



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: 29<sup>th</sup> June 2019

To,

1. कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के., 14, गोल्फ क्लब रोड, कोलकाता - 700033  
Executive Director, ERLDC, 14 Golf Club Road, Tollygunge, Kolkata, 700033
2. 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
3. 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
4. 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
5. 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 28.06.2019.**

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 28-जून-2019 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा०भा०प्रे०के० 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 28<sup>th</sup> June 2019, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting

29-Jun-19

A. Power Supply Position at All India and Regional level

|   | NR             | WR             | SR             | ER             | NER           | Total           |
|---|----------------|----------------|----------------|----------------|---------------|-----------------|
| Demand Met during Evening Peak hrs(MW)<br>(at 2000 hrs; from RLDCs) | 61992          | 44798          | 42562          | 20944          | 2512          | 172808          |
| Peak Shortage (MW)  | 1085           | 0              | 0              | 0              | 248           | 1333            |
| Energy Met (MU)   | 1472           | 1060           | 966            | 462            | 49            | 4008            |
| Hydro Gen (MU)  | 352            | 9              | 28             | 97             | 23            | 509             |
| Wind Gen (MU)   | 35             | 127            | 214            | -----          | -----         | 376             |
| Solar Gen (MU)*   | 28.52          | 19.9           | 70.71          | 2.09           | 0.03          | 121             |
| Energy Shortage (MU)  | 11.7           | 0.0            | 0.0            | 0.0            | 3.0           | 14.7            |
| Maximum Demand Met during the day<br>(MW) & time (from NLDC SCADA)  | 65349<br>22:29 | 47418<br>00:02 | 41401<br>19:57 | 22104<br>20:19 | 2663<br>19:49 | 175802<br>20:19 |

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 | 0.023 | 0.00  | 0.00      | 0.38      | 0.38  | 75.31      | 24.31   |

