



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: 04<sup>th</sup> July 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 03.07.2019.**

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 03-जुलाई-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 03<sup>rd</sup> July 2019, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting

4-Jul-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) | 62627          | 43546          | 42143          | 19180          | 2811          | 170307          |
| Peak Shortage (MW)  | 839            | 0              | 0              | 0              | 134           | 973             |
| Energy Met (MU)   | 1491           | 989            | 940            | 433            | 51            | 3905            |
| Hydro Gen (MU)  | 365            | 13             | 41             | 93             | 19            | 531             |
| Wind Gen (MU)   | 27             