

**Central Electricity Authority
Operation Performance Monitoring Division**

No.CEA/OPM/PPI/6/1/2012

Dated .07.2013

Subject: Electricity Generation during the month of June'13 and during the period April'13- June'13.

HIGHLIGHTS

ALL INDIA GENERATION

All India Generation for the month was 76 BU compared to 77 BU last year giving a negative growth of 1.25% and it is 95% of the target. During the period April 2013 to June, 2013, All India Generation was 238 BU compared to 231 BU over the last year giving a growth of 2.84% and it is 101.46% of the target.

THERMAL GENERATION

Thermal Generation for the month was 61 BU compared to 62 BU last year giving a negative growth of 2.40% and it is 92.53% of the target. During the period April 2013 to June, 2013, Thermal Generation was 198 BU compared to 193 BU over the last year giving a growth of 2.88% and it is 99.22% of the target.

NUCLEAR

Nuclear Generation for the month was 2.82 BU compared to 2.75 BU last year giving a growth of 2.84% and it is 112.37% of the target. During the period April, 2013 to June, 2013, Nuclear Generation was 112.37 BU compared to 8.41 BU over the last year giving a negative growth of 9.00% and it is 97.14% of the target.

HYDRO

Hydro Generation for the month was 12 BU compared to 11.38 BU last year giving a growth of 5.44% and it is 106.65% of the target. During the period April, 2013 to June, 2013, Hydro Generation was 31.28 BU compared to 29.50 BU over the last year giving a growth of 6.04% and it is 101.81 %of the target.

BHUTAN IMPORT

Bhutan Import for the month was 0.33 BU compared to 0.49 BU last year giving a negative growth of 33.44% and it is 61.18% of the target. During the period April, 2013 to June, 2013, Bhutan Import was 0.49 BU compared to 0.49 BU over the last year giving a growth of 0.43% and it is 91.95% of the target.

PLANT LOAD FACTOR (PLF)

The Plant Load Factor (PLF) for the month in regard to Thermal is 64.63 and for Nuclear Station it is 82.05 and for Gas 22.51 and for the period from April, 2013 to June, 2013 the PLF is 68.75,73.33,29.38 for Thermal, Nuclear and Gas respectively.

Category-wise Gross Electricity Generation performance:

The category-wise details of electricity generation in the country during June'13 are given below:

| Category | Programmed (BU) | Actual Generation* (BU) | % of Program | Actual Generation (June'13)(BU) | Growth (%) |
|---------------|-----------------|-------------------------|--------------|-----------------------------------|--------------|
| Thermal | 65.60 | 60.70 | 92.53 | 62.19 | -2.40 |
| Nuclear | 2.51 | 2.82 | 112.37 | 2.75 | 2.84 |
| Hydro | 11.25 | 12.00 | 106.65 | 11.38 | 5.44 |
| Bhutan Import | 0.54 | 0.33 | 61.18 | 0.49 | -33.44 |
| Total | 79.89 | 75.85 | 94.94 | 76.80 | -1.25 |

The category-wise details of electricity generation in the country during April'13-June'13 are given below:

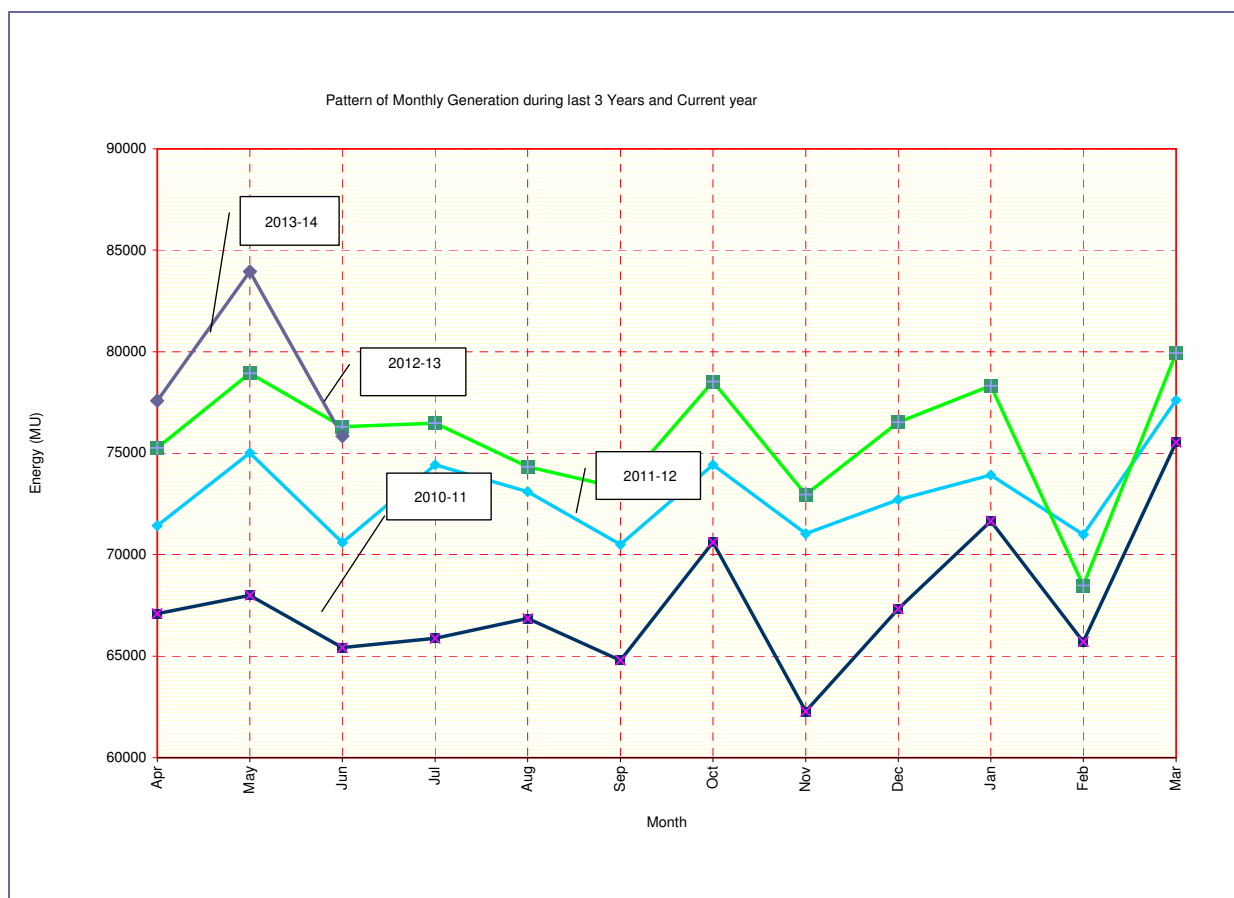
| Category | Program (BU) | Actual Generation* (BU) | % of Program | Actual Generation same period Last year (BU) | Growth (%) |
|---------------|---------------|-------------------------|--------------|--|-------------|
| Thermal | 199.75 | 198.19 | 99.22 | 192.65 | 2.88 |
| Nuclear | 7.88 | 7.65 | 97.14 | 8.41 | -9.00 |
| Hydro | 30.72 | 31.28 | 101.81 | 29.50 | 6.04 |
| Bhutan Import | 1.02 | 0.94 | 91.95 | 0.94 | -0.43 |
| Total | 239.37 | 238.07 | 99.46 | 231.50 | 2.84 |