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            | 12621                               | 0                                   | 282.7           | 135.4                | -1.1             | 430         | 0.0                  |
|        | Haryana           | 9976                                | 0                                   | 219.7           | 152.7                | -0.6             | 216         | 0.0                  |
|        | Rajasthan         | 11660                               | 0                                   | 254.7           | 63.9                 | 0.7              | 566         | 0.0                  |
|        | Delhi             | 6567                                | 0                                   | 133.5           | 114.5                | -0.7             | 296         | 0.1                  |
|        | UP                | 20560                               | 1040                                | 446.8           | 211.9                | 3.1              | 750         | 0.0                  |
|        | Uttarakhand       | 2163                                | 0                                   | 47.2            | 17.5                 | 0.4              | 152         | 0.0                  |
|        | HP                | 1472                                | 0                                   | 31.7            | 2.7                  | 0.2              | 88          | 0.0                  |
|        | J&K               | 2374                                | 593                                 | 48.8            | 22.1                 | 1.9              | 227         | 11.6                 |
| WR     | Chandigarh        | 351                                 | 0                                   | 6.7             | 7.5                  | -0.9             | -5          | 0.0                  |
|        | Chhattisgarh      | 3784                                | 0                                   | 87.3            | 34.9                 | -2.4             | 268         | 0.0                  |
|        | Gujarat           | 14949                               | 0                                   | 331.8           | 60.0                 | 2.9              | 651         | 0.0                  |
|        | MP                | 8257                                | 0                                   | 188.4           | 100.6                | -0.1             | 579         | 0.0                  |
|        | Maharashtra       | 18028                               | 0                                   | 407.6           | 94.5                 | -3.7             | 658         | 0.0                  |
|        | Goa               | 541                                 | 0                                   | 12.4            | 10.7                 | 1.1              | 46          | 0.0                  |
|        | DD                | 337                                 | 0                                   | 7.5             | 7.2                  | 0.3              | 96          | 0.0                  |
|        | DNH               | 791                                 | 0                                   | 18.5            | 18.7                 | -0.2             | 128         | 0.0                  |
| SR     | Essar steel       | 373                                 | 0                                   | 6.5             | 6.3                  | 0.2              | 308         | 0.0                  |
|        | Andhra Pradesh    | 8450                                | 0                                   | 185.0           | 13.7                 | 0.3              | 483         | 0.0                  |
|        | Telangana         | 7435                                | 0                                   | 163.5           | 46.1                 | -0.6             | 454         | 0.0                  |
|        | Karnataka         | 10182                               | 0                                   | 195.2           | 59.5                 | -0.4             | 496         | 0.0                  |
|        | Kerala            | 3789                                | 0                                   | 76.1            | 64.6                 | 2.2              | 232         | 0.0                  |
|        | Tamil Nadu        | 15600                               | 0                                   | 337.3           | 132.2                | 0.6              | 418         | 0.0                  |
|        | Pondy             | 416                                 | 0                                   | 8.6             | 8.9                  | -0.3             | 33          | 0.0                  |
|        | Bihar             | 5428                                | 0                                   | 103.1           | 104.3                | -3.7             | 30          | 0.0                  |
| ER     | DVC               | 3239                                | 0                                   | 67.8            | -42.5                | 0.9              | 200         | 0.0                  |
|        | Jharkhand         | 1197                                | 0                                   | 25.2            | 17.2                 | -1.3             | 50          | 0.0                  |
|        | Odisha            | 3991                                | 0                                   | 88.4            | 33.5                 | -1.2             | 400         | 0.0                  |
|        | West Bengal       | 8887                                | 0                                   | 175.9           | 62.8                 | 1.7              | 300         | 0.0                  |
|        | Sikkim            | 92                                  | 0                                   | 1.3             | 1.4                  | -0.1             | 18          | 0.0                  |
| NER    | Arunachal Pradesh | 128                                 | 3                                   | 2.2             | 3.0                  | -0.8             | 19          | 0.0                  |
|        | Assam             | 1661                                | 48                                  | 29.6            | 21.9                 | 3.7              | 129         | 3.0                  |
|        | Manipur           | 158                                 | 3                                   | 2.6             | 2.3                  | 0.3              | 31          | 0.0                  |
|        | Meghalaya         | 313                                 | 4                                   | 5.4             | 1.5                  | -0.1             | 89          | 0.0                  |
|        | Mizoram           | 88                                  | 7                                   | 1.7             | 1.4                  | 0.3              | 13          | 0.0                  |
|        | Nagaland          | 115                                 | 6                                   | 2.2             | 2.2                  | -0.3             | 14          | 0.0                  |
|        | Tripura           | 248                                 | 10                                  | 5.5             | 4.7                  | 0.5              | 136         | 0.0                  |

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

|               | Bhutan | Nepal  | Bangladesh |
|---------------|--------|--------|------------|
| Actual(MU)    | 26.8   | -7.9   | -25.1      |
| Day peak (MW) | 1316.2 | -511.1 | -1118.0    |

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

|              | NR    | WR     | SR   | ER    | NER  | TOTAL |
|--------------|-------|--------|------|-------|------|-------|
| Schedule(MU) | 310.0 | -281.3 | 25.3 | -45.2 | -8.8 | 0.0   |
| Actual(MU)   | 329.7 | -306.8 | 29.9 | -43.5 | -4.4 | 4.9   |
| O/D/U/D(MU)  | 19.7  | -25.5  | 4.6  | 1.7   | 4.4  | 4.9   |

F. Generation Outage(MW)

|                | NR    | WR    | SR    | ER   | NER | Total |
|----------------|-------|-------|-------|------|-----|-------|
| Central Sector | 4585  | 15782 | 7592  | 1525 | 155 | 29639 |
| State Sector   | 6065  | 15608 | 6830  | 4010 | 86  | 32599 |
| Total          | 10650 | 31390 | 14422 | 5535 | 240 | 62237 |

