

# National Load Despatch Centre राष्ट्रीय भार प्रेषण केंद्र

## POWER SYSTEM OPERATION CORPORATION LIMITED पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

(Government of India Enterprise/ भारत सरकार का उद्यम)
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बी-9, कृतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 01st July 2019

To,

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   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., डोंगतिएह, 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 30.06.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 30-जून-2019 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा॰भा॰प्रे॰के॰ की वेबसाइट पर उप्लब्ध 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 30<sup>th</sup> June 2019, is available at the NLDC website.

धन्यवाद,

## पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली

1-Jul-19

#### Report for previous day Date of Reporting

## 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) | 59498 | 41420 | 36707 | 19793 | 2739  | 160157 |
| Peak Shortage (MW)  | 1206  | 0     | 0     | 0     | 158   | 1364   |
| Energy Met (MU)   | 1447  | 988   | 879   | 444   | 53    | 3812   |
| Hydro Gen (MU)  | 350   | 7     | 34    | 90    | 22    | 502    |
| Wind Gen (MU)   | 48    | 125   | 173   |       |       | 346    |
| Solar Gen (MU)*   | 28.60 | 16.76 | 55.52 | 2.06  | 0.04  | 103    |
| Energy Shortage (MU)  | 11.7  | 0.0   | 0.0   | 0.0   | 1.1   | 12.8   |
| Maximum Demand Met during the day                                   | 64788 | 43172 | 37372 | 21245 | 2788  | 166563 |
| (MW) & time (from NLDC SCADA)                                       | 01:12 | 11:50 | 08:09 | 00:00 | 20:09 | 00:00  |