Category wise Plant load factor of Plants

| Type | Fuel | June'13 | <u>April'13-June'13</u> |
|------------------|--|---------|-------------------------|
| Thermal Stations | Coal/Lignite | 64.63 | 68.75 |
| Nuclear Station | Nuclear | 82.05 | 73.33 |
| Gas Station | Gas(includes gas, Liquid fuels, diesel) | 22.51 | 29.38 |

Month wise Generation performance in the country during the period April'13- June'13 for last 3years:

The pattern of monthly energy generation in the country during the last 3 years and during the current financial year is graphically represented below:-



Thermal Generation performance:

Region wise performance

Region wise details of thermal generation during June'13 and April'13 - June'13 are as follows:-

| Region | Thermal Generation performance in June'13 | | Thermal Generation performance during April'13-June'13 | |
|--------------------------|---|-------------------------|--|-------------------------|
| | % of Programme | % of last year's actual | % of Programme | % of last year's actual |
| Northern | 85.73 | 93.71 | 93.92 | 101.92 |
| Western | 91.29 | 96.54 | 100.01 | 103.76 |
| Southern | 101.39 | 97.70 | 107.85 | 103.47 |
| Eastern | 95.57 | 105.15 | 95.49 | 101.49 |
| North Eastern | 92.44 | 99.43 | 107.05 | 110.35 |
| Total (All India) | 92.53 | 97.60 | 99.22 | 102.88 |

Fuel-wise performance

The fuel-wise details of thermal generation for the month of June'13 are given below:-

| Particulars | Programme (BU) | Actual Generation* (BU) | Excess(+)/Shortfall(-) (BU) | Generation Last Year (BU) | Growth (%) | PLF (%) | |
|---------------------------|----------------|-------------------------|-----------------------------|---------------------------|-------------|--------------|--------------|
| | | | | | | June'13 | June'12 |
| Coal | 59.01 | 54.51 | -4.50 | 52.78 | 2.93 | 64.28 | 72.00 |
| Lignite | 2.76 | 2.82 | 0.06 | 2.69 | 4.86 | 73.08 | 77.50 |
| Gas Turbine (gas) | 3.59 | 3.23 | -0.36 | 6.26 | -48.40 | 22.51 | 50.91 |
| Gas Turbine (liquid fuel) | 0.08 | 0.02 | -0.06 | 0.02 | 37.34 | | |
| Diesel | 0.16 | 0.12 | -0.04 | 0.16 | -27 | | |
| Total (Thermal) | 65.60 | 60.70 | -4.90 | 62.19 | -2.4 | 64.63 | 72.21 |

* Provisional figures

The fuel-wise details of the cumulative thermal generation for the period from April'13 to June'13 are given below:

| Particulars | Programme (BU) | Actual * Generation (MU) | Excess(+)/Shortfall(-) BU | Generation Last Year (MU) | Growth (%) | PLF (%) | |
|---------------------------|----------------|--------------------------|---------------------------|---------------------------|-------------|--------------|--------------|
| | | | | | | this year | last year |
| Coal | 180.03 | 175.69 | -4.35 | 162.89 | 7.74 | 68.40 | 73.76 |
| Lignite | 8.39 | 9.01 | 0.63 | 8.24 | 9.32 | 77.00 | 78.33 |
| Gas Turbine (gas) | 10.61 | 12.43 | 1.82 | 20.52 | -39.42 | 29.38 | 52.83 |
| Gas Turbine (liquid fuel) | 0.23 | 0.44 | 0.21 | 0.14 | 214.72 | | |
| Diesel | 0.49 | 0.63 | 0.13 | 0.57 | 8.74 | | |
| Total (Thermal) | 199.75 | 198.19 | -1.55 | 192.36 | 2.84 | 68.75 | 73.93 |

* Provisional figures

Loss of generation due to various constraints and subsequently reasons for low PLF during the period April 2013-June'2013 are furnished in following table:

| Sl. No. | Category | Energy loss in the Period of April- April'13(BU)* |
|---|---------------------------------------|---|
| Shortfall in Generation - Reasons | | |
| 1 | Shortage of coal | 2.27 |
| 2 | Wet/poor coal quality | 0.22 |
| 3 | Backing down/shut down (Low schedule) | 6.8 |
| 4 | Transmission constraints | 0.06 |
| 5 | Gas shortage | 24.14 |
| Total Loss of thermal generation on a/c of above reasons(BU) | | 33.4 |

*Provisional Figure

A statement indicating the thermal generating stations suffering shortfall in generation exceeding 100 MU during the period April- June'13 along with the reasons thereof is attached at **Annex-I**.

Availability of Coal: During the current financial year 2013.14, the anticipated gap between the requirement and availability of domestic coal was estimated around 70 MT. To need the shortage of 46 MT of coal was to be met through import of coal, for which all the utilities have been advised to take necessary action. In addition to this 24 MT of coal would be needed to operate power plants designed on imported coal. The status of import of coal by various utilities (as on the last day of June'13) is given in **Annex-II**.

During the month of June 2013 only 82 % of the total requirement of coal was available. The thermal power stations received about 34.5 MT of coal against the demand of 43.1 MT. On 30.06.2013, 12 TPS had critical coal stock i.e. less than 7 days. Out of these 6 TPS were having coal stock of less than 4 days.

Best Performing Power Plants: During the month of June'13, 17 numbers of coal / Lignite based TPS with an aggregate installed capacity of 13915 MW achieved PLF more than 90%. The list is enclosed at **Annex-III**.

