there is a possibility of surplus in power during next day, relief shall be given to consumers of such period having longest period of power cut.
- g) The restriction period and corresponding penalty mechanism shall not be applicable for industrial consumers on mixed feeders subjected to such roastering. However, the mixed feeders on which continuous supply consumers are connected shall not be cut during scheduled/unscheduled load shedding.
- h) In case UPCL, upon getting direction from SLDC, is required to carry out unscheduled load shedding during scheduled restriction period approved by the Commission, UPCL shall be at liberty to carryout unscheduled load shedding of consumers, except for those industries who have opted for continuous supply, in whole of Uttarakhand or selective areas, as required under the prevailing conditions.
- i) In case of improvement in availability of power during scheduled/unscheduled power cuts, UPCL shall grant corresponding relief to consumers and gradually reduce load shedding for them. While doing so, UPCL shall ensure that imposition and reduction of load shedding is carried out in equitable manner across all consumers in all areas. However, owing to extreme weather conditions in hilly areas, preference of restoring supply shall be given to such areas. UPCL shall also ensure that it does not underdraw from the grid for more than two consecutive

time slots of 15 minutes during the period of load shedding. Record of Load Shedding shall be maintained at concerned Grid Sub-station. However, the evening/night hours of restriction on industrial consumer shall remain unaffected.

- j) UPCL shall implement provisions given in clause 6 (Restrictions in Usage) of Rate Schedule RTS 7 of tariff order dated 23.10.2010 for applying higher tariff on those industrial consumers, having continuous process and opting for continuous supply during restricted period as well as penalty on non-continuous consumers who use power beyond 15% during restricted hours.
- k) Restriction will be closely monitored and field staff shall implement load shedding programme without any deviation except as provided in this order. At the time of meter reading of all industrial consumers, UPCL shall take out full MRI dump with load survey and submit to the Commission by 15.04.2010.
- l) UPCL's vigilance team shall monitor and report instances of deviation from load shedding schedule directly to the Commission.
- m) Scheduled load shedding in areas which remained without power during the period of restriction due to overloading of system during peak hours or breakdown in PTCUL's system, shall be reduced suitably.
- n) UPCL may synchronise their maintenance shutdowns within the period of cut as far as possible.
- o) UPCL shall submit a report of load shedding, availability, drawl schedules and load actually drawn, to the Commission by 15.04.2010.
- p) UPCL shall maintain separate account of revenue billed on account of continuous supply surcharge/penalties and data on additional power purchase incurred during the period of restriction and submit the same to the Commission by the end of succeeding month.

-Sd-

(Anand Kumar)
Member

-Sd-

(V.J. Talwar)
Chairman

PROPOSED LOAD SHEDDING PLAN OF UPCL

Sl. No.	Areas of Load Shedding	Time period	Approximate relief in MW
1.	Rural area of Jwalapur, Sultanpur- Bhattipur, Roorkee, Mangalore, Landhora, Bhagwanpur, Laksar, Khanpur , Narsan., Khatima, Kichha, Sitarganj, Jaspur, Bazpur, Rudrapur, Kela Khera, Pipalia, ND Nagar, Ghari Nagi, Sarwarkhera & Laksar Town	06.15 Hrs. to 12.15 Hrs.	140 MW
2.	Landhora Town, Manglore Town, Bahadrad Town, Doiwala, Dhakrani, Vikasnagar, Selaqui, Sahaspur, Ramnagar Town, Jaspur Town, Khatima Town, Rudrapur Town, Gadarpur Town, Bazpur Town, Kichha Town & Sitarganj Town.	08.15 Hrs. to 12.15 Hrs.	70 MW
3.	All Hill areas of Kumoun & Garhwal Except Kotdwar.	12.00 Hrs. to 14.00 Hrs.	60 MW
4.	Kashipur Town, Haldwani Town & Roorkee Town	12.15 Hrs. to 16.15 Hrs.	80 MW
5.	Kotdwar	14.00 Hrs. to 17.00 Hrs.	15 MW
6.	Nainital & Mussoorie	14.00 Hrs. to 15.00 Hrs.	15 MW
7.	Dehradun Town	15.00 Hrs. to 17.00 Hrs.	100 MW
8*	Rural area of Jwalapur, Sultanpur Bhattipur, Roorkee, Mangalore, Landhora, Bhagwanpur, Laksar, Khanpur ,Narsan & Laksar Town	17.00 Hrs. to 19.30 Hrs.	80 MW
9*	Rural area of Khatima, Kichha, Sitarganj, Jaspur, Bazpur, Rudrapur, Kela Khera, Pipalia, ND Nagar, Ghari Nagi, Sarwarkhera.	19.30 Hrs. to 22.00 Hrs.	60 MW
10.	All Induction Furnaces & Rolling Mills	17.00 Hrs. to 24.00 Hrs.	80 MW
11.	All 132, 33 KV and 11 KV Industrial & Independent feeders emanating from Primary & Secondary Sub-stations including SIDCUL Hardwar, SIDCUL Pantnagar except the industrial consumers who have opted for supply during restricted hours at higher tariff.	18.00 Hrs. to 23.00 Hrs.	90 MW

Note: Hospitals & Water Works on independent feeders shall be exempted from load shedding.

* Schedule for load shedding at Sl. No. 8 & 9 above will be interchanged in each alternate week

POWER SUPPLY POSITION FOR DECEMBER, 2009
DOWNLOADED FROM THE WEBSITE OF CENTRAL ELECTRICITY AUTHORITY

विद्युत आपूर्ति स्थिति (पूर्वावलोकन) / Power Supply Position (Provisional)

