



National Load Despatch Centre
राष्ट्रीय भार प्रेषण केंद्र
POWER SYSTEM OPERATION CORPORATION LIMITED
पावर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड
(Government of India Enterprise/ भारत सरकार का उद्यम)
B-9, QUTUB INSTITUTIONAL AREA, KATWARIA SARAI, NEW DELHI -110016
बी-9, कुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 01st Aug 2019

To,

- कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के., 14, गोल्फ क्लब रोड, कोलकाता - 700033
Executive Director, ERLDC, 14 Golf Club Road, Tollygunge, Kolkata, 700033
- कार्यकारी निदेशक, ऊ.क्षे.भा.प्रे.के., 18/ ए, शहीद जीत सिंह सनसनवाल मार्ग, नई दिल्ली - 110016
Executive Director, NRLDC, 18-A, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi - 110016
- कार्यकारी निदेशक, प.क्षे.भा.प्रे.के., एफ3-, एम आई डी सी क्षेत्र, अंधेरी, मुंबई -400093
Executive Director, WRLDC, F-3, M.I.D.C. Area, Marol, Andheri (East), Mumbai-400093
- मुख्य महाप्रबंधक, ऊ. पू.क्षे.भा.प्रे.के., डोंगतेिह, लोअर नोंग्रह, लापलंग, शिलोंग - 793006
Chief General Manager, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
- कार्यकारी निदेशक, द.क्षे.भा.प्रे.के., 29, रेस कोर्स क्रॉस रोड, बंगलुरु -560009
Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 31.07.2019.

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 31-जुलाई-2019 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रांभांप्रेंकें की वेबसाइट पर उपलब्ध है ।

As per article 5.5.1 of the Indian Electricity Grid Code, the daily report pertaining power supply position of All India Power System for the date 31st July 2019, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting

1-Aug-19

A. Power Supply Position at All India and Regional level

| | NR | WR | SR | ER | NER | Total |
|---|----------------|----------------|----------------|----------------|---------------|-----------------|
| Demand Met during Evening Peak hrs(MW) (at 2000 hrs; from RLDCs) | 56464 | 41534 | 40565 | 21837 | 2744 | 163144 |
| Peak Shortage (MW) | 1333 | 0 | 0 | 0 | 180 | 1513 |
| Energy Met (MU) | 1294 | 938 | 923 | 461 | 51 | 3667 |
| Hydro Gen (MU) | 319 | 20 | 52 | 126 | 27 | 543 |
| Wind Gen (MU) | 15 | 164 | 176 | ----- | ----- | 355 |
| Solar Gen (MU)* | 22.56 | 10.03 | 75.28 | 2.09 | 0.03 | 110 |
| Energy Shortage (MU) | 8.8 | 0.0 | 0.0 | 0.0 | 1.5 | 10.3 |
| Maximum Demand Met during the day (MW) & time (from NLDC SCADA) | 60315 22:41 | 42979 09:54 | 41935 19:41 | 22392 19:40 | 2766 19:42 | 167276 19:44 |

B. Frequency Profile (%)

| Region | FVI | <49.7 | 49.7-49.8 | 49.8-49.9 | <49.9 | 49.9-50.05 | > 50.05 |
|-----------|-------|-------|-----------|-----------|-------|------------|---------|
| All India | 0.046 | 0.00 | 1.30 | 5.50 | 6.79 | 69.54 | 23.67 |