Gas based Generation

- Region-wise average PLF of gas based power plants is given below:

June'13

| Region | June'13 | | June'12 | |
|------------------|-------------------|--------------|-----------------|--------------|
| | Generation (BU) * | PLF (%) | Generation (BU) | PLF (%) |
| Northern | 1.14 | 33.17 | 1.88 | 58.95 |
| Western | 1.06 | 16.37 | 2.68 | 45.14 |
| Southern | 0.70 | 19.71 | 1.47 | 41.24 |
| Eastern | 0.00 | 0.00 | 0.00 | 0.00 |
| North Eastern | 0.35 | 41.41 | 0.35 | 60.55 |
| All India | 3.25 | 22.51 | 6.38 | 47.63 |

| Region | April'13_June'13 | | April'12_June'12 | |
|------------------|-------------------|--------------|------------------|--------------|
| | Generation (BU) * | PLF (%) | Generation (BU) | PLF (%) |
| Northern | 3.72 | 35.60 | 5.52 | 57.14 |
| Western | 4.99 | 25.41 | 8.82 | 48.92 |
| Southern | 2.97 | 27.41 | 5.34 | 49.39 |
| Eastern | 0.00 | 0.00 | 0.00 | 0.00 |
| North Eastern | 1.20 | 47.18 | 1.09 | 62.15 |
| All India | 12.87 | 29.38 | 20.76 | 51.12 |

Nuclear Generation

Plant wise performances of nuclear generation during June'13 are as under:

| Stations | Capacity (MW) | Nuclear Generation performance in June'13 | | PLF % | PLF % |
|----------------------|---------------|---|---------------|--------------|--------------|
| | | % of programme | % Growth | June '13 | June '12 |
| KAIGA | 880 | 116.78 | 123.73 | 92.16 | 74.48 |
| KAKRAPARA | 440 | 101.89 | 93.37 | 86.84 | 93.01 |
| MADRAS A.P.S. | 440 | 48.48 | 51.14 | 38.26 | 74.81 |
| NARORA A.P.S. | 440 | 94.35 | 111.59 | 74.45 | 66.72 |
| RAJASTHAN A.P.S. | 1180 | 145.95 | 127.61 | 90.53 | 70.95 |
| TARAPUR | 1400 | 117.13 | 90.35 | 83.20 | 92.08 |
| TOTAL NUCLEAR | 4780 | 112.37 | 102.84 | 82.05 | 79.79 |

Following are the details for plant wise performance of nuclear generation during April'13 to June'13:

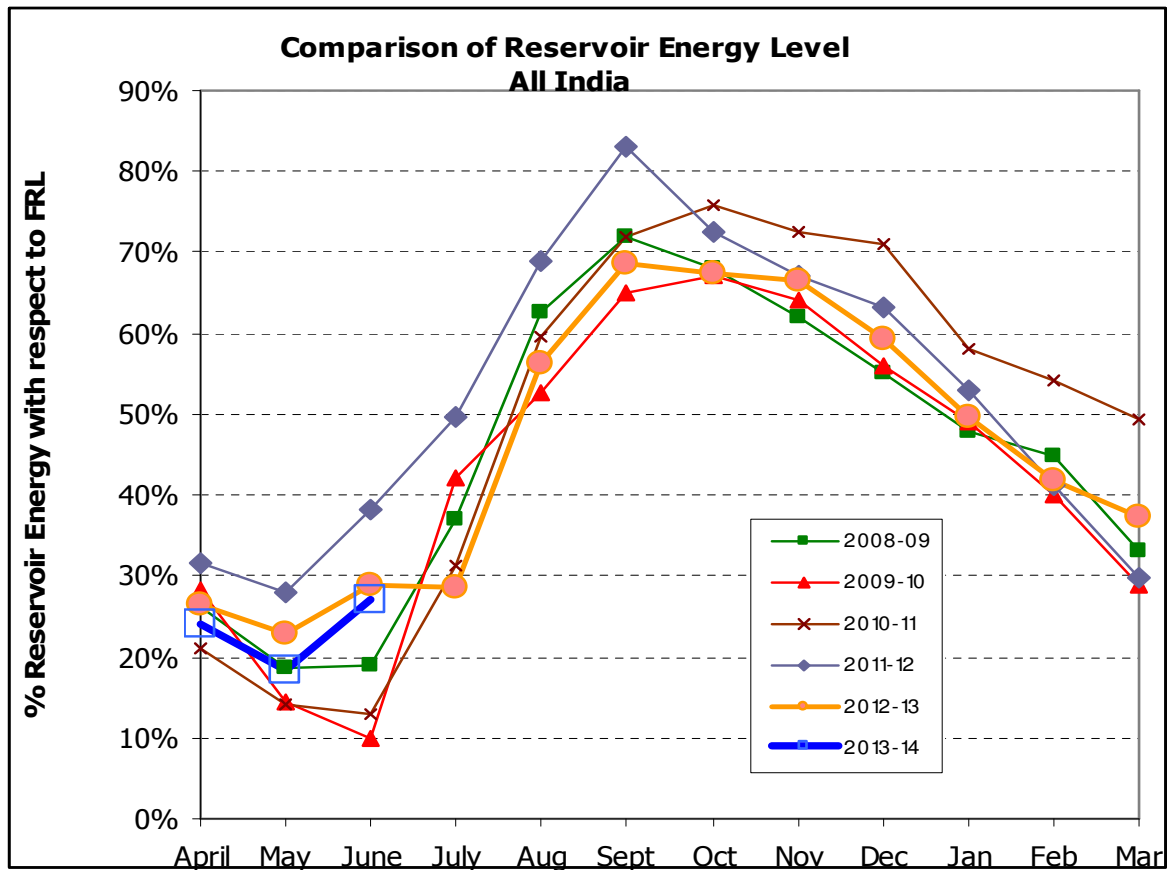
| Stations | Capacity (MW) | Nuclear Generation performance in April'13 - June'13 | | PLF % | |
|----------------------|---------------|--|-----------|---------------------|--------------------|
| | | % of programme | % Growth | April'13 - June '13 | April'12- June '12 |
| KAIGA | 880 | 111.75 | 117.22 | 87.91 | 75 |
| KAKRAPARA | 440 | 111.72 | 96.73 | 95.1 | 98.31 |
| MADRAS A.P.S. | 440 | 48.62 | 55.28 | 38.25 | 69.19 |
| NARORA A.P.S. | 440 | 87.78 | 111.86 | 69.06 | 61.74 |
| RAJASTHAN A.P.S. | 1180 | 123.43 | 116.2 | 89.61 | 77.12 |
| TARAPUR | 1400 | 78.95 | 61.53 | 55.95 | 90.93 |
| TOTAL NUCLEAR | 4780 | 97.14 | 91 | 73.33 | 80.58 |