ऑकडे मिलियन युनिट नेट / Figures in MU net

राज्य / State प्रणाली / System क्षेत्र / Region	दिसम्बर, 2009 / December, 2009				अप्रैल से दिसम्बर-2009 / April to December, 2009			
	आवश्यकता	उपलब्धता	अधिशेष कमी (-)		आवश्यकता	उपलब्धता	अधिशेष कमी (-)	
	Requirement (MU)	Availability (MU)	Surplus / Deficit (-) (MU)	(%)	Requirement (MU)	Availability (MU)	Surplus / Deficit (-) (MU)	(%)
चंडीगढ़ / Chandigarh	102	102	0	0.0	1,231	1,200	-31	-2.5
दिल्ली / Delhi	1,638	1,633	-5	-0.3	19,230	19,073	-157	-0.8
हरियाणा / Haryana	2,648	2,469	-179	-6.8	26,105	25,011	-1,094	-4.2
हिमाचल प्रदेश / Himachal Pradesh	576	620	44	7.6	5,112	4,995	-117	-2.3
जम्मू कश्मीर / Jammu & Kashmir	1,068	1,068	0	0.0	9,544	7,409	-2,135	-22.4
पंजाब / Punjab	3,010	2,673	-337	-11.2	36,548	31,359	-5,189	-14.2
राजस्थान / Rajasthan	4,115	4,090	-25	-0.6	31,975	31,007	-968	-3.0
उत्तर प्रदेश / Uttar Pradesh	6,112	4,823	-1,289	-21.1	57,371	44,539	-12,832	-22.4
उत्तराखण्ड / Uttarakhand	728	675	-53	-7.3	6,602	6,272	-330	-5.0
उत्तरी क्षेत्र / Northern Region	19,997	18,153	-1,844	-9.2	193,716	170,861	-22,855	-11.8
छत्तीसगढ़ / Chhattisgarh	609	600	-9	-1.5	8,663	8,433	-230	-2.7
गुजरात / Gujarat	6,272	5,725	-547	-8.7	52,054	50,416	-1,638	-3.1
मध्य प्रदेश / Madhya Pradesh	4,287	3,507	-780	-18.2	30,718	25,281	-5,437	-17.7
महाराष्ट्र / Maharashtra	10,920	8,620	-2,300	-21.1	91,475	75,117	-16,358	-17.9
दमन और दिउ / Daman & Diu	162	153	-9	-5.6	1,459	1,327	-132	-9.0
दादर व नगर हवेली / Dadra & Nagar Haveli	314	314	0	0.0	2,952	2,799	-153	-5.2
गोवा / Goa	282	279	-3	-1.1	2,290	2,232	-58	-2.5
पश्चिमी क्षेत्र / Western Region	22,846	19,198	-3,648	-16.0	189,612	165,606	-24,006	-12.7
आन्ध्र प्रदेश / Andhra Pradesh	6,335	6,061	-274	-4.3	57,795	54,066	-3,729	-6.5
कर्नाटक / Karnataka	4,033	3,688	-345	-8.6	32,476	30,194	-2,282	-7.0
केरल / Kerala	1,501	1,480	-21	-1.4	12,963	12,630	-333	-2.6
तमिल नाडु / Tamil Nadu	5,704	5,294	-410	-7.2	56,357	53,012	-3,345	-5.9
पुडुचेरी / Puducherry	156	154	-2	-1.3	1,592	1,468	-124	-7.8
लक्षद्वीप / Lakshadweep #	2	2	0	0	18	18	0	0
दक्षिणी क्षेत्र / Southern Region	17,729	16,677	-1,052	-5.9	161,183	151,370	-9,813	-6.1
बिहार / Bihar	1,148	858	-290	-25.3	8,891	7,474	-1,417	-15.9
दामोदर घाटी निगम / DVC	1,192	1,184	-8	-0.7	11,136	10,789	-347	-3.1
झारखण्ड / Jharkhand	523	469	-54	-10.3	4,311	4,041	-270	-6.3
उड़ीसा / Orissa	1,585	1,574	-11	-0.7	15,860	15,708	-152	-1.0
पश्चिम बंगाल / West Bengal	2,454	2,438	-16	-0.7	25,416	24,745	-671	-2.6
सिक्किम / Sikkim	33	33	0	0.0	270	229	-41	-15.2
अंडमान- निकोबार / Andaman- Nicobar #	20	15	-5	-25	180	135	-45	-25.0
पूर्वी क्षेत्र / Eastern Region	6,935	6,556	-379	-5.5	65,884	62,986	-2,898	-4.4
अरुणाचल प्रदेश / Arunachal Pradesh	36	30	-6	-16.7	299	241	-58	-19.4
असम / Assam	426	405	-21	-4.9	3,989	3,615	-374	-9.4
मणीपुर / Manipur	48	41	-7	-14.6	388	313	-75	-19.3
मेघालय / Meghalaya	136	125	-11	-8.1	1,164	1,000	-164	-14.1
मिजोरम / Mizoram	30	27	-3	-10.0	261	211	-50	-19.2
नागालैण्ड / Nagaland	44	42	-2	-4.5	393	342	-51	-13.0
त्रिपुरा / Tripura	70	63	-7	-10.0	666	592	-74	-11.1
उत्तर-पूर्वी क्षेत्र / North-Eastern Region	790	733	-57	-7.2	7,159	6,315	-844	-11.8
सम्पूर्ण भारत / All India	68,297	61,317	-6,980	-10.2	617,554	557,138	-60,416	-9.8

Lakshadweep and Andaman & Nicobar Islands are stand- alone systems, power supply position of these, does not form part of regional requirement and availability

Note : Both peak met and energy availability represent the net consumption (including the transmission losses) in the various States. Net export has been accounted for in the consumption of importing States.

अधिकतम मांग और अधिकतम उपलब्ध (पूर्वावलोकन) / Peak Demand and Peak Met (Provisional)

ऑकडे मेगा वाट नेट / Figures in MW net

राज्य / State प्रणाली / System क्षेत्र / Region	दिसम्बर, 2009 / December, 2009				अप्रैल से दिसम्बर-2009 / April to December, 2009			
	अधिकतम मांग Peak Demand	अधिकतम उपलब्ध Peak Met	अधिशेष/ कमी (-) Surplus / Deficit (-)		अधिकतम मांग Peak Demand	अधिकतम उपलब्ध Peak Met	अधिशेष/ कमी (-) Surplus / Deficit (-)	
	(MW)	(MW)	(MW)	(%)	(MW)	(MW)	(MW)	(%)
चंडीगढ़ / Chandigarh	191	191	0	0.0	308	308	0	0.0
दिल्ली / Delhi	3,008	2,966	-42	-1.4	4,502	4,408	-94	-2.1
हरियाणा / Haryana	5,484	4,748	-736	-13.4	6,133	5,678	-455	-7.4
हिमाचल प्रदेश / Himachal Pradesh	1,092	1,047	-45	-4.1	1,092	1,047	-45	-4.1
जम्मू कश्मीर / Jammu & Kashmir	1,597	1,597	0	0.0	2,150	1,597	-553	-25.7
पंजाब / Punjab	5,381	4,847	-534	-9.9	9,786	7,407	-2,379	-24.3
राजस्थान / Rajasthan	5,949	5,891	-58	-1.0	6,487	6,143	-344	-5.3
उत्तर प्रदेश / Uttar Pradesh	10,544	7,593	-2,951	-28.0	10,856	8,563	-2,293	-21.1
उत्तराखंड / Uttarakhand	1,454	1,214	-240	-16.5	1,454	1,313	-141	-9.7
उत्तरी क्षेत्र / Northern Region	33,210	28,852	-4,358	-13.1	37,159	31,439	-5,720	-15.4
छत्तीसगढ़ / Chhattisgarh	2,442	2,391	-51	-2.1	2,819	2,703	-116	-4.1
गुजरात / Gujarat	9,528	8,520	-1,008	-10.6	10,406	9,515	-891	-8.6
मध्य प्रदेश / Madhya Pradesh	6,987	5,968	-1,019	-14.6	6,987	5,970	-1,017	-14.6
महाराष्ट्र / Maharashtra	17,905	13,619	-4,286	-23.9	18,981	14,292	-4,689	-24.7
दमन और दिउ / Daman & Diu	249	237	-12	-4.8	280	255	-25	-8.9
दादर व नगर हवेली / Dadra & Nagar Haveli	464	464	0	0.0	509	464	-45	-8.8
गोवा / Goa	467	444	-23	-4.9	469	444	-25	-5.3
पश्चिमी क्षेत्र / Western Region*	37,158	30,680	-6,478	-17.4	37,631	31,177	-6,454	-17.2
आन्ध्र प्रदेश / Andhra Pradesh	9,736	9,309	-427	-4.4	11,325	10,294	-1,031	-9.1
कर्नाटक / Karnataka	6,502	6,048	-454	-7.0	7,196	6,352	-844	-11.7
केरल / Kerala	2,985	2,855	-130	-4.4	3,045	2,896	-149	-4.9
तमिल नाडु / Tamil Nadu	9,914	9,019	-895	-9.0	10,158	9,675	-483	-4.8
पुडुचेरी / Puducherry	271	258	-13	-4.8	325	282	-43	-13.2
लक्षद्वीप / Lakshadweep #	6	6	0	0	6	6	0	0
दक्षिणी क्षेत्र / Southern Region	27,094	25,911	-1,183	-4.4	29,216	26,445	-2,771	-9.5
बिहार / Bihar	1,862	1,285	-577	-31.0	2,249	1,492	-757	-33.7
दामोदर घाटी निगम / DVC	1,833	1,828	-5	-0.3	1,892	1,892	0	0.0
झारखण्ड / Jharkhand	792	792	0	0.0	1,088	947	-141	-13.0
उड़ीसा / Orissa	2,707	2,675	-32	-1.2	3,188	3,120	-68	-2.1
पश्चिम बंगाल / West Bengal	5,066	4,844	-222	-4.4	5,386	5,368	-18	-0.3
सिक्किम / Sikkim	80	80	0	0.0	84	84	0	0.0
अंडमान-निकोबार / Andaman- Nicobar #	40	32	-8	-20	40	32	-8	-20
पूर्वी क्षेत्र / Eastern Region	11,981	11,169	-812	-6.8	12,960	12,384	-576	-4.6
अरुणाचल प्रदेश / Arunachal Pradesh	78	72	-6	-7.7	95	78	-17	-17.9
असम / Assam	884	833	-51	-5.8	920	845	-75	-8.2
मणिपुर / Manipur	100	96	-4	-4.0	111	98	-13	-11.7
मेघालय / Meghalaya	275	217	-58	-21.1	275	238	-37	-13.5
मिजोरम / Mizoram	69	64	-5	-7.2	69	64	-5	-7.2
नागालैण्ड / Nagaland	100	96	-4	-4.0	100	96	-4	-4.0
त्रिपुरा / Tripura	138	138	0	0.0	176	173	-3	-1.7
उत्तर-पूर्वी क्षेत्र / North-Eastern Region	1,678	1,434	-244	-14.5	1,760	1,445	-315	-17.9
सम्पूर्ण भारत / All India	111,121	98,046	-13,075	-11.8	116,261	101,609	-14,652	-12.6