C. Power Supply Position in States

| Region | States | Max. Demand Met during the day (MW) | Shortage during maximum Demand (MW) | Energy Met (MU) | Drawal Schedule (MU) | OD(+)/UD(-) (MU) | Max OD (MW) | Energy Shortage (MU) |
|--------|-------------------|-------------------------------------|-------------------------------------|-----------------|----------------------|------------------|-------------|----------------------|
| NR | Punjab | 10510 | 0 | 236.4 | 130.6 | -2.4 | 15 | 0.0 |
| | Haryana | 8933 | 0 | 193.9 | 156.1 | 0.9 | 271 | 0.0 |
| | Rajasthan | 9641 | 0 | 209.8 | 70.4 | -2.5 | 592 | 0.0 |
| | Delhi | 5748 | 0 | 117.9 | 100.9 | 0.2 | 159 | 0.1 |
| | UP | 21254 | 0 | 426.0 | 207.4 | -0.5 | 579 | 0.0 |
| | Uttarakhand | 1869 | 0 | 40.3 | 15.5 | 0.4 | 210 | 0.0 |
| | HP | 1357 | 0 | 27.9 | -3.2 | -0.7 | 90 | 0.0 |
| | J&K | 2018 | 504 | 36.7 | 15.2 | 2.0 | 588 | 8.7 |
| WR | Chandigarh | 241 | 0 | 5.0 | 6.3 | -1.3 | 25 | 0.0 |
| | Chhattisgarh | 3646 | 0 | 82.2 | 24.5 | -3.4 | 180 | 0.0 |
| | Gujarat | 12274 | 0 | 269.1 | 35.5 | 3.0 | 607 | 0.0 |
| | MP | 8302 | 0 | 183.4 | 70.2 | -2.0 | 348 | 0.0 |
| | Maharashtra | 16858 | 0 | 360.8 | 91.5 | 0.5 | 592 | 0.0 |
| | Goa | 541 | 0 | 11.3 | 10.7 | 0.0 | 44 | 0.0 |
| | DD | 325 | 0 | 7.3 | 6.9 | 0.5 | 79 | 0.0 |
| | DNH | 777 | 0 | 18.3 | 18.5 | -0.2 | 115 | 0.0 |
| SR | Essar steel | 298 | 0 | 5.6 | 5.5 | 0.1 | 252 | 0.0 |
| | Andhra Pradesh | 7699 | 0 | 169.9 | 16.0 | 0.1 | 681 | 0.0 |
| | Telangana | 8148 | 0 | 169.4 | 72.5 | -0.6 | 644 | 0.0 |
| | Karnataka | 9541 | 0 | 182.5 | 50.7 | -2.1 | 803 | 0.0 |
| | Kerala | 3507 | 0 | 71.6 | 55.6 | 3.8 | 465 | 0.0 |
| | Tamil Nadu | 14833 | 0 | 321.5 | 146.8 | 0.3 | 456 | 0.0 |
| | Pondy | 402 | 0 | 8.2 | 8.3 | -0.1 | 54 | 0.0 |
| | Bihar | 5383 | 0 | 106.1 | 99.5 | 2.0 | 150 | 0.0 |
| ER | DVC | 3046 | 0 | 64.6 | -41.1 | -0.3 | 150 | 0.0 |
| | Jharkhand | 1190 | 0 | 24.1 | 18.6 | -0.1 | 70 | 0.0 |
| | Odisha | 4545 | 0 | 89.1 | 41.4 | 2.4 | 400 | 0.0 |
| | West Bengal | 8679 | 0 | 175.9 | 77.7 | 3.5 | 400 | 0.0 |
| | Sikkim | 77 | 0 | 0.8 | 1.2 | -0.4 | 0 | 0.0 |
| NER | Arunachal Pradesh | 121 | 2 | 2.5 | 2.7 | -0.2 | 58 | 0.0 |
| | Assam | 1695 | 50 | 32.5 | 26.1 | 1.3 | 83 | 1.5 |
| | Manipur | 145 | 2 | 2.5 | 2.3 | 0.2 | 31 | 0.0 |
| | Meghalaya | 325 | 0 | 5.8 | 0.2 | -0.2 | 40 | 0.0 |
| | Mizoram | 90 | 1 | 1.6 | 1.1 | 0.3 | 13 | 0.0 |
| | Nagaland | 149 | 2 | 2.3 | 2.2 | -0.1 | 45 | 0.0 |
| | Tripura | 269 | 5 | 4.3 | 4.2 | -0.6 | 88 | 0.0 |