C. Power Supply Position in States

| Region | States            | Max. Demand<br>Met during the<br>day (MW) | Shortage during<br>maximum Demand<br>(MW) | Energy Met (MU) | Drawal<br>Schedule (MU) | OD(+)/UD(-)<br>(MU) | Max OD<br>(MW) | Energy<br>Shortage (MU |
|--------|-------------------|---|---|-----------------|-------------------------|---------------------|----------------|------------------------|
|        | Punjab            | 12876                                     | 0   | 286.0           | 142.0                   | -2.4                | 81             | 0.0                    |
|        | Harvana           | 9939                                      | 195                                       | 211.8           | 145.4                   | -0.3                | 160            | 1.4                    |
|        | Rajasthan         | 11393                                     | 0   | 246.4           | 56.1                    | -1.8                | 293            | 0.0                    |
|        | Delhi             | 6623                                      | 0   | 136.0           | 114.4                   | -0.1                | 320            | 0.1                    |
| NR     | UP                | 20914                                     | 0   | 445.1           | 209.7                   | 1.3                 | 680            | 0.0                    |
|        | Uttarakhand       | 2020                                      | 0   | 44.9            | 16.7                    | 0.4                 | 234            | 0.0                    |
|        | HP                | 1299                                      | 0   | 28.5            | 1.5                     | -1.1                | 18             | 0.0                    |
|        | J&K               | 2116                                      | 529                                       | 42.3            | 17.9                    | -0.7                | 343            | 10.1                   |
|        | Chandigarh        | 322                                       | 0   | 6.1             | 6.8                     | -0.7                | 10             | 0.0                    |
|        | Chhattisgarh      | 3759                                      | 0   | 86.3            | 35.7                    | -1.7                | 270            | 0.0                    |
|        | Gujarat           | 14577                                     | 0   | 319.5           | 64.6                    | 3.4                 | 606            | 0.0                    |
|        | MP                | 7753                                      | 0   | 171.4           | 96.2                    | 0.0                 | 609            | 0.0                    |
| WR     | Maharashtra       | 16471                                     | 0   | 371.1           | 86.6                    | -1.7                | 502            | 0.0                    |
| WK     | Goa               | 541                                       | 0   | 10.0            | 9.4                     | 0.0                 | 47             | 0.0                    |
|        | DD                | 300                                       | 0   | 6.8             | 6.5                     | 0.3                 | 36             | 0.0                    |
|        | DNH               | 743                                       | 0   | 17.4            | 17.6                    | -0.2                | 53             | 0.0                    |
|        | Essar steel       | 304                                       | 0   | 5.7             | 5.5                     | 0.2                 | 329            | 0.0                    |
|        | Andhra Pradesh    | 8029                                      | 0   | 174.3           | 17.3                    | -1.2                | 442            | 0.0                    |
|        | Telangana         | 6359                                      | 0   | 136.3           | 34.4                    | 0.7                 | 491            | 0.0                    |
| SR     | Karnataka         | 8590                                      | 0   | 170.3           | 59.7                    | -0.1                | 520            | 0.0                    |
| JIV.   | Kerala            | 3546                                      | 0   | 70.3            | 60.6                    | 1.5                 | 264            | 0.0                    |
|        | Tamil Nadu        | 14313                                     | 0   | 319.5           | 128.6                   | -0.5                | 471            | 0.0                    |
|        | Pondy             | 387                                       | 0   | 8.1             | 8.2                     | -0.2                | 46             | 0.0                    |
|        | Bihar             | 5166                                      | 0   | 100.3           | 97.1                    | 0.9                 | 400            | 0.0                    |
|        | DVC               | 2920                                      | 0   | 66.5            | -42.4                   | 0.8                 | 220            | 0.0                    |
| ER     | Jharkhand         | 1068                                      | 0   | 25.7            | 16.2                    | 0.3                 | 150            | 0.0                    |
| LIV    | Odisha            | 3689                                      | 0   | 88.4            | 26.6                    | 1.2                 | 392            | 0.0                    |
|        | West Bengal       | 8211                                      | 0   | 162.5           | 54.9                    | 2.2                 | 400            | 0.0                    |
|        | Sikkim            | 87  | 0   | 1.0             | 1.1                     | -0.1                | 30             | 0.0                    |
|        | Arunachal Pradesh | 130                                       | 1   | 2.2             | 2.3                     | -0.1                | 158            | 0.0                    |
|        | Assam             | 1756                                      | 95  | 32.7            | 25.8                    | 1.4                 | 171            | 1.0                    |
|        | Manipur           | 171                                       | 2   | 2.7             | 2.4                     | 0.3                 | 42             | 0.0                    |
| NER    | Meghalaya         | 315                                       | 0   | 6.0             | 1.7                     | -0.2                | 64             | 0.0                    |
|        | Mizoram           | 86  | 1   | 1.7             | 1.3                     | 0.2                 | 51             | 0.0                    |
|        | Nagaland          | 125                                       | 2   | 2.2             | 2.5                     | -0.5                | 8              | 0.0                    |
|        | Tripura           | 267                                       | 11  | 5.5             | 4.3                     | 0.1                 | 70             | 0.0                    |

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

| <u> </u>      | Bhutan | Nepal  | Bangladesh |
|---------------|--------|--------|------------|
| Actual(MU)    | 18.5   | -8.3   | -25.4      |
| Day peak (MW) | 790.2  | -514.5 | -1080.0    |

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

|              | NR    | WR     | SR   | ER    | NER  | TOTAL |
|--------------|-------|--------|------|-------|------|-------|
| Schedule(MU) | 309.0 | -268.8 | 23.4 | -56.4 | -7.1 | 0.1   |
| Actual(MU)   | 309.3 | -285.5 | 25.4 | -45.5 | -3.4 | 0.3   |
| O/D/U/D(MU)  | 0.3   | -16.7  | 2.0  | 11.0  | 3.7  | 0.2   |

F. Generation Outage(MW)

| 11 Generation Gutage(11111) | ************************************** |       |       |      |     |       |  |  |  |  |
|-----------------------------|--|-------|-------|------|-----|-------|--|--|--|--|
|                             | NR                                     | WR    | SR    | ER   | NER | Total |  |  |  |  |
| Central Sector              | 4434                                   | 16900 | 7792  | 1525 | 56  | 30707 |  |  |  |  |
| State Sector                | 4985                                   | 16838 | 8020  | 3300 | 50  | 33193 |  |  |  |  |
| Total                       | 9419                                   | 33738 | 15812 | 4825 | 106 | 63899 |  |  |  |  |