Lakshadweep and Andaman & Nicobar Islands are stand-alone systems, power supply position of these, does not form part of regional requirement and availability

Note : Both peak met and energy availability represent the net consumption (including the transmission losses) in the various States. Net export has been accounted for in the consumption of importing States

MONTHLY GENERATION REPORTS FOR LAST THREE MONTHS
DOWNLOADED FROM THE WEBSITE OF CENTRAL ELECTRICITY AUTHORITY

ENERGYWISE - PERFORMANCE STATUS ALL INDIA - REGIONWISE

PERIOD: OCT-2009 VIS-A-VIS OCT-2008 AND APR-OCT-2009 VIS-A-VIS APR-OCT-2008

SECTOR WISE DETAILS - STATE SECTOR (HYDRO)

Category / Sectors / Utility	Monitored Capacity (MW)	Target Apr 2009 to Mar 2010	GENERATION (GWH)									
			OCT-2009					APRIL 2009 - OCT-2009				
			PROGRAM	ACTUAL *	ACTUAL	% OF PRO- GRAM (4/3)	% OF LAST YEAR (4/5)	PROGRAM	ACTUAL *	ACTUAL	% OF PROGRAM (9/8)	% OF LAST YEAR (9/10)
					SAME MONTH 2008 - 09					SAME PERIOD 2008 - 09		
1	2	3	4	5	6	7	8	9	10	11	12	
STATE SECTOR HYDRO												
HPGC	62.40			35.53	36.08		98.48		172.16	196.27		87.72
HPSEB	450.45	1612.00	127.00	145.56	184.33	114.61	78.97	1337.00	1396.88	1656.63	104.48	84.32
J&KPDC	758.49	3346.00	199.00	228.84	125.23	114.99	182.74	2669.00	2658.08	728.23	99.59	365.01
PSEB	1142.35	3752.00	259.00	242.20	338.99	93.51	71.45	2682.00	2497.80	2770.02	93.13	90.17
RRVUNL	430.00	898.00	52.00	29.15	20.66	56.06	141.09	166.00	50.09	213.45	30.17	23.47
UJVNL	1281.85	4570.00	432.00	362.35	470.73	83.88	76.98	3159.00	2926.63	3207.19	92.64	91.25
UPJVNL	525.80	1380.00	144.00	111.52	152.48	77.44	73.14	829.00	599.73	711.24	72.34	84.32
CSPGCL	137.00	310.00	35.00	52.65	69.27	150.43	76.01	225.00	258.76	211.91	115.00	122.11
GSECL	545.00	979.00	86.00	37.96	46.07	44.14	82.40	513.00	269.11	317.54	52.46	84.75
MAHAGENCO	2586.30	3848.00	292.00	312.15	173.99	106.90	179.41	2049.00	2678.43	2378.70	130.72	112.60
MPPGCL	915.00	2500.00	438.00	221.05	283.55	50.47	77.96	1374.00	1241.39	1456.80	90.35	85.21
NVDA	10.00			0.00	0.00		0.00		0.00	0.00		0.00
SSNNL	1450.00	3483.00	378.00	257.54	161.19	68.13	159.77	2195.00	1537.90	1520.99	70.06	101.11
APGENCO	3751.35	9012.00	1197.00	860.12	1031.62	71.86	83.38	5822.00	3666.72	5523.55	62.98	66.38
KPCL	3620.60	11843.00	1033.00	1264.81	1037.06	122.44	121.96	6955.00	6503.59	8249.63	93.51	78.83
KSEB	1835.50	6769.00	591.00	660.28	509.19	111.72	129.67	4003.00	3780.65	3833.99	94.45	98.61
TNEB	2162.70	4700.00	479.00	791.65	524.18	165.27	151.03	2808.00	3286.02	3543.65	117.02	92.73
A&N ADM	5.25			0.31	1.13		27.43		6.18	7.17		86.19
BSHPC	44.90			0.00	6.22		0.00		18.33	37.79		48.50
JSEB	130.00	152.00	25.00	42.36	20.16	169.44	210.12	116.00	102.77	211.27	88.59	48.64
OHPC	2011.50	6041.00	682.00	387.00	594.14	56.74	65.14	3996.00	2995.55	3703.79	74.96	80.88
SIKKIM	32.00			4.56	4.26		107.04		26.71	30.05		88.89
WBSEDCL	1056.50	948.00	88.00	101.86	74.53	115.75	136.67	611.00	638.86	536.55	104.56	119.07
APGPCL	100.00	450.00	62.00	57.79	63.05	93.21	91.66	356.00	323.10	317.51	90.76	101.76
DOHPD	18.50			0.00	2.20		0.00		9.63	13.46		71.55
MEGEB	185.20	530.00	65.00	60.36	67.90	92.86	88.90	302.00	368.70	326.73	122.09	112.85
NAGALAND	24.00			0.00	7.90		0.00		39.90	41.90		95.23
TRIPURA	15.00			5.62	5.73		98.08		26.75	37.91		70.56
TOTAL STATE	25287.64	67123.00	6664.00	6273.22	6011.84	94.14	104.35	42167.00	38080.42	41783.92	90.31	91.14