Hydro Generation

- Region wise hydro generation performance:-

| Region | Hydro Generation performance in June '13 | | Hydro Generation performance during April'13- June '13 | |
|--------------------------|--|-------------------------|--|-------------------------|
| | % of Programme | % of last year's actual | % of Programme | % of last year's actual |
| Northern | 102.26 | 101.71 | 102.00 | 104.53 |
| Western | 164.83 | 117.92 | 135.85 | 110.94 |
| Southern | 92.29 | 85.44 | 78.45 | 80.81 |
| Eastern | 118.94 | 178.26 | 113.78 | 187.15 |
| North Eastern | 105.11 | 110.24 | 107.11 | 128.44 |
| Total (All India) | 106.65 | 105.44 | 101.81 | 106.04 |

- **Reservoir levels:** The storage position of the 31 major reservoirs in the country is regularly monitored in CEA. These reservoirs feed hydroelectric stations having total installed generating capacity of 18,273 MW which constitute about 46 % of the hydro capacity in the country.
- The storage position of these reservoirs as compared to that obtained during the previous four years is shown graphically below:



- During 2012-13, share of energy generation from these reservoir based plants was 45.35 % in terms of total annual hydroelectric energy generation in the country. The reservoirs positions in the five regions of the country are summarized below:-

| Region | No. of schemes | Energy Content at FRL (BU) | Energy Content on 30.06.2013 | | Energy Content Last Year on the same day 30.06.2012 | | % variation in energy content with respect to same day last year |
|-------------------|----------------|----------------------------|------------------------------|--------------------|---|--------------------|--|
| | | | (BU) | % of Energy at FRL | (BU) | % of Energy at FRL | |
| Northern | 7 | 6.01 | 2.00 | 33% | 2.17 | 36% | -8% |
| Western | 6 | 8.42 | 2.50 | 30% | 4.15 | 49% | -40% |
| Southern | 12 | 15.81 | 4.37 | 28% | 2.79 | 18% | 57% |
| Eastern | 5 | 3.30 | 0.73 | 22% | 0.42 | 13% | 74% |
| North Eastern | 1 | 0.25 | 0.25 | 100% | 0.25 | 100% | 0% |
| Total (All India) | 31 | 34 | 9.85 | 29% | 9.77 | 29% | 1% |

- The storage positions of each of 31 reservoirs in the country and corresponding energy content as on 30.06.2013 along with the comparison of the same with the last day of March'11 are given at **Annex-IV & V**.

Statement of Shortfall in generation (more than 100 MU) vis-a vis targets of Coal/Lignite power plants during April-June'13

| Station | Organisation | Capacity (MW) | Program (MU) | Actual (MU) | Shortfall (MU) | Reasons |
|------------------------------|--------------|---------------|--------------|-------------|----------------|---|
| AKRIMOTA LIG TPS | GMDCL | 250 | 360 | 121.81 | 238.19 | Lignite feeding problem/Vintage units |
| ANPARA C TPS | LAPPL | 1200 | 1820 | 1534.33 | 285.67 | Coal Shortage |
| BAKRESWAR TPS | WBPDCL | 1050 | 2065 | 1826.46 | 238.54 | RSD/BTL |
| BANDEL TPS | WBPDCL | 450 | 605 | 440.53 | 164.47 | RSD |
| BELLARY TPS | KPCL | 1000 | 1770 | 1461.63 | 308.37 | Fire in cable gallery |
| BHUSAWAL TPS | MAHAGENCO | 1470 | 1960 | 1360.04 | 599.96 | Misc. Force Outage |
| BINA TPS | BPSCL | 500 | 464 | 262.54 | 201.46 | RSD |
| BOKARO 'B' TPS | DVC | 630 | 845 | 620.89 | 224.11 | Uneconomical Operation & Tube Leakage |
| CHANDRAPUR(MAHARASHTRA) STPS | MAHAGENCO | 2340 | 4270 | 3494.05 | 775.95 | Boiler inspection/ recertification/ BTL |
| CHANDRAPURA(DVC) TPS | DVC | 1250 | 1331 | 1225.3 | 105.70 | Water wall tube leakage/ Uneconomical operation |
| D.P.L. TPS | DPL | 690 | 742 | 571.2 | 170.80 | Misc. Problem |
| DSPM TPS | CSPGCL | 500 | 980 | 503.7 | 476.30 | LSD |
| FARAKKA STPS | NTPC Ltd. | 2100 | 3172 | 2949.59 | 222.41 | Misc. Force Outage & Coal Shortage |
| GANDHI NAGAR TPS | GSECL | 870 | 994 | 771.24 | 222.76 | RSD |
| GND TPS(BHATINDA) | PSPCL | 440 | 609 | 450.37 | 158.63 | RSD |
| HARDUAGANJ TPS | UPRVUNL | 720 | 888 | 627.11 | 260.89 | Misc. Force Outage |
| INDIRA GANDHI STPP | APCPL | 1500 | 1725 | 1169.94 | 555.06 | RSD |
| KAHALGAON TPS | NTPC Ltd. | 2340 | 3738 | 3212.97 | 525.03 | Coal shortage/feeding Problem |
| KAKATIYA TPS | APGENCO | 500 | 983 | 872.98 | 110.02 | Water wall tube leakage |
| KHAPARKHEDA TPS | MAHAGENCO | 1340 | 1990 | 1852.06 | 137.94 | water wall tube leakage/ Furnace draft abnormal |
| KOLAGHAT TPS | WBPDCL | 1260 | 1857 | 1641.08 | 215.92 | RSD & Furnance Draft Abnormal |
| MAHATMA GANDHI TPS | JhPL(HR) | 1320 | 1892 | 759.67 | 1132.33 | LSD |
| MAITHON RB TPP | MPL | 1050 | 1856 | 1712.63 | 143.37 | PG Test, Water wall tube leakage |
| MAUDA TPS | NTPC Ltd. | 1000 | 546 | 0 | 546.00 | Non stabilised |
| MUZAFFARPUR TPS | K.B.U.N.L | 220 | 124 | 0 | 124.00 | R&M |
| PANIPAT TPS | HPGCL | 1360 | 2362 | 1667.61 | 694.39 | RSD/STL |
| PARLI TPS | MAHAGENCO | 1170 | 1062 | 0 | 1062.00 | Misc. Force Outage |
| PATHADI TPP | LANCO | 600 | 900 | 558.73 | 341.27 | LSD/Misc. |
| RAICHUR TPS | KPCL | 1720 | 2768 | 2606.23 | 161.77 | Misc. Force Outages |
| RAJIV GANDHI TPS | HPGCL | 1200 | 1297 | 1027.37 | 269.63 | unscheduled/AOH |
| ROPAR TPS | PSPCL | 1260 | 2285 | 2088.86 | 196.14 | RSD |
| SAGARDIGHI TPS | WBPDCL | 600 | 1180 | 666.55 | 513.45 | RSD |
| SATPURA TPS | MPPGCL | 1330 | 1577 | 1241.47 | 335.53 | Misc. Force Outages |