G. Sourcewise generation (MU)

|                                     | NR   | WR   | SR  | ER  | NER | All India |
|-------------------------------------|------|------|-----|-----|-----|-----------|
| Coal                                | 642  | 1047 | 445 | 426 | 11  | 2571      |
| Lignite                             | 18   | 17   | 45  | 0   | 0   | 79        |
| Hydro                               | 350  | 7    | 34  | 90  | 22  | 502       |
| Nuclear                             | 27   | 31   | 55  | 0   | 0   | 113       |
| Gas, Naptha & Diesel                | 31   | 31   | 13  | 0   | 29  | 104       |
| RES (Wind, Solar, Biomass & Others) | 93   | 152  | 265 | 2   | 0   | 512       |
| Total                               | 1161 | 1285 | 856 | 519 | 62  | 3881      |

| Share of RES in total generation (%)         | 8.03  | 11.80 | 30.92 | 0.40  | 0.06  | 13.18 |
|--|-------|-------|-------|-------|-------|-------|
| Share of Non-fossil fuel (Hydro, Nuclear and | 40.54 | 14.72 | 41.24 | 17 92 | 35.03 | 29.03 |
| RES) in total generation (%)                 | 40.54 | 14.72 | 41.24 | 17.82 | 33.03 | 47.03 |

H. Diversity Factor
All India Demand Diversity Factor 1.017

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

<sup>\*</sup>Source: RLDCs for solar connected to ISTS; SLDCs for embedded solar. Limited visibility of embedded solar data.