* PROVISIONAL BASED ON ACTUAL-CUM-ASSESSMENT

ENERGYWISE - PERFORMANCE STATUS ALL INDIA - REGIONWISE

PERIOD: NOV-2009 VIS-A-VIS NOV-2008 AND APR-NOV-2009 VIS-A-VIS APR-NOV-2008

SECTOR WISE DETAILS - STATE SECTOR (HYDRO)

Category / Sectors / Utility	Monitored Capacity (MW)	Target Apr 2009 to Mar 2010	GENERATION (GWH)									
			NOV-2009					APRIL 2009 - NOV-2009				
			PROGRAM	ACTUAL *	ACTUAL SAME MONTH	% OF PRO- GRAM (4/3)	% OF LAST YEAR (4/5)	PROGRAM	ACTUAL *	ACTUAL SAME PERIOD	% OF PROGRAM (9/8)	% OF LAST YEAR (9/10)
					2008 - 09					2008 - 09		
	1	2	3	4	5	6	7	8	9	10	11	12
STATE SECTOR HYDRO												
HPGC	62.40			17.77	26.72		66.50		181.81	222.99		81.53
HPSEB	450.45	1612.00	59.00	88.95	104.07	150.76	85.47	1396.00	1484.20	1760.70	106.32	84.30
J&KPDC	758.49	3346.00	142.00	36.55	164.93	25.74	22.16	2811.00	2724.53	893.16	96.92	305.04
PSEB	1142.35	3752.00	266.00	188.70	305.61	70.94	61.75	2948.00	2691.26	3075.63	91.29	87.50
RRVJNL	430.00	898.00	177.00	82.18	143.87	46.43	57.12	343.00	131.96	357.32	38.47	36.93
UJVNL	1281.85	4570.00	282.00	250.56	306.50	88.85	81.75	3441.00	3170.95	3513.69	92.15	90.25
UPJVNL	525.80	1380.00	115.00	69.38	105.69	60.33	65.64	944.00	665.88	816.93	70.54	81.51
CSPGCL	137.00	310.00	25.00	5.43	6.13	21.72	88.58	250.00	266.90	218.04	106.76	122.41
GSECL	545.00	979.00	106.00	32.53	57.63	30.69	56.45	619.00	303.74	375.17	49.07	80.96
MAHAGENCO	2586.30	3848.00	331.00	411.78	236.25	124.40	174.30	2380.00	3066.14	2614.95	128.83	117.25
MPPGCL	915.00	2500.00	409.00	94.12	332.88	23.01	28.27	1783.00	1308.54	1789.68	73.39	73.12
NVDA	10.00			0.00	0.00		0.00		0.00	0.00		0.00
SSNNL	1450.00	3483.00	334.00	81.63	262.61	24.44	31.08	2529.00	1592.36	1783.60	62.96	89.28
APGENCO	3751.35	9012.00	719.00	409.89	449.51	57.01	91.19	6541.00	4044.70	5973.06	61.84	67.72
KPCL	3620.60	11843.00	991.00	927.58	871.41	93.60	106.45	7946.00	7456.99	9121.04	93.85	81.76
KSEB	1835.50	6769.00	548.00	598.14	418.18	109.15	143.03	4551.00	4373.11	4252.17	96.09	102.84
TNEB	2162.70	4700.00	437.00	542.22	515.51	124.08	105.18	3245.00	3830.76	4059.16	118.05	94.37
A&N ADM	5.25			0.30	0.96		31.25		7.51	8.13		92.37
BSHPC	44.90			0.00	1.35		0.00		23.62	39.14		60.35
JSEB	130.00	152.00	10.00	6.25	4.10	62.50	152.44	126.00	97.91	215.37	77.71	45.46
OHPC	2011.50	6041.00	511.00	189.43	479.25	37.07	39.53	4507.00	3182.06	4183.04	70.60	76.07
SIKKIM	32.00			3.60	3.60		100.00		27.62	33.65		82.08
WBSEDCL	1056.50	948.00	76.00	78.50	82.24	103.29	95.45	687.00	722.65	618.79	105.19	116.78
APGPCL	100.00	450.00	36.00	27.22	39.25	75.61	69.35	392.00	350.08	356.76	89.31	98.13
DOHPD	18.50			0.00	1.97		0.00		11.88	15.43		76.99
MEGEB	185.20	530.00	59.00	40.37	53.27	68.42	75.78	361.00	406.11	380.00	112.50	106.87
NAGALAND	24.00			0.00	10.50		0.00		50.40	52.40		96.18
TRIPURA	15.00			6.58	4.64		141.81		33.39	42.55		78.47
TOTAL STATE	25287.64	67123.00	5633.00	4189.66	4988.63	74.38	83.98	47800.00	42207.06	46772.55	88.30	90.24