G. Sourcewise generation (MU)

|                                     | NR   | WR   | SR  | ER  | NER | All India |
|-------------------------------------|------|------|-----|-----|-----|-----------|
| Coal                                | 655  | 1127 | 481 | 439 | 12  | 2714      |
| Lignite                             | 19   | 16   | 44  | 0   | 0   | 79        |
| Hydro                               | 352  | 9    | 28  | 97  | 23  | 509       |
| Nuclear                             | 27   | 31   | 55  | 0   | 0   | 112       |
| Gas, Naptha & Diesel                | 31   | 40   | 14  | 0   | 28  | 112       |
| RES (Wind, Solar, Biomass & Others) | 79   | 156  | 319 | 2   | 0   | 556       |
| Total                               | 1163 | 1377 | 941 | 538 | 63  | 4082      |

|   |       |       |       |       |       |       |
|---|-------|-------|-------|-------|-------|-------|
| Share of RES in total generation (%)                                      | 6.78  | 11.31 | 33.90 | 0.40  | 0.05  | 13.61 |
| Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%) | 39.36 | 14.17 | 42.70 | 18.44 | 36.32 | 28.83 |

H. Diversity Factor

|                                   |       |
|-----------------------------------|-------|
| All India Demand Diversity Factor | 1.018 |
|-----------------------------------|-------|