| Station | Organisation | Capacity (MW) | Program (MU) | Actual (MU) | Shortfall (MU) | Reasons |
|-------------------|--------------|---------------|--------------|-------------|----------------|------------------------|
| SIPAT STPS | NTPC Ltd. | 2980 | 5306 | 4440.42 | 865.58 | Coal handling problem |
| SURATGARH TPS | RRVUNL | 1500 | 2615 | 2413.92 | 201.08 | Turbine vibration high |
| TALCHER STPS | NTPC Ltd. | 3000 | 5607 | 4760.95 | 846.05 | Coal shortage |
| TROMBAY TPS | TATA PCL | 1400 | 2205 | 1879.41 | 325.59 | RSD |
| UKAI TPS | GSECL | 1350 | 1493 | 1204.04 | 288.96 | Misc. Force Outages |
| WANAKBORI TPS | GSECL | 1470 | 2429 | 1679.36 | 749.64 | RSD |
| WARDHA WARORA TPP | WPCL | 540 | 936 | 774.42 | 161.58 | ID Fan/ RSD |

IMPORT OF COAL DURING THE YEAR 2013-14

| Sl.No. | Board/Utility | Annual Target of Imported Coal | Receipt at TPSs during April - May 13 | Receipt at TPSs during June 2013 | Available at Port | Total | Fig in MT | |
|--|-------------------|--------------------------------|---------------------------------------|----------------------------------|-------------------|---------------|-------------------|----------------|
| | | | | | | | Prorata Receipt % | Prorata Target |
| | 1 | 2 | 3 | 4 | 5 | 6=(3+4+5) | 7 | |
| POWER PLANTS DESIGNED ON INDIGENEOUS COAL | | | | | | | | |
| 1 | HPGCL | 1.500 | 0.251 | 0.040 | 0.000 | 0.291 | 78 | 0.38 |
| 2 | RVUNL | 2.000 | 0.154 | 0.057 | 0.000 | 0.211 | 42 | 0.50 |
| 3 | UPRVUNL | 0.500 | 0.000 | 0.000 | 0.000 | 0.000 | 0 | 0.13 |
| 4 | MPGCL | 2.000 | 0.109 | 0.037 | 0.000 | 0.146 | 29 | 0.50 |
| 5 | Torrent AEC | 0.500 | 0.041 | 0.084 | 0.000 | 0.125 | 100 | 0.13 |
| 6 | GSECL | 1.500 | 0.032 | 0.008 | 0.029 | 0.069 | 18 | 0.38 |
| 7 | MAHA GENCO | 3.500 | 0.733 | 0.122 | 0.000 | 0.855 | 98 | 0.88 |
| 8 | Reliance | 0.600 | 0.160 | 0.055 | 0.000 | 0.215 | 143 | 0.15 |
| 9 | AP GENCO | 2.500 | 0.310 | 0.044 | 0.000 | 0.354 | 57 | 0.63 |
| 10 | TNEB | 2.400 | 0.899 | 0.507 | 0.000 | 1.406 | 234 | 0.60 |
| 11 | KPCL | 1.500 | 0.196 | 0.103 | 0.000 | 0.299 | 80 | 0.38 |
| 12 | DVC | 3.000 | 0.507 | 0.248 | 0.000 | 0.755 | 101 | 0.75 |
| 13 | CESC | 0.400 | 0.074 | 0.000 | 0.000 | 0.074 | 74 | 0.10 |
| 14 | WBPDCL | 1.000 | 0.003 | 0.000 | 0.000 | 0.003 | 1 | 0.25 |
| 15 | NTPC | 16.600 | 2.107 | 1.999 | 0.848 | 4.954 | 119 | 4.15 |
| 16 | NTPC(JV)IndGandhi | 2.000 | 0.150 | 0.075 | 0.000 | 0.225 | 45 | 0.50 |
| 17 | Reliance ROSA | 1.500 | 0.079 | 0.231 | 0.000 | 0.310 | 83 | 0.38 |
| 18 | TATA(MAITHONRB) | 0.500 | 0.000 | 0.000 | 0.000 | 0.000 | 0 | 0.13 |
| 19 | CLP | 1.700 | 0.488 | 0.313 | 0.000 | 0.801 | 188 | 0.43 |
| 20 | LANCO(Anpara) | 1.500 | 0.107 | 0.030 | 0.000 | 0.137 | 37 | 0.38 |
| 21 | CSEB | 0.300 | 0.000 | 0.000 | 0.000 | 0.000 | 0 | 0.08 |
| 22 | J P BINA | 0.500 | 0.008 | 0.001 | 0.000 | 0.009 | 7 | 0.13 |
| 23 | VEDANTA(Star.) | 0.500 | 0.160 | 0.069 | 0.000 | 0.229 | 183 | 0.13 |
| 24 | NTPC(JV) VELLUR | 1.000 | 0.101 | 0.055 | 0.000 | 0.156 | 62 | 0.25 |
| 25 | ADANI(Tirora) | 1.000 | 0.096 | 0.135 | 0.000 | 0.231 | 92 | 0.25 |
| | Emco Energy | 0.000 | 0.018 | 0.013 | 0.000 | 0.031 | | 0.00 |
| | NTPC SAIL | 0.000 | 0.054 | 0.054 | 0.000 | 0.108 | | 0.00 |
| | Sub Total | 50.000 | 6.837 | 4.280 | 0.877 | 11.994 | 96 | 12.50 |
| POWER PLANTS DESIGNED ON IMPORTED COAL | | | | | | | | |
| 26 | TROMBAY | 2.300 | 0.508 | 0.209 | 0.000 | 0.717 | 125 | 0.58 |
| 27 | JSW ENERGY | 6.600 | 1.269 | 0.443 | 0.000 | 1.712 | 104 | 1.65 |
| 28 | ADANI POWER | 9.000 | 2.187 | 0.887 | 0.000 | 3.074 | 137 | 2.25 |
| 29 | UDUPPI | 2.400 | 0.712 | 0.404 | 0.000 | 1.116 | 186 | 0.60 |
| 30 | MUNDRA UMPP | 7.200 | 2.443 | 0.811 | 0.000 | 3.254 | 181 | 1.80 |
| 31 | ESSAR SALAYA | 2.400 | 0.688 | 0.210 | 0.000 | 0.898 | 150 | 0.60 |
| 32 | SIMAPURI | 0.600 | 0.246 | 0.144 | 0.000 | 0.390 | 260 | 0.15 |
| 33 | THAMNA PATNAM | 0.300 | 0.132 | 0.050 | 0.000 | 0.182 | 243 | 0.08 |
| 34 | KAWAI* | 1.200 | 0.000 | | | | | 0.30 |
| | Sub Total | 32.000 | 8.185 | 3.158 | 0.000 | 11.343 | 142 | 8.00 |
| | TOTAL | 82.000 | 15.022 | 7.438 | 0.877 | 23.337 | 114 | 20.50 |