* PROVISIONAL BASED ON ACTUAL-CUM-ASSESSMENT

ENERGYWISE - PERFORMANCE STATUS ALL INDIA - REGIONWISE

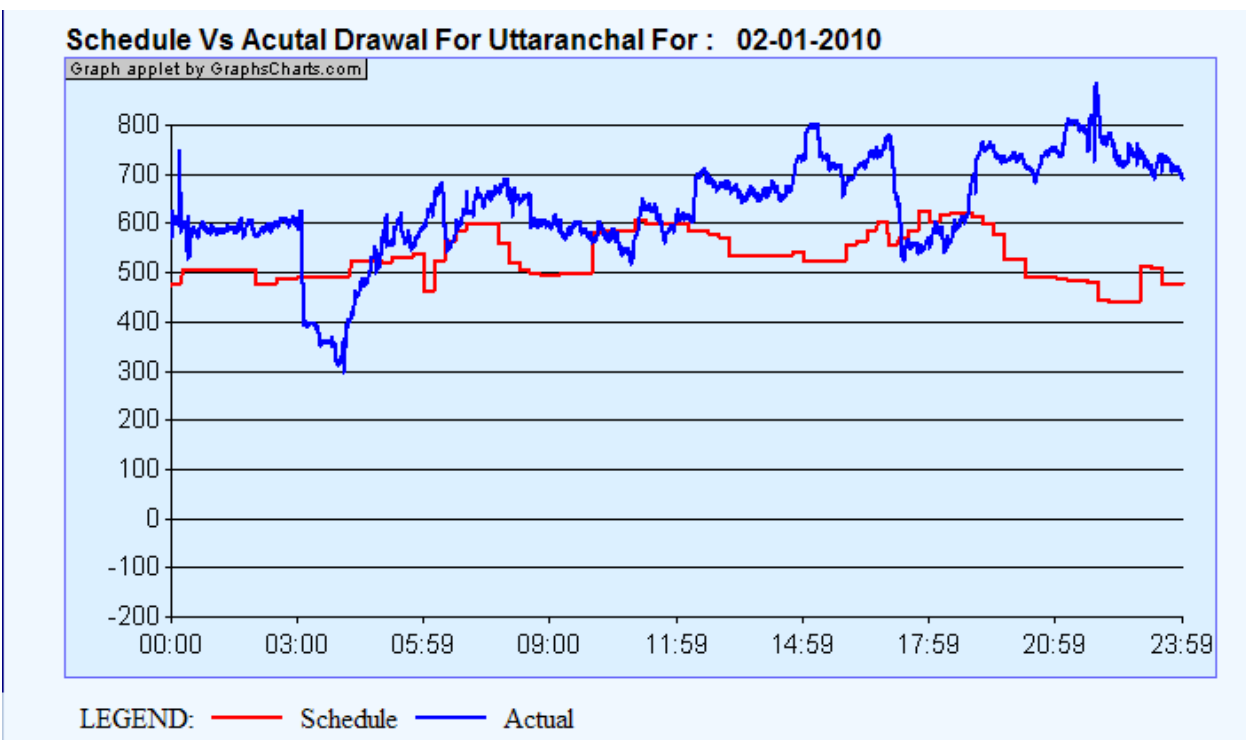
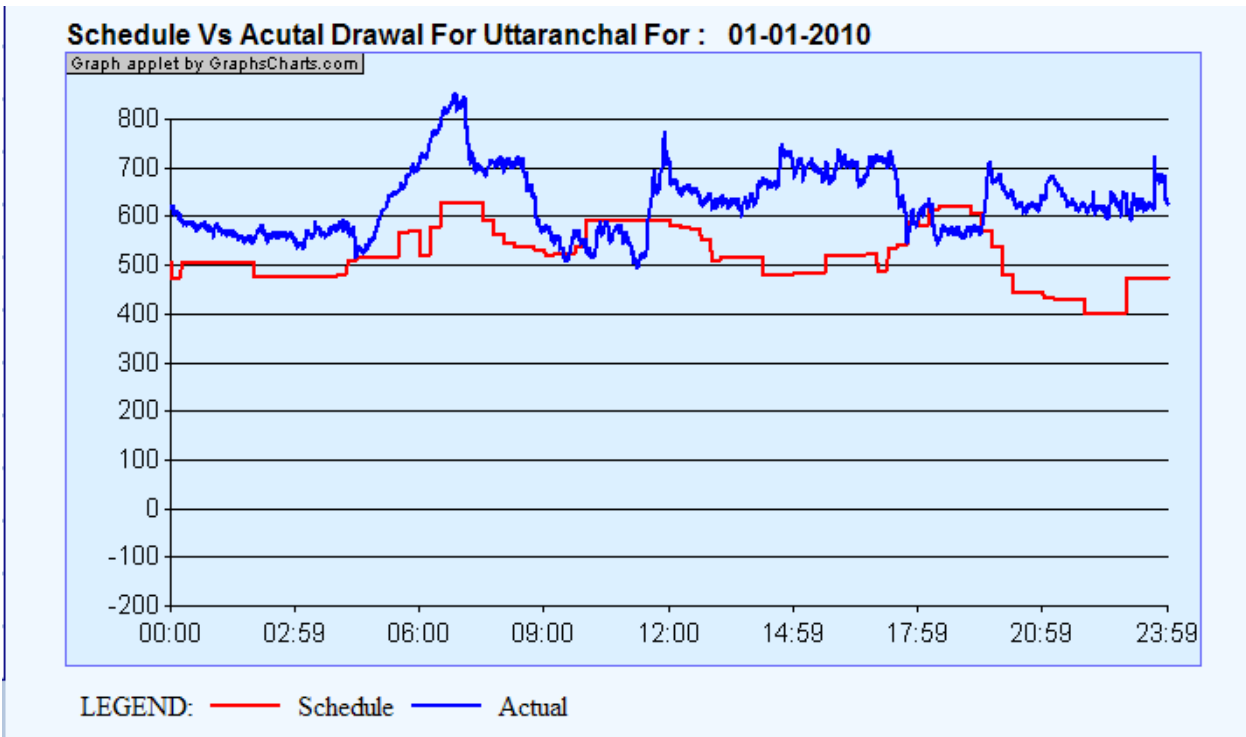
PERIOD: DEC-2009 VIS-A-VIS DEC-2008 AND APR-DEC-2009 VIS-A-VIS APR-DEC-2008

SECTOR WISE DETAILS - STATE SECTOR (HYDRO)

Category / Sectors / Utility	Monitored Capacity (MW)	Target Apr 2009 to Mar 2010	GENERATION (GWH)									
			DEC-2009					APRIL 2009 - DEC-2009				
			PROGRAM	ACTUAL *	ACTUAL SAME MONTH	% OF PRO- GRAM (4/3)	% OF LAST YEAR (4/5)	PROGRAM	ACTUAL *	ACTUAL SAME PERIOD	% OF PROGRAM (9/8)	% OF LAST YEAR (9/10)
					2008 - 09					2008 - 09		
	1	2	3	4	5	6	7	8	9	10	11	12
STATE SECTOR HYDRO												
HPGC	62.40			14.51	20.25		71.65		196.09	243.24		80.62
HPSEB	450.45	1612.00	49.00	59.92	80.80	122.29	74.16	1445.00	1547.80	1841.50	107.11	84.05
J&KPDC	758.49	3346.00	122.00	114.87	170.33	94.16	67.44	2933.00	2969.36	1063.49	101.24	279.21
PSEB	1142.35	3752.00	225.00	246.65	341.89	109.62	72.14	3173.00	2936.78	3417.52	92.56	85.93
RRVUNL	430.00	898.00	178.00	119.17	147.15	66.95	80.99	521.00	253.26	504.47	48.61	50.20
UJVNL	1281.85	4570.00	289.00	234.95	293.28	81.30	80.11	3730.00	3405.43	3806.97	91.30	89.45
UPJVNL	525.80	1380.00	127.00	72.43	63.62	57.03	113.85	1071.00	740.93	880.55	69.18	84.14
CSPGCL	137.00	310.00	20.00	3.62	5.70	18.10	63.51	270.00	268.44	223.74	99.42	119.98
GSECL	545.00	979.00	95.00	28.10	34.65	29.58	81.10	714.00	333.76	409.82	46.75	81.44
MAHAGENCO	2586.30	3848.00	332.00	231.78	280.47	69.81	82.64	2712.00	3300.73	2895.42	121.71	114.00
MPPGCL	915.00	2500.00	296.00	120.47	230.75	40.70	52.21	2079.00	1432.77	2020.43	68.92	70.91
NVDA	10.00			0.00	0.00		0.00		0.00	0.00		0.00
SSNNL	1450.00	3483.00	346.00	155.12	162.56	44.83	95.42	2875.00	1747.02	1946.16	60.77	89.77
APGENCO	3751.35	9012.00	599.00	320.92	272.61	53.58	117.72	7140.00	4363.06	6245.67	61.11	69.86
KPCL	3620.60	11843.00	1019.00	1146.83	873.01	112.54	131.37	8965.00	8592.79	9994.05	95.85	85.98
KSEB	1835.50	6769.00	546.00	549.93	377.62	100.72	145.63	5097.00	4919.72	4629.79	96.52	106.26
TNEB	2162.70	4700.00	442.00	487.63	374.54	110.32	130.19	3687.00	4330.86	4433.70	117.46	97.68
A&N ADM	5.25			0.31	0.88		35.23		8.66	9.01		96.12
BSHPC	44.90			0.00	1.03		0.00		25.34	40.17		63.08
JSEB	130.00	152.00	10.00	7.24	0.00	72.40	0.00	136.00	104.56	215.37	76.88	48.55
OHPC	2011.50	6041.00	434.00	58.35	376.99	13.44	15.48	4941.00	3242.07	4560.03	65.62	71.10
SIKKIM	32.00			3.72	3.71		100.27		31.15	37.36		83.38
WBSIEDCL	1056.50	948.00	73.00	100.01	89.69	137.00	111.51	760.00	817.88	708.48	107.62	115.44
APGPCL	100.00	450.00	24.00	19.92	24.09	83.00	82.69	416.00	370.29	380.85	89.01	97.23
DOHPD	18.50			0.00	1.82		0.00		13.10	17.25		75.94
MEGEB	185.20	530.00	58.00	38.09	50.15	65.67	75.95	419.00	444.53	430.15	106.09	103.34
NAGALAND	24.00			0.00	8.90		0.00		59.90	61.30		97.72
TRIPURA	15.00			5.80	3.07		188.93		38.21	45.62		83.76
TOTAL STATE	25287.64	67123.00	5284.00	4140.34	4289.56	78.36	96.52	53084.00	46494.49	51062.11	87.59	91.05