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 : 29-Jun-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)      |     |
|---------------------------------------|---------------------|-------------------------|--------------------|-----------------|-----------------|-------------|--------------|---------------|-----|
| <b>Import/Export of ER (With NR)</b>  |                     |                         |                    |                 |                 |             |              |               |     |
| 1                                     | 765kV               | GAYA-VARANASI           | D/C                | 235             | 726             | 0.0         | 5.8          | -5.8          |     |
| 2                                     |                     | SASARAM-FATEHPUR        | S/C                | 283             | 108             | 1.1         | 0.0          | 1.1           |     |
| 3                                     |                     | GAYA-BALIA              | S/C                | 0               | 478             | 0.0         | 9.4          | -9.4          |     |
| 4                                     |                     | ALIPURDUAR-AGRA         | -                  | 0               | 2201            | 0.0         | 19.0         | -19.0         |     |
| 5                                     |                     | PUSAULI B/B             | S/C                | 0               | 346             | 0.0         | 5.9          | -5.9          |     |
| 6                                     | 400 kV              | PUSAULI-VARANASI        | S/C                | 0               | 314             | 0.0         | 4.8          | -4.8          |     |
| 7                                     |                     | PUSAULI -ALLAHABAD      | S/C                | 0               | 103             | 0.0         | 1.0          | -1.0          |     |
| 8                                     |                     | MUZAFFARPUR-GORAKHPUR   | D/C                | 0               | 1427            | 0.0         | 12.2         | -12.2         |     |
| 9                                     |                     | PATNA-BALIA             | Q/C                | 0               | 1665            | 0.0         | 16.9         | -16.9         |     |
| 10                                    |                     | BIHARSHARIFF-BALIA      | D/C                | 0               | 675             | 0.0         | 7.1          | -7.1          |     |
| 11                                    |                     | MOTIHARI-GORAKHPUR      | D/C                | 581             | 0               | 4.9         | 0.0          | 4.9           |     |
| 12                                    | 220 kV              | BIHARSHARIFF-VARANASI   | D/C                | 397             | 168             | 0.7         | 0.0          | 0.7           |     |
| 13                                    |                     | PUSAULI-SAHUPURI        | S/C                | 0               | 204             | 0.0         | 3.3          | -3.3          |     |
| 14                                    |                     | 132 kV                  | SONE NAGAR-RIHAND  | S/C             | 0               | 0           | 0.0          | 0.0           | 0.0 |
| 15                                    |                     |                         | GARWAH-RIHAND      | S/C             | 30              | 0           | 0.6          | 0.0           | 0.6 |
| 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           |     |
| <b>ER-NR</b>                          |                     |                         |                    |                 |                 | <b>7.2</b>  | <b>85.5</b>  | <b>-78.2</b>  |     |
| <b>Import/Export of ER (With WR)</b>  |                     |                         |                    |                 |                 |             |              |               |     |
| 18                                    | 765 kV              | JHARSUGUDA-DHARAMAJGARH | Q/C                | 2604            | 0               | 18.2        | 0.0          | 18.2          |     |
| 19                                    |                     | NEW RANCHI-DHARAMAJGARH | D/C                | 2351            | 0               | 21.5        | 0.0          | 21.5          |     |
| 20                                    |                     | JHARSUGUDA-DURG         | D/C                | 416             | 5               | 2.7         | 0.0          | 2.7           |     |
| 21                                    | 400 kV              | JHARSUGUDA-RAIGARH      | Q/C                | 608             | 0               | 4.8         | 0.0          | 4.8           |     |
| 22                                    |                     | RANCHI-SIPAT            | D/C                | 932             | 0               | 8.1         | 0.0          | 8.1           |     |
| 23                                    | 220 kV              | BUDHIPADAR-RAIGARH      | S/C                | 30              | 83              | 0.0         | 0.4          | -0.4          |     |
| 24                                    |                     | BUDHIPADAR-KORBA        | D/C                | 510             | 0               | 4.7         | 0.0          | 4.7           |     |
| <b>ER-WR</b>                          |                     |                         |                    |                 |                 | <b>59.9</b> | <b>0.4</b>   | <b>59.5</b>   |     |
| <b>Import/Export of ER (With SR)</b>  |                     |                         |                    |                 |                 |             |              |               |     |
| 25                                    | 765 kV              | ANGUL-SRIKAKULAM        | D/C                | 0.0             | 2576.0          | 0.0         | 20.4         | -20.4         |     |
| 26                                    | HVDC                | JEYPORE-GAZUWAKA B/B    | D/C                | 0.0             | 825.0           | 0.0         | 6.9          | -6.9          |     |
| 27                                    | LINK                | TALCHER-KOLAR BIPOLE    | D/C                | 0.0             | 3158.0          | 0.0         | 29.2         | -29.2         |     |
| 28                                    | 400 kV              | TALCHER-I/C             | D/C                | 1781.0          | 696.0           | 1.5         | 0.0          | 1.5           |     |
| 29                                    | 220 kV              | BALIMELA-UPPER-SILERRU  | S/C                | 1.0             | 0.0             | 0.0         | 0.0          | 0.0           |     |
| <b>ER-SR</b>                          |                     |                         |                    |                 |                 | <b>0.0</b>  | <b>56.5</b>  | <b>-56.5</b>  |     |
| <b>Import/Export of ER (With NER)</b> |                     |                         |                    |                 |                 |             |              |               |     |
| 30                                    | 400 kV              | BINAGURI-BONGAIGAON     | D/C                | 0               | 1188            | 0.0         | 4.9          | -5            |     |
| 31                                    |                     | ALIPURDUAR-BONGAIGAON   | D/C                | 523             | 341             | 2.3         | 0.0          | 2             |     |