|            |                  | INT                                   | TER-REGI         | ONAL EXCH          | ANGES              | Date of 1   | Reporting      | : 1-Jul-19                               |
|------------|------------------|---------------------------------------|------------------|--------------------|--------------------|-------------|----------------|--|
|            |                  |                                       |                  |                    |                    |             |                | Import=(+ve) /Export =(-ve) for NET (MU) |
| Sl No      | Voltage<br>Level | Line Details                          | Circuit          | Max Import<br>(MW) | Max Export<br>(MW) | Import (MU) | Export<br>(MU) | NET<br>(MU)                              |
|            | Export of        | ER (With NR)                          |                  |                    |                    |             |                |  |
| 2          | 765kV            | GAYA-VARANASI                         | D/C<br>S/C       | 95<br>277          | 310<br>14          | 0.0<br>3.7  | 3.5<br>0.0     | -3.5<br>3.7                              |
| 3          | 703K V           | SASARAM-FATEHPUR<br>GAYA-BALIA        | S/C              | 0                  | 572                | 0.0         | 10.8           | -10.8                                    |
| 4          | HVDC             | ALIPURDUAR-AGRA                       | -                | 0                  | 1201               | 0.0         | 25.9           | -25.9                                    |
| 5          | HVDC             | PUSAULI B/B                           | S/C              | 0                  | 346                | 0.0         | 8.7            | -8.7                                     |
| 6          |                  | PUSAULI-VARANASI                      | S/C              | 0                  | 300                | 0.0         | 6.7            | -6.7                                     |
| 7          |                  | PUSAULI -ALLAHABAD                    | S/C              | 0                  | 113                | 0.0         | 1.8            | -1.8                                     |
| 8          | 400 kV           | MUZAFFARPUR-GORAKHPUR<br>PATNA-BALIA  | D/C<br>Q/C       | 0                  | 596<br>1123        | 0.0         | 7.9<br>18.4    | -7.9<br>-18.4                            |
| 10         | 400 K            | BIHARSHARIFF-BALIA                    | D/C              | 0                  | 433                | 0.0         | 7.7            | -7.7                                     |
| 11         |                  | MOTIHARI-GORAKHPUR                    | D/C              | 287                | 22                 | 4.3         | 0.0            | 4.3                                      |
| 12         |                  | BIHARSHARIFF-VARANASI                 | D/C              | 245                | 76                 | 3.1         | 0.0            | 3.1                                      |
| 13         | 220 kV           | PUSAULI-SAHUPURI                      | S/C              | 0                  | 192                | 0.0         | 3.9            | -3.9                                     |
| 14         |                  | SONE NAGAR-RIHAND                     | S/C              | 0                  | 0                  | 0.0         | 0.0            | 0.0                                      |
| 15         | 132 kV           | GARWAH-RIHAND                         | S/C              | 30                 | 0                  | 0.5         | 0.0            | 0.5                                      |
| 16         | 102111           | 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                                      |
| Imamout/E  | Ermant of        | ED (With WD)                          |                  |                    | ER-NR              | 11.6        | 95.1           | -83.6                                    |
|            | export of        | ER (With WR)                          | 1 1              |                    |                    | 1           |                |  |
| 18         | 765 1-37         | JHARSUGUDA-DHARAMJAIGARH              | Q/C              | 1366               | 0                  | 19.5        | 0.0            | 19.5                                     |
| 19         | 765 kV           | NEW RANCHI-DHARAMJAIGARH              | D/C              | 1277               | 0                  | 23.0        | 0.0            | 23.0                                     |
| 20         |                  | JHARSUGUDA-DURG<br>JHARSUGUDA-RAIGARH | D/C              | 293<br>345         | 54<br>0            | 3.5<br>5.2  | 0.0            | 3.5<br>5.2                               |
| 22         | 400 kV           | RANCHI-SIPAT                          | Q/C<br>D/C       | 511                | 0                  | 11.7        | 0.0            | 11.7                                     |
| 23         |                  | BUDHIPADAR-RAIGARH                    | S/C              | 29                 | 80                 | 0.0         | 0.6            | -0.6                                     |
| 24         | 220 kV           | BUDHIPADAR-KORBA                      | D/C              | 230                | 0                  | 4.0         | 0.0            | 4.0                                      |
|            |                  |                                       |                  |                    | ER-WR              | 66.8        | 0.6            | 66.2                                     |
| Import/E   | Export of        | ER (With SR)                          |                  |                    |                    |             |                |  |
| 25         | 765 kV           | ANGUL-SRIKAKULAM                      | D/C              | 0.0                | 716.0              | 0.0         | 19.7           | -19.7                                    |
| 26         | HVDC             | JEYPORE-GAZUWAKA B/B                  | D/C              | 0.0                | 360.0              | 0.0         | 7.3            | -7.3                                     |
| 27         | LINK             | TALCHER-KOLAR BIPOLE                  | D/C              | 0.0                | 1187.0             | 0.0         | 25.4           | -25.4                                    |
| 28         | 400 kV           | TALCHER-I/C                           | D/C              | 586.0              | 443.0              | 1.5         | 0.0            | 1.5                                      |
| 29         | 220 kV           | BALIMELA-UPPER-SILERRU                | S/C              | 1.0                | 0.0<br>ER-SR       | 0.0         | 0.0<br>52.3    | -52.3                                    |
| Import/F   | Export of        | ER (With NER)                         |                  |                    | EK-5K              | 0.0         | 32.3           | -32.3                                    |
| 30         |                  | BINAGURI-BONGAIGAON                   | D/C              | 0                  | 640                | 0.0         | 9.4            | -9                                       |
| 31         | 400 kV           | ALIPURDUAR-BONGAIGAON                 | D/C              | 244                | 243                | 0.9         | 0.0            | 1  |