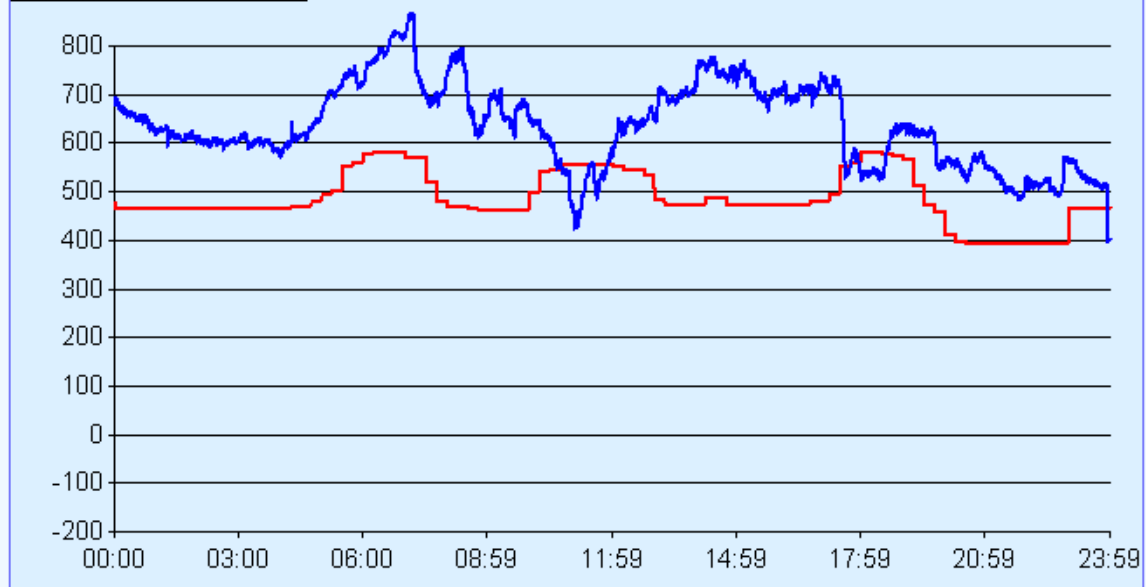
* PROVISIONAL BASED ON ACTUAL-CUM-ASSESSMENT