* Presently using Imported Coal as linkage yet to be granted.

**List of Thermal (Coal/ Lignite based) Stations with PLF more than 90%
during June'2013**

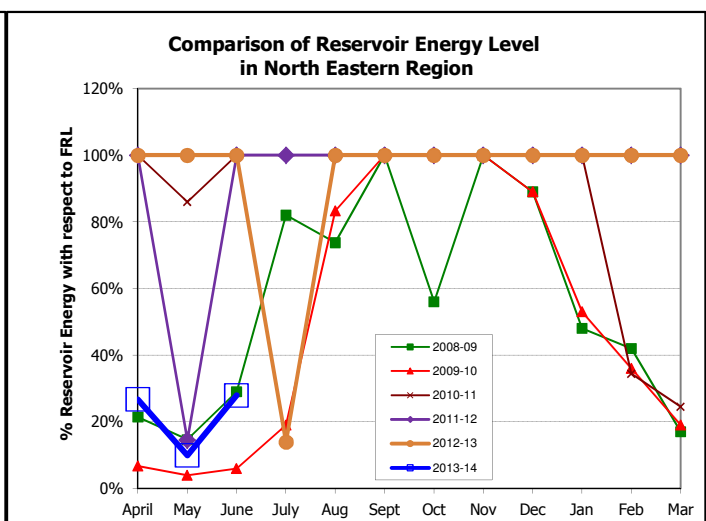
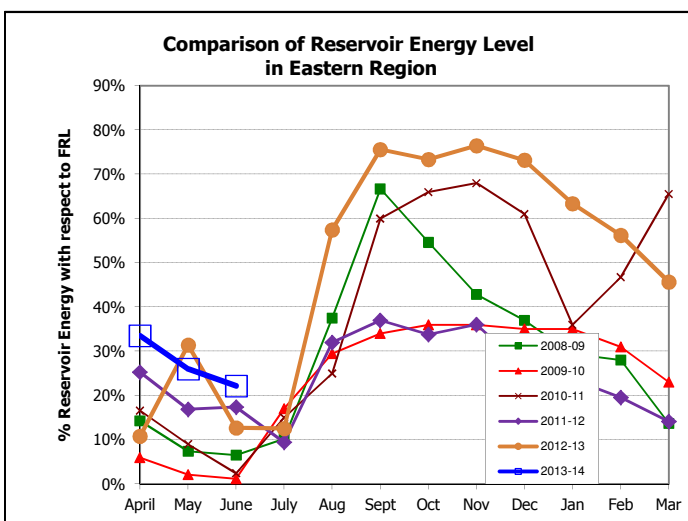
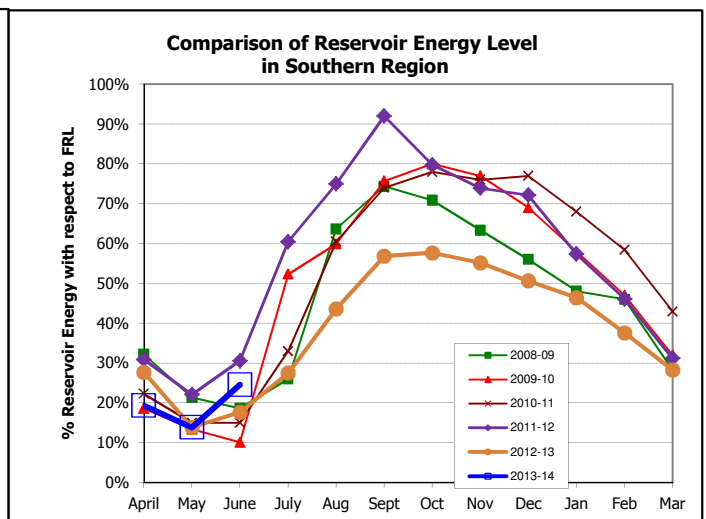
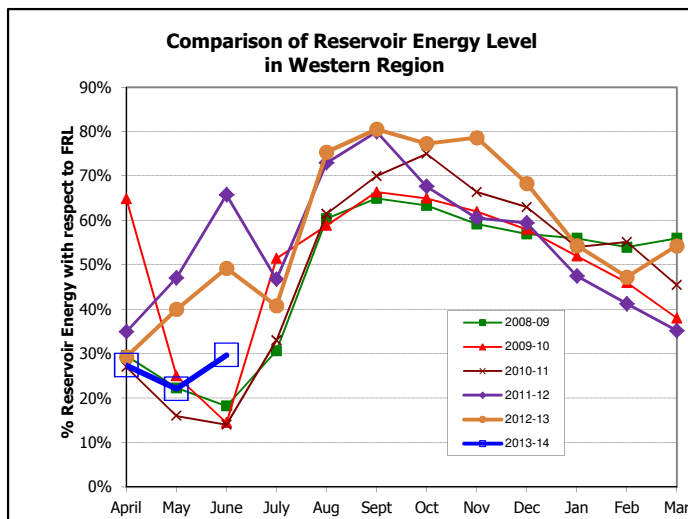
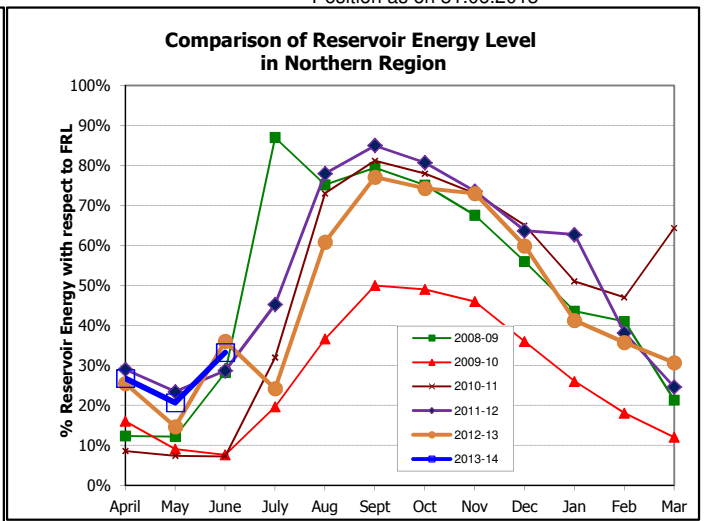
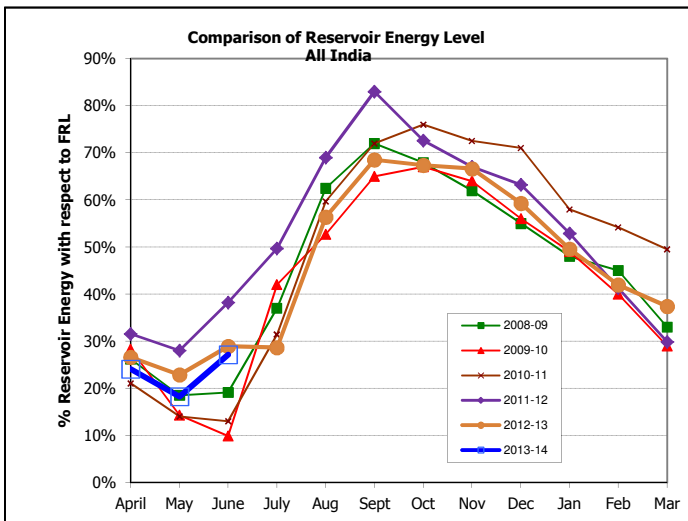
| Sl.No | Station | Installed Cap.(MW) | Sector | PLF (%) |
|--------------|------------------------|---------------------------|---------------|----------------|
| 1 | BUDGE BUDGE TPS | 750 | PVT | 96.9 |
| 2 | DAHANU TPS | 500 | PVT | 99.13 |
| 3 | KOTA TPS | 1240 | STATE | 90.24 |
| 4 | METTUR TPS | 1440 | STATE | 90.6 |
| 5 | NEYVELI (EXT) TPS | 420 | CENTRAL | 100.39 |
| 6 | NEYVELI TPS(Z) | 250 | PVT | 97.65 |
| 7 | NEYVELI TPS-II | 1470 | CENTRAL | 93.76 |
| 8 | OP JINDAL TPS | 1000 | PVT | 100.45 |
| 9 | RAMAGUNDEM STPS | 2600 | CENTRAL | 91.5 |
| 10 | RAYALASEEMA TPS | 1050 | STATE | 91.28 |
| 11 | SOUTHERN REPL. TPS | 135 | PVT | 99.05 |
| 12 | TALCHER (OLD) TPS | 470 | CENTRAL | 91.97 |
| 13 | TANDA TPS | 440 | CENTRAL | 91.76 |
| 14 | TITAGARH TPS | 240 | PVT | 92.36 |
| 15 | TORANGALLU TPS(SBU-I) | 260 | PVT | 100.59 |
| 16 | TORANGALLU TPS(SBU-II) | 600 | PVT | 103.72 |
| 17 | TUTICORIN TPS | 1050 | STATE | 94.5 |
| | | 13915 | | |
| | | | | |

Storage Position of Major Reservoirs based Hydroelectric Projects in the Country as on 30-Jun-2013

| Sl No. | Reservoir | STATE | Installed Capacity | Full Reservoir Level | Minimum Draw Down Level | Effective Capacity | Annual design energy potential | Energy content at F.R.L. | Present reservoir Level | Reservoir level on the same day last year | Energy content at present level | Energy content on the same day last year | % Energy content w.r.t. content at FRL on the last day of the month | % Energy content w.r.t. content at FRL on the same day last year |
|-----------------------------|----------------|----------------|--------------------|----------------------|-------------------------|--------------------|--------------------------------|--------------------------|-------------------------|---|---------------------------------|--|---|--|
| | | | MW | M | M | MCM | MU | MU | M | M | MU | | (%) | (%) |
| Northern Region | | | | | | | | | | | | | | |
| 1 | Bhakra | PUNJAB | 1325 | 513.59 | 445.62 | 4604.97 | 5282 | 1728.8 | 489.91 | 467.77 | 756.08 | 238.42 | 43.73% | 13.79% |
| 2 | Pong | PUNJAB | 396 | 426.72 | 384.05 | 3974.43 | 1123 | 1084 | 405.21 | 393.7 | 307.98 | 95.14 | 28.41% | 8.78% |
| 3 | Ranjit Sagar | PUNJAB | 600 | 527.91 | 487.91 | 1196.16 | 1507 | 390.3 | 513.03 | 527.91 | 249.85 | 388.33 | 64.01% | 99.50% |
| 4 | R.P. Sagar | RAJASTHAN | 172 | 352.81 | 343.81 | 1326.7 | 459 | 175.66 | 348.75 | 349.68 | 84.51 | 103.2 | 48.11% | 58.75% |
| 5 | Rihand | UTTAR PRADESH | 300 | 268.22 | 252.98 | 1740.66 | 920 | 860.5 | 254.66 | 268.22 | 63.12 | 860.18 | 7.34% | 99.96% |
| 6 | Ram Ganga | UTTARAKHAND | 198 | 366 | 323 | 757.09 | 164 | 480.8 | 345.65 | 366 | 158.49 | 480.81 | 32.96% | 100.00% |
| 7 | Tehri | UTTARAKHAND | 1000 | 829.79 | 740.04 | 1287.37 | 3090 | 1291.49 | 780.80 | 740.04 | 378.02 | 0.26 | 29.27% | 0.02% |
| Total (N Region) | | | 3991 | | | | 12545 | 6011.55 | | | 1998.05 | 2166.34 | 33.24% | 36.04% |
| Western Region | | | | | | | | | | | | | | |
| 8 | Sardar Sarovar | GUJARAT | 1450 | 138.68 | 110.84 | 519.57 | 5469 | 1817.55 | 114.85 | 113.44 | 120.46 | 81.28 | 6.63% | 4.47% |
| 9 | Ukai | GUJARAT | 305 | 105.16 | 82.3 | 1063.08 | 1080 | 813.08 | 96.05 | 91.63 | 330.68 | 193.54 | 40.67% | 23.80% |
| 10 | Gandhi Sagar | MADHYA PRADESH | 115 | 399.9 | 381 | 925.11 | 420.48 | 725 | 392.17 | 386.90 | 274.75 | 103.5 | 37.90% | 14.28% |
| 11 | Indira Sagar | MADHYA PRADESH | 1000 | 262.14 | 243.24 | 281.34 | 2628 | 1316.12 | 246.50 | 244.04 | 104.89 | 23.46 | 7.97% | 1.78% |
| 12 | Bhira | MAHARASHTRA | 150 | 606.03 | 590.09 | 429.43 | 790 | 618.8 | 594.99 | 606.03 | 156.65 | 617.58 | 25.32% | 99.80% |
| 13 | Koyna | MAHARASHTRA | 1960 | 657.91 | 609.6 | 1511.6 | 3523 | 3126.1 | 642.09 | 657.91 | 1509.6 | 3125.97 | 48.29% | 100.00% |
| Total (W Region) | | | 4980 | | | | 13910.48 | 8416.65 | | | 2497.03 | 4145.33 | 29.67% | 49.25% |
| Southern Region | | | | | | | | | | | | | | |