| 32         | 220 kV           | ALIPURDUAR-SALAKATI                   | D/C              | 0                  | 104                | 0.0         | 1.3            | -1                                       |
|            |                  |                                       |                  |                    | ER-NER             | 0.9         | 10.7           | -9.8                                     |
|            |                  | NER (With NR)                         |                  |                    | 1                  |             |                | Т  |
| 33         | HVDC             | BISWANATH CHARIALI-AGRA               | -                | 0                  | 602                | 0.0         | 14.4           | -14.4                                    |
| Import/E   | Export of        | WR (With NR)                          |                  |                    | NER-NR             | 0.0         | 14.4           | -14.4                                    |
| 34         | Aport or         | CHAMPA-KURUKSHETRA                    | D/C              | 0                  | 3034               | 0.0         | 59.5           | -59.5                                    |
| 35         | HVDC             |                                       | D/C              | 0                  | 253                | 0.0         | 4.9            | -4.9                                     |
| 36         |                  | APL -MHG                              | D/C              | 0                  | 2098               | 0.0         | 44.1           | -44.1                                    |
| 37         | 1                | GWALIOR-AGRA                          | D/C              | 0                  | 2726               | 0.0         | 52.1           | -52.1                                    |
| 38         | ]                | PHAGI-GWALIOR                         | D/C              | 0                  | 1056               | 0.0         | 17.8           | -17.8                                    |
| 39         | 765 kV           | JABALPUR-ORAI                         | D/C              | 0                  | 998                | 0.0         | 37.2           | -37.2                                    |
| 40         | , 55 KV          | GWALIOR-ORAI                          | S/C              | 380                | 0                  | 6.8         | 0.0            | 6.8                                      |
| 41         |                  | SATNA-ORAI                            | S/C              | 0                  | 1435               | 0.0         | 31.1           | -31.1                                    |
| 42         |                  | CHITTORGARH-BANASKANTHA               | D/C              | 322                | 384                | 0.0         | 1.1            | 1.1                                      |
| 43         | 1                | ZERDA-KANKROLI                        | S/C              | 171                | 28                 | 1.4<br>4.4  | 0.0            | 1.4<br>4.4                               |
| 44         | 400 kV           | ZERDA -BHINMAL<br>V'CHAL -RIHAND      | S/C<br>S/C       | 975                | 0                  | 22.2        | 0.0            | 22.2                                     |
| 45         | 1                | RAPP-SHUJALPUR                        | D/C              | 48                 | 285                | 0           | 2              | -2                                       |
| 46         |                  | BHANPURA-RANPUR                       | S/C              | 37                 | 45                 | 0.1         | 0.4            | -0.4                                     |
| 48         | 1                | BHANPURA-MORAK                        | S/C              | 8                  | 89                 | 0.0         | 1.3            | -1.3                                     |
| 49         | 220 kV           | MEHGAON-AURAIYA                       | S/C              | 53                 | 46                 | 0.0         | 0.3            | -0.1                                     |
| 50         | 1                | MALANPUR-AURAIYA                      | S/C              | 16                 | 64                 | 0.0         | 0.8            | -0.8                                     |
| 51         | 132kV            | GWALIOR-SAWAI MADHOPUR                | S/C              | 0                  | 0                  | 0.0         | 0.0            | 0.0                                      |
|            |                  |                                       |                  |                    | WR-NR              | 35.1        | 252.1          | -214.8                                   |
|            |                  | WR (With SR)                          |                  |                    |                    |             | <del></del>    |  |
| 52         |                  | BHADRAWATI B/B                        | -                | 185                | 302                | 1.2         | 3.0            | -1.8                                     |
| 53         | LINK             | BARSUR-L.SILERU                       | - D/C            | 0                  | 0                  | 0.0         | 0.0            | 0.0                                      |
| 54         | 765 kV           | SOLAPUR-RAICHUR                       | D/C              | 656                | 802                | 0.8         | 0.0            | 0.8                                      |
| 55         |                  | WARDHA-NIZAMABAD                      | D/C              | 0                  | 1207               | 0.0         | 13.3           | -13.3                                    |
| 56<br>57   | 400 kV           | KOLHAPUR-KUDGI<br>KOLHAPUR-CHIKODI    | D/C<br>D/C       | 892                | 0                  | 12.9<br>0.0 | 0.0            | 12.9<br>0.0                              |
| 58         | 220 ⊬V           | PONDA-AMBEWADI                        | S/C              | 0                  | 91                 | 0.0         | 0.0            | -1.4                                     |
| 59         | -20 K            | XELDEM-AMBEWADI                       | S/C              | 0                  | 50                 | 0.0         | 0.0            | 0.8                                      |
| 37         | ı                |                                       | 5/0              | U                  | WR-SR              | 15.7        | 17.7           | -1.9                                     |
|            |                  |                                       | D A NIGINI A POP | ONAL ENGL.         |                    | 15./        | 1/./           | -1.7                                     |
| <i>c</i> 0 | 1                |                                       | KANSNATI         | ONAL EXCHA         | MGE                |             |                | 40 -                                     |
| 60         |                  | BHUTAN<br>NEPAL                       |                  |                    |                    |             |                | 18.5<br>-8.3                             |
|            | <b> </b>         | BANGLADESH                            |                  |                    |                    |             |                | -8.3<br>-25.4                            |
| 62         |                  |                                       |                  |                    |                    |             |                | -0.7                                     |