D. Transnational Exchanges (MU) - Import(+ve)/Export(-ve)

| | Bhutan | Nepal | Bangladesh |
|---------------|--------|--------|------------|
| Actual(MU) | 42.8 | -5.0 | -26.0 |
| Day peak (MW) | 1880.3 | -340.0 | -1120.0 |

E. Import/export By Regions(in MU) - Import(+ve)/Export(-ve); OD(+)/UD(-)

| | NR | WR | SR | ER | NER | TOTAL |
|--------------|-------|--------|------|-------|------|-------|
| Schedule(MU) | 307.3 | -313.7 | 44.5 | -28.7 | -9.1 | 0.3 |
| Actual(MU) | 305.7 | -324.4 | 50.0 | -20.3 | -8.4 | 2.6 |
| O/D/U/D(MU) | -1.6 | -10.7 | 5.5 | 8.4 | 0.7 | 2.3 |

F. Generation Outage(MW)

| | NR | WR | SR | ER | NER | Total |
|----------------|-------|-------|-------|------|-----|-------|
| Central Sector | 4616 | 18465 | 8512 | 2530 | 82 | 34204 |
| State Sector | 8590 | 19354 | 10160 | 5150 | 50 | 43304 |
| Total | 13206 | 37819 | 18672 | 7680 | 131 | 77508 |

G. Sourcewise generation (MU)

| | NR | WR | SR | ER | NER | All India |
|-------------------------------------|------|------|-----|-----|-----|-----------|
| Coal | 555 | 998 | 419 | 370 | 12 | 2353 |
| Lignite | 20 | 12 | 46 | 0 | 0 | 78 |
| Hydro | 319 | 20 | 52 | 126 | 27 | 543 |
| Nuclear | 27 | 31 | 60 | 0 | 0 | 119 |
| Gas, Naptha & Diesel | 30 | 40 | 14 | 0 | 29 | 114 |
| RES (Wind, Solar, Biomass & Others) | 55 | 182 | 285 | 2 | 0 | 525 |
| Total | 1007 | 1283 | 877 | 498 | 68 | 3731 |

| | | | | | | |
|---|-------|-------|-------|-------|-------|-------|
| Share of RES in total generation (%) | 5.49 | 14.21 | 32.51 | 0.42 | 0.04 | 14.06 |
| Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%) | 39.88 | 18.15 | 45.29 | 25.76 | 39.41 | 31.79 |

H. Diversity Factor

| | |
|-----------------------------------|-------|
| All India Demand Diversity Factor | 1.019 |
|-----------------------------------|-------|

Diversity factor = Sum of regional maximum demands / All India maximum demand

*Source: RLDCs for solar connected to ISTS; SLDCs for embedded solar. Limited visibility of embedded solar data.

INTER-REGIONAL EXCHANGES

Date of Reporting : **1-Aug-19**

Import=(+ve)
/Export =(-ve) for
NET (MU)