GRAPHS DOWNLOADED FROM NRLDC WEBSITE SHOWING OVERDRAWS



Schedule Vs Actual Drawal For Uttaranchal For : 03-01-2010

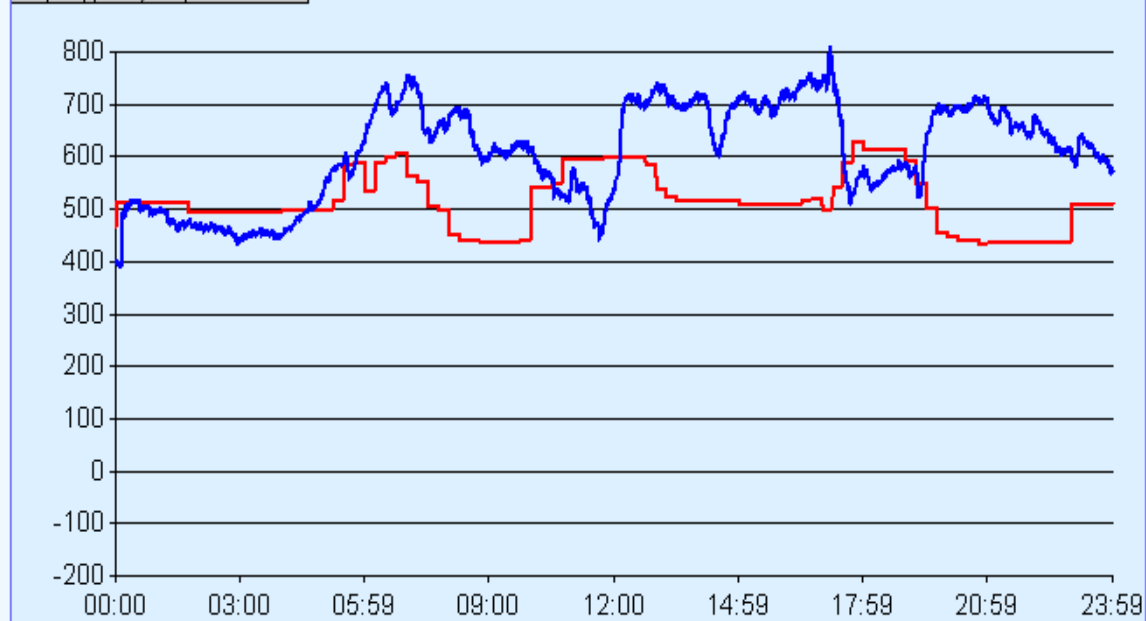
Graph applet by GraphsCharts.com



LEGEND: — Schedule — Actual

Schedule Vs Actual Drawal For Uttaranchal For : 04-01-2010

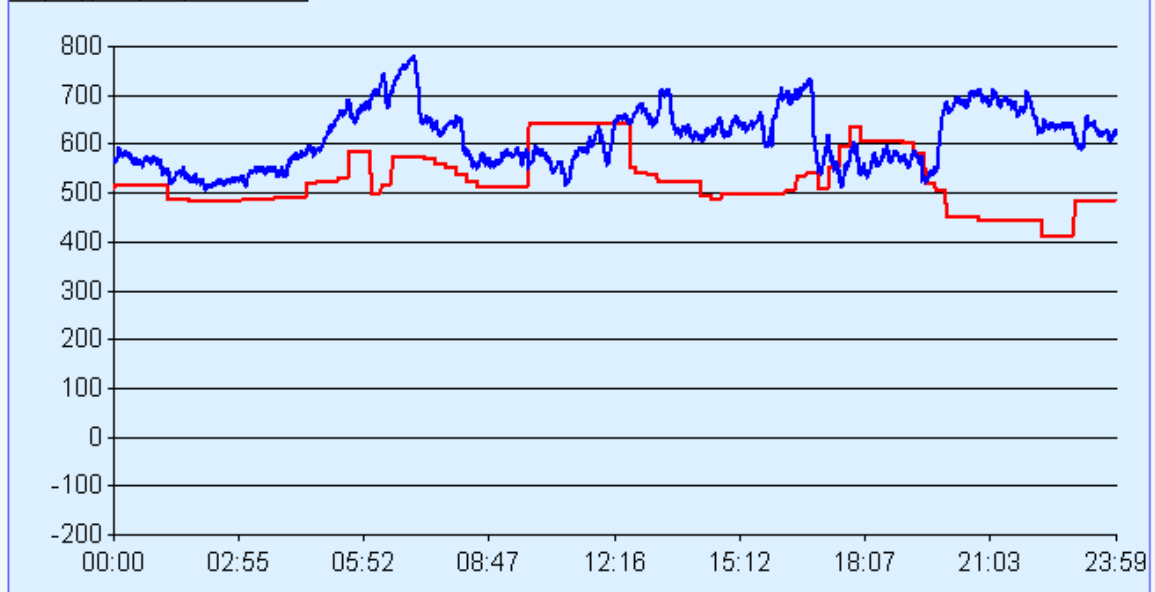
Graph applet by GraphsCharts.com



LEGEND: — Schedule — Actual

Schedule Vs Actual Drawal For Uttaranchal For : 05-01-2010

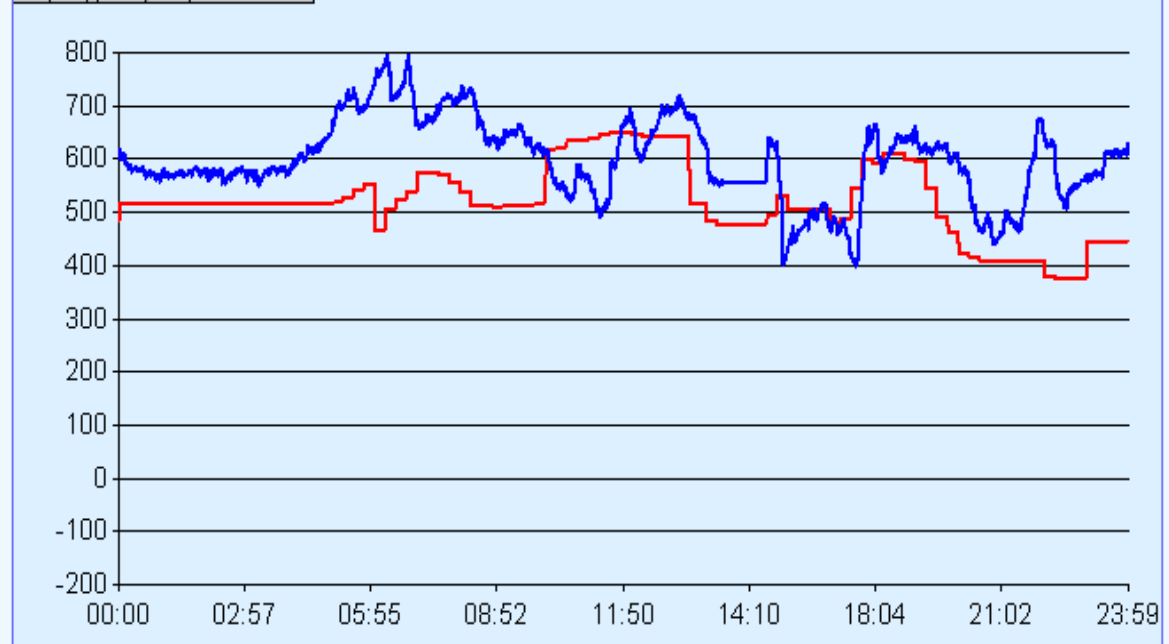
Graph applet by GraphsCharts.com



LEGEND: — Schedule — Actual

Schedule Vs Actual Drawal For Uttaranchal For : 06-01-2010

Graph applet by GraphsCharts.com



LEGEND: — Schedule — Actual

COMMUNICATION FROM NRLDC

Message A

Page 1 of 1

**NORTHERN REGIONAL LOAD DESPATCH CENTRE
POWER GRID CORPORATION OF INDIA LIMITED**
18- A, Shaheed Jeet Singh Sansarwal Marg, Katwaria Sarai New Delhi-110016
Tel: 26519406/26523869, FAX: 26852747/26853082, <http://www.nrlc.org>

MESSAGE A

Reference: NRLDC/OD/Message-A/3049

Date: 15-Jan-2010 Time : 0747 Hrs

FROM: SHIFT INCHARGE
NRLDCTO: SHIFT INCHARGE, SLDC
UttarakhandCC: Dy. General Manager (SO)
Uttarakhand*Sub: Low frequency Operation and Request to restrict the drawal within the schedule.*

At present the system frequency is below 49.5 hz. the over drawal by Uttarakhand state control area is as follow:

Quantum of overdrawal

Frequency

240 MW

49.25 Hz

Your specific reference is invited to Clause 5.4.2 (a) and clause 6.4.7 of the IEGC which states that "the Constituents shall endeavour to restrict their net drawal from the Grid within their respective drawal schedules, whenever the system frequency is below 49.5 Hz. When the frequency falls below 49.20 Hz., requisite load shedding (manual) shall be carried out in the concerned State(s) to curtail the over drawal."

You are, therefore, requested to take necessary measures so that system frequency is maintained at 49.5 Hz. and above


Shift Incharge
NRLDC

**NORTHERN REGIONAL LOAD DESPATCH CENTRE
POWER GRID CORPORATION OF INDIA LIMITED**

18- A, Shaheed Jeet Singh Sansanwal Marg, Katwaria Sarai New Delhi-110016
Tel.: 26519408/26523869, FAX: 26852747/26853082, <http://www.nrlcdc.org>

MESSAGE A

Reference: NRLDC/OD/Message-A/2998

Date: 12-Jan-2010 Time : 0951 Hrs

FROM: SHIFT INCHARGE
NRLDC

TO: SHIFT INCHARGE, SLDC
Uttarakhand

CC: Dy. General Manager (SO)
Uttarakhand

Sub: Low frequency Operation and Request to restrict the drawal within the schedule.

At present the system frequency is below 49.5 hz. the over drawal by Uttarakhand state control area is as
below.

Quantum of overdrawal

142 MW

Frequency

49.25 Hz

Your specific reference is invited to Clause 5.4.2 (a) and clause 6.4.7 of the IEGC which states that "the Constituents shall endeavour to restrict their net drawal from the Grid within their respective drawal schedules, whenever the system frequency is below 49.5 Hz. When the frequency falls below 49.20 Hz., requisite load shedding (manual) shall be carried out in the concerned State(s) to curtail the over drawal."

You are, therefore, requested to take necessary measures so that system frequency is maintained at 49.5 Hz. and above.


Shift Incharge
NRLDC

NORTHERN REGIONAL LOAD DESPATCH CENTRE
POWER GRID CORPORATION OF INDIA LIMITED
 18-A, Shaheed Jeet Singh Sansanwal Marg, Katwaria Sarai New Delhi-110016
 Tel.: 26519406/26523889, FAX: 26852747/26853062, <http://www.nrlco.org>

MESSAGE A

Reference: NRLDC/OD/Message-A/2946

Date: 09-Jan-2010 Time: 1544 Hrs

FROM: SHIFT INCHARGE
 NRLDC

TO: SHIFT INCHARGE, SLDC
 Uttarakhand

CC: Dy. General Manager (SO)
 Uttarakhand

Sub: Low frequency Operation and Request to restrict the drawal within the schedule.