| 32                                    | 220 kV              | ALIPURDUAR-SALAKATI     | D/C                | 3               | 212             | 0.0         | 0.8          | -1            |     |
| <b>ER-NER</b>                         |                     |                         |                    |                 |                 | <b>2.3</b>  | <b>5.7</b>   | <b>-3.4</b>   |     |
| <b>Import/Export of NER (With NR)</b> |                     |                         |                    |                 |                 |             |              |               |     |
| 33                                    | HVDC                | BISWANATH CHARIALI-AGRA | -                  | 0               | 803             | 0.0         | 14.0         | -14.0         |     |
| <b>NER-NR</b>                         |                     |                         |                    |                 |                 | <b>0.0</b>  | <b>14.0</b>  | <b>-14.0</b>  |     |
| <b>Import/Export of WR (With NR)</b>  |                     |                         |                    |                 |                 |             |              |               |     |
| 34                                    | HVDC                | CHAMPA-KURUKSHETRA      | D/C                | 0               | 3015            | 0.0         | 65.7         | -65.7         |     |
| 35                                    |                     | V'CHAL B/B              | D/C                | 141             | 253             | 1.1         | 2.9          | -1.8          |     |
| 36                                    |                     | APL -MHG                | D/C                | 0               | 2368            | 0.0         | 60.4         | -60.4         |     |
| 37                                    | 765 kV              | GWALIOR-AGRA            | D/C                | 0               | 2754            | 0.0         | 51.5         | -51.5         |     |
| 38                                    |                     | PHAGI-GWALIOR           | D/C                | 0               | 1241            | 0.0         | 22.4         | -22.4         |     |
| 39                                    |                     | JABALPUR-ORAI           | D/C                | 0               | 1012            | 0.0         | 38.8         | -38.8         |     |
| 40                                    |                     | GWALIOR-ORAI            | S/C                | 452             | 0               | 9.2         | 0.0          | 9.2           |     |
| 41                                    |                     | SATNA-ORAI              | S/C                | 0               | 1458            | 0.0         | 31.6         | -31.6         |     |
| 42                                    |                     | CHITTORGARH-BANASKANTHA | D/C                | 343             | 450             | 0.0         | 1.2          | 1.2           |     |
| 43                                    | 400 kV              | ZERDA-KANKROLI          | S/C                | 159             | 52              | 1.4         | 0.1          | 1.3           |     |
| 44                                    |                     | ZERDA -BHINMAL          | S/C                | 249             | 59              | 2.9         | 0.0          | 2.9           |     |
| 45                                    |                     | V'CHAL -RIHAND          | S/C                | 959             | 0               | 22.0        | 0.0          | 22.0          |     |
| 46                                    | 220 kV              | RAPP-SHUJALPUR          | D/C                | 19              | 345             | 0           | 2            | -2            |     |
| 47                                    |                     | BHANPURA-RANPUR         | S/C                | 36              | 52              | 0.2         | 0.3          | -0.2          |     |
| 48                                    |                     | BHANPURA-MORAK          | S/C                | 0               | 88              | 0.0         | 0.9          | -0.9          |     |
| 49                                    |                     | MEHGAON-AURAIYA         | S/C                | 46              | 29              | 0.2         | 0.1          | 0.1           |     |
| 50                                    |                     | MALANPUR-AURAIYA        | S/C                | 15              | 48              | 0.0         | 0.6          | -0.6          |     |
| 51                                    | 132kV               | GWALIOR-SAWAI MADHOPUR  | S/C                | 0               | 0               | 0.0         | 0.0          | 0.0           |     |
| <b>WR-NR</b>                          |                     |                         |                    |                 |                 | <b>36.9</b> | <b>278.6</b> | <b>-239.4</b> |     |
| <b>Import/Export of WR (With SR)</b>  |                     |                         |                    |                 |                 |             |              |               |     |
| 52                                    | HVDC                | BHADRAWATI B/B          | -                  | 0               | 305             | 0.0         | 5.4          | -5.4          |     |
| 53                                    | LINK                | BARSUR-L.SILERU         | -                  | 0               | 0               | 0.0         | 0.0          | 0.0           |     |
| 54                                    | 765 kV              | SOLAPUR-RAICHUR         | D/C                | 903             | 965             | 1.5         | 0.0          | 1.5           |     |
| 55                                    |                     | WARDHA-NIZAMABAD        | D/C                | 235             | 1367            | 0.0         | 11.9         | -11.9         |     |
| 56                                    | 400 kV              | KOLHAPUR-KUDGI          | D/C                | 982             | 0               | 13.8        | 0.0          | 13.8          |     |
| 57                                    | 220 kV              | KOLHAPUR-CHIKODI        | D/C                | 0               | 0               | 0.0         | 0.0          | 0.0           |     |
| 58                                    |                     | PONDA-AMBEWADI          | S/C                | 0               | 66              | 0.0         | 1.2          | -1.2          |     |
| 59                                    |                     | XELDEM-AMBEWADI         | S/C                | 0               | 41              | 0.7         | 0.0          | 0.7           |     |
| <b>WR-SR</b>                          |                     |                         |                    |                 |                 | <b>15.9</b> | <b>18.5</b>  | <b>-2.6</b>   |     |
| <b>TRANSNATIONAL EXCHANGE</b>         |                     |                         |                    |                 |                 |             |              |               |     |
| 60                                    |                     | BHUTAN                  |                    |                 |                 |             |              | <b>26.8</b>   |     |
| 61                                    |                     | NEPAL                   |                    |                 |                 |             |              | <b>-7.9</b>   |     |
| 62                                    |                     | BANGLADESH              |                    |                 |                 |             |              | <b>-25.1</b>  |     |