| 14 | Machkund | ANDHRA PRADESH | 114.75 | 838.2 | 813.39 | 346.2 | 670 | 551.6 | 826.01 | 827.14 | 111.69 | 136.43 | 20.25% | 24.73% |
| 15 | Nagarjun Sagar | ANDHRA PRADESH | 810 | 179.83 | 150.88 | 2287.43 | 2237 | 1398.13 | 158.44 | 155.78 | 252.8 | 158.67 | 18.08% | 11.35% |
| 16 | Srisailem | ANDHRA PRADESH | 1670 | 269.75 | 243.84 | 265.99 | 4300 | 1391.84 | 247.22 | 269.75 | 69.72 | 1391.85 | 5.01% | 100.00% |
| 17 | Almatti | KARNATAKA | 290 | 519.62 | 505.97 | 1442.58 | 483 | 175.35 | 513.50 | 506.03 | 37.22 | 0.62 | 21.23% | 0.35% |
| 18 | Kalindi Supa | KARNATAKA | 1220 | 563.88 | 513.52 | 19168.68 | 542 | 2885 | 528.11 | 515.42 | 481.51 | 48.23 | 16.69% | 1.67% |
| 19 | Sharavathy | KARNATAKA | 1006.2 | 554.43 | 522.73 | 1329.83 | 5564 | 4557.03 | 538.58 | 532.38 | 1074.46 | 468.42 | 23.58% | 10.28% |
| 20 | Idamalayar | KERALA | 75 | 169 | 114.99 | 308.85 | 380 | 254.45 | 147.89 | 128.69 | 116.75 | 32.4 | 45.88% | 12.73% |
| 21 | Idukki | KERALA | 780 | 732.35 | 694.94 | 283.18 | 2398 | 2146.32 | 712.85 | 701.63 | 787.64 | 249.48 | 36.70% | 11.62% |
| 22 | Sabrigri | KERALA | 300 | 981.46 | 908.3 | 265.07 | 1338 | 764 | 960.77 | 928.04 | 320.13 | 57.07 | 41.90% | 7.47% |
| 23 | Kundah Group | TAMIL NADU | 555 | | | | 1315 | 1270 | | 180.33 | 564.23 | 180.33 | 44.43% | 14.20% |
| 24 | Mettur | TAMIL NADU | 240 | 240.79 | 211.23 | 410.53 | 790 | 204 | 215.37 | 228.16 | 7.84 | 64.89 | 3.84% | 31.81% |
| 25 | Periyar | TAMIL NADU | 140 | 46.33 | 33.53 | 80.27 | 409 | 216 | 38.06 | 33.56 | 59.48 | 0.42 | 27.54% | 0.19% |
| Total (S Region) | | | 7200.95 | | | | 20426 | 15813.72 | | | 3883.47 | 2788.81 | 24.56% | 17.64% |
| Eastern Region | | | | | | | | | | | | | | |
| 26 | Balimela | ORISSA | 510 | 462.08 | 438.91 | 149.23 | 1183 | 897.75 | 450.71 | 441.05 | 343.81 | 50.94 | 38.30% | 5.67% |
| 27 | Hirakud | ORISSA | 331.5 | 192.02 | 179.83 | 1316.28 | 1174 | 372.28 | 181.61 | 186.45 | 20.01 | 122.51 | 5.37% | 32.91% |
| 28 | Indravati | ORISSA | 600 | 641.84 | 625 | 130.67 | 1962 | 1213.13 | 632.81 | 629.35 | 222.22 | 125.76 | 18.32% | 10.37% |
| 29 | Rengali | ORISSA | 250 | 123.44 | 109.72 | 1565.1 | 525 | 275 | 109.79 | 116.48 | 0.2 | 88.61 | 0.07% | 32.22% |
| 30 | Upper Kolab | ORISSA | 320 | 857.78 | 843.78 | 84.09 | 832 | 540 | 849.90 | 845.01 | 144.71 | 31.19 | 26.80% | 5.78% |
| Total (E Region) | | | 2011.5 | | | | 5676 | 3298.16 | | | 730.95 | 419.01 | 22.16% | 12.70% |
| North Eastern Region | | | | | | | | | | | | | | |
| 31 | Loktak | MANIPUR | 90 | 768.5 | 766.01 | | 450 | 250 | 767.57 | 768.5 | 69.78 | 250.02 | 27.91% | 100.01% |
| Total (NE Region) | | | 90 | | | | 450 | 250 | | | 69.78 | 250.02 | 27.91% | 100.01% |
| Total (All India) | | | 18273.45 | | | | 53007.48 | 33790.08 | | | 9179.28 | 9769.51 | 27.17% | 28.91% |

Energy Content in major Hydro Reservoirs as percent of Energy Content at Full Reservoir Level (FRL)

Position as on 31.06.2013



Based on the water storage position of 31 major reservoirs in the country as monitored in CEA. Monthly data refers to position on the last day of the particular month.