| Sl No | Voltage Level | Line Details | Circuit | Max Import (MW) | Max Export (MW) | Import (MU) | Export (MU) | NET (MU) | |
|---------------------------------------|---------------------|-------------------------|--------------------|-----------------|-----------------|--------------|--------------|---------------|-----|
| Import/Export of ER (With NR) | | | | | | | | | |
| 1 | 765kV | GAYA-VARANASI | D/C | 269 | 36 | 2.0 | 0.0 | 2.0 | |
| 2 | | SASARAM-FATEHPUR | S/C | 376 | 0 | 6.3 | 0.0 | 6.3 | |
| 3 | | GAYA-BALIA | S/C | 0 | 385 | 0.0 | 5.6 | -5.6 | |
| 4 | | ALIPURDUAR-AGRA | - | 0 | 1601 | 0.0 | 39.5 | -39.5 | |
| 5 | | PUSAULI B/B | S/C | 0 | 398 | 0.0 | 9.8 | -9.8 | |
| 6 | 400 kV | PUSAULI-VARANASI | S/C | 0 | 311 | 0.0 | 6.9 | -6.9 | |
| 7 | | PUSAULI -ALLAHABAD | S/C | 0 | 142 | 0.0 | 2.7 | -2.7 | |
| 8 | | MUZAFFARPUR-GORAKHPUR | D/C | 0 | 509 | 0.0 | 6.3 | -6.3 | |
| 9 | | PATNA-BALIA | Q/C | 0 | 640 | 0.0 | 11.3 | -11.3 | |
| 10 | | BIHARSHARIFF-BALIA | D/C | 0 | 298 | 0.0 | 4.4 | -4.4 | |
| 11 | | MOTIHARI-GORAKHPUR | D/C | 0 | 213 | 0.0 | 4.0 | -4.0 | |
| 12 | 220 kV | BIHARSHARIFF-VARANASI | D/C | 254 | 0 | 3.6 | 0.0 | 3.6 | |
| 13 | | PUSAULI-SAHUPURI | S/C | 0 | 155 | 0.0 | 3.0 | -3.0 | |
| 14 | | 132 kV | SONE NAGAR-RIHAND | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 15 | | | GARWAH-RIHAND | S/C | 30 | 0 | 0.5 | 0.0 | 0.5 |
| 16 | | | KARMANASA-SAHUPURI | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 17 | KARMANASA-CHANDAULI | | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 | |
| ER-NR | | | | | | 12.4 | 93.5 | -81.1 | |
| Import/Export of ER (With WR) | | | | | | | | | |
| 18 | 765 kV | JHARSUGUDA-DHARAMAJGARH | Q/C | 2080 | 0 | 41.1 | 0.0 | 41.1 | |
| 19 | | NEW RANCHI-DHARAMAJGARH | D/C | 1327 | 0 | 24.2 | 0.0 | 24.2 | |
| 20 | | JHARSUGUDA-DURG | D/C | 447 | 0 | 9.0 | 0.0 | 9.0 | |
| 21 | 400 kV | JHARSUGUDA-RAIGARH | Q/C | 565 | 0 | 10.6 | 0.0 | 10.6 | |
| 22 | | RANCHI-SIPAT | D/C | 520 | 0 | 10.0 | 0.0 | 10.0 | |
| 23 | 220 kV | BUDHIPADAR-RAIGARH | S/C | 53 | 8 | 0.5 | 0.0 | 0.5 | |
| 24 | | BUDHIPADAR-KORBA | D/C | 270 | 0 | 5.6 | 0.0 | 5.6 | |
| ER-WR | | | | | | 101.1 | 0.0 | 101.1 | |
| Import/Export of ER (With SR) | | | | | | | | | |
| 25 | 765 kV | ANGUL-SRIKAKULAM | D/C | 0.0 | 1566.0 | 0.0 | 16.3 | -16.3 | |
| 26 | HVDC | JEYPORE-GAZUWAKA B/B | D/C | 0.0 | 418.0 | 0.0 | 7.3 | -7.3 | |
| 27 | LINK | TALCHER-KOLAR BIPOLE | D/C | 0.0 | 1488.0 | 0.0 | 30.1 | -30.1 | |
| 28 | 400 kV | TALCHER-I/C | D/C | 220.0 | 883.0 | 0.0 | 13.4 | -13.4 | |
| 29 | 220 kV | BALIMELA-UPPER-SILERRU | S/C | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| ER-SR | | | | | | 0.0 | 53.7 | -53.7 | |