At present the system frequency is below 49.5 Hz. the over drawal by Uttarakhand state control area is as follow:

Quantum of overdrawal

234 MW

Frequency

49.00 Hz

Your specific reference is invited to Clause 5.4.2 (a) and clause 5.4.7 of the IEGC which states that "the Constituents shall endeavour to restrict their net drawal from the Grid within their respective drawal schedules, whenever the system frequency is below 49.5 Hz. When the frequency falls below 49.20 Hz., requisite load shedding (manual) shall be carried out in the concerned State(s) to curtail the over drawal."

You are, therefore, requested to take necessary measures so that system frequency is maintained at 49.5 Hz. and above.

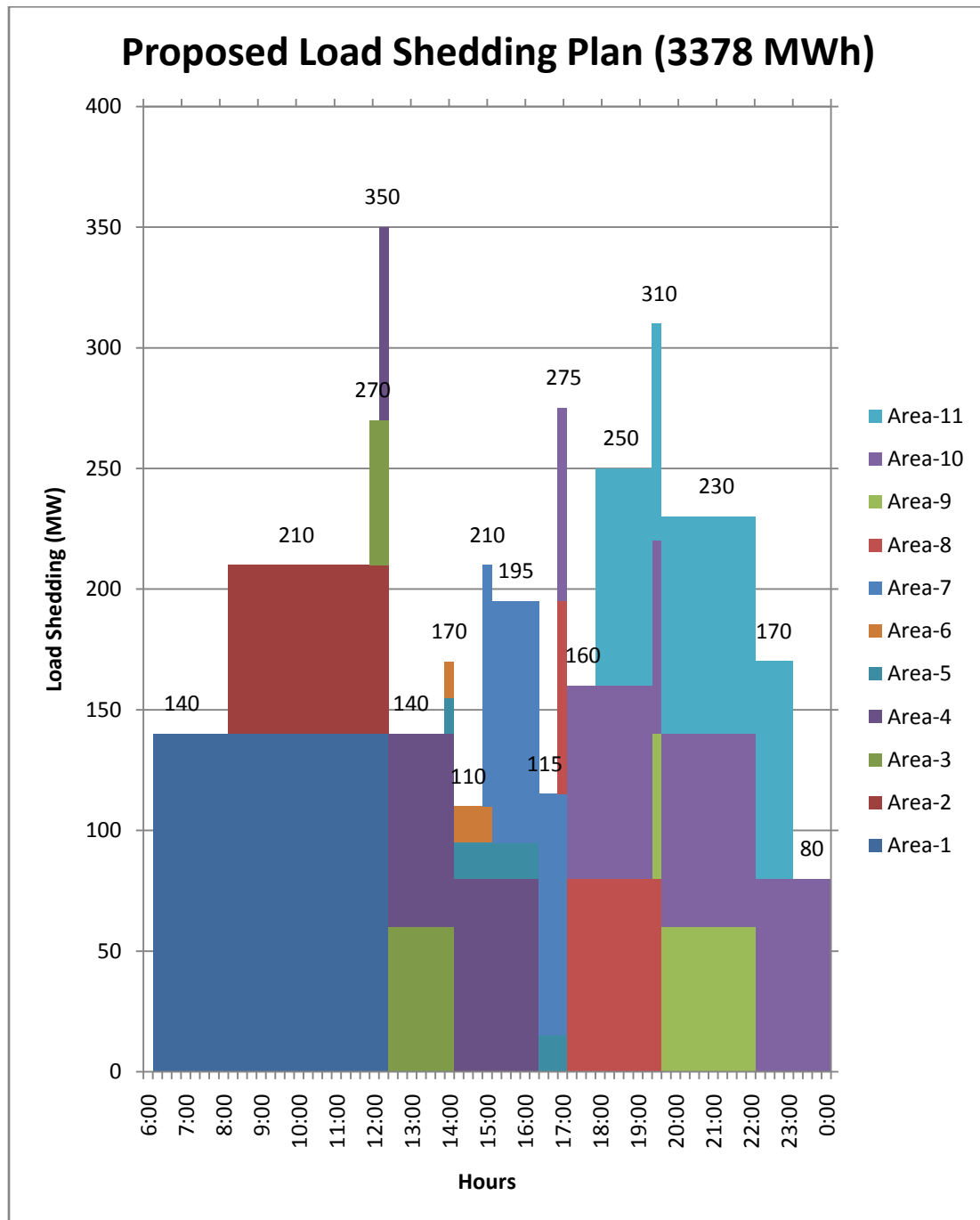

 Shift Incharge
 NRLDC

APPROVED SCHEDULE FOR RESTRICTION/LOAD SHEDDING
FOR PERIOD 21.01.2010 TO 31.03.2010

Sl. No.	Areas of Load Shedding	Time period	Approximate relief in MW
1.	Rural area of Jwalapur, Sultanpur- Bhattipur, Roorkee, Mangalore, Landhora, Bhagwanpur, Laksar, Khanpur , Narsan., Khatima, Kichha, Sitarganj, Jaspur, Bazpur, Rudrapur, Kela Khera, Pipalia, ND Nagar, Ghari Nagi, Sarwarkhera & Laksar Town	06.15 Hrs. to 11.15 Hrs.	140 MW
2.	Landhora Town, Manglore Town, Bahadrabad Town, Doiwala, Dhakrani, Vikasnagar, Selaqui, Sahaspur, Ramnagar Town, Jaspur Town, Khatima Town, Rudrapur Town, Gadarpur Town, Bazpur Town, Kichha Town & Sitarganj Town.	08.15 Hrs. to 12.15 Hrs.	70 MW
3.	All Hill areas of Kumoun & Garhwal Except Kotdwar.	11.00 Hrs. to 13.00 Hrs	60 MW
4.	Kashipur Town, Haldwani Town & Roorkee Town	11.15 Hrs. to 15.15 Hrs	80 MW
5.	Kotdwar	13.00 Hrs. to 17.00 Hrs.	15 MW
6.	Nainital & Mussoorie	13.00 Hrs. to 15.00 Hrs.	15 MW
7.	Dehradun Town	14.00 Hrs. to 17.00 Hrs.	100 MW
8*	Rural area of Jwalapur, Sultanpur Bhattipur, Roorkee, Mangalore, Landhora, Bhagwanpur, Laksar, Khanpur ,Narsan & Laksar Town	17.00 Hrs. to 19.30 Hrs.	80 MW
9*	Rural area of Khatima, Kichha, Sitarganj, Jaspur, Bazpur, Rudrapur, Kela Khera, Pipalia, ND Nagar, Ghari Nagi, Sarwarkhera.	19.30 Hrs. to 22.00 Hrs.	60 MW
10.	All Induction Furnaces & Rolling Mills	17.00 Hrs. to 24.00 Hrs.	80 MW
11.	All 132, 33 KV and 11 KV Industrial & Independent feeders emanating from Primary & Secondary Sub-stations including SIDCUL Hardwar, SIDCUL Pantnagar except the industrial consumers who have opted for supply during restricted hours at higher tariff.	18.00 Hrs. to 23.00 Hrs.	90 MW

Note: Hospitals & Water Works on independent feeders shall be exempted from load shedding.

* Schedule for load shedding at Sl. No. 8 & 9 above will be interchanged in each alternate week

PROPOSED AND APPROVED SCHEDULE FOR RESTRICTION/LOAD SHEDDING

Approved Load Shedding Plan (3368 MWh)