| Import/Export of ER (With NER) | | | | | | | | | |
| 30 | 400 kV | BINAGURI-BONGAIGAON | D/C | 0 | 635 | 0.0 | 11.2 | -11 | |
| 31 | | ALIPURDUAR-BONGAIGAON | D/C | 277 | 79 | 2.0 | 0.0 | 2 | |
| 32 | 220 kV | ALIPURDUAR-SALAKATI | D/C | 0 | 105 | 0.0 | 1.7 | -2 | |
| ER-NER | | | | | | 2.0 | 12.9 | -10.9 | |
| Import/Export of NER (With NR) | | | | | | | | | |
| 33 | HVDC | BISWANATH CHARIALI-AGRA | - | 0 | 1003 | 0.0 | 21.5 | -21.5 | |
| NER-NR | | | | | | 0.0 | 21.5 | -21.5 | |
| Import/Export of WR (With NR) | | | | | | | | | |
| 34 | HVDC | CHAMPA-KURUKSHETRA | D/C | 0 | 2510 | 0.0 | 57.2 | -57.2 | |
| 35 | | V'CHAL B/B | D/C | 454 | 51 | 6.6 | 0.0 | 6.6 | |
| 36 | | APL -MHG | D/C | 0 | 1734 | 0.0 | 43.6 | -43.6 | |
| 37 | 765 kV | GWALIOR-AGRA | D/C | 0 | 2455 | 0.0 | 45.0 | -45.0 | |
| 38 | | PHAGI-GWALIOR | D/C | 0 | 895 | 0.0 | 14.1 | -14.1 | |
| 39 | | JABALPUR-ORAI | D/C | 0 | 977 | 0.0 | 35.0 | -35.0 | |
| 40 | | GWALIOR-ORAI | S/C | 322 | 0 | 6.0 | 0.0 | 6.0 | |
| 41 | | SATNA-ORAI | S/C | 0 | 1262 | 0.0 | 27.3 | -27.3 | |
| 42 | | CHITTORGARH-BANASKANTHA | D/C | 0 | 998 | 0.0 | 11.4 | 11.4 | |
| 43 | 400 kV | ZERDA-KANKROLI | S/C | 7 | 141 | 0.0 | 1.9 | -1.9 | |
| 44 | | ZERDA -BHINMAL | S/C | 180 | 192 | 0.2 | 2.1 | -1.9 | |
| 45 | | V'CHAL -RIHAND | S/C | 956 | 0 | 22.4 | 0.0 | 22.4 | |
| 46 | | RAPP-SHUJALPUR | D/C | 25 | 335 | 0 | 2 | -2 | |
| 47 | 220 kV | BHANPURA-RANPUR | S/C | 1 | 71 | 0.0 | 0.9 | -0.9 | |
| 48 | | BHANPURA-MORAK | S/C | 0 | 126 | 0.0 | 2.0 | -2.0 | |
| 49 | | MEHGAON-AURAIYA | S/C | 97 | 0 | 1.2 | 0.0 | 1.2 | |
| 50 | | MALANPUR-AURAIYA | S/C | 52 | 9 | 0.3 | 0.0 | 0.3 | |
| 51 | 132kV | GWALIOR-SAWAI MADHOPUR | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 | |
| WR-NR | | | | | | 36.6 | 242.8 | -183.4 | |
| Import/Export of WR (With SR) | | | | | | | | | |
| 52 | HVDC | BHADRAWATI B/B | - | 385 | 505 | 0.0 | 1.8 | -1.8 | |
| 53 | LINK | BARSUR-L.SILERU | - | 0 | 0 | 0.0 | 0.0 | 0.0 | |
| 54 | 765 kV | SOLAPUR-RAICHUR | D/C | 980 | 2052 | 5.3 | 9.1 | -3.8 | |
| 55 | | WARDHA-NIZAMABAD | D/C | 19 | 2292 | 0.0 | 20.0 | -20.0 | |
| 56 | 400 kV | KOLHAPUR-KUDGI | D/C | 836 | 25 | 11.8 | 0.0 | 11.8 | |
| 57 | 220 kV | KOLHAPUR-CHIKODI | D/C | 0 | 0 | 0.0 | 0.0 | 0.0 | |
| 58 | | PONDA-AMBEWADI | S/C | 0 | 65 | 0.0 | 1.2 | -1.2 | |
| 59 | | XELDEM-AMBEWADI | S/C | 0 | 37 | 0.7 | 0.0 | 0.7 | |
| WR-SR | | | | | | 17.8 | 32.1 | -14.3 | |
| TRANSNATIONAL EXCHANGE | | | | | | | | | |
| 60 | | BHUTAN | | | | | | 42.8 | |
| 61 | | NEPAL | | | | | | -5.0 | |
| 62 | | BANGLADESH | | | | | | -26.0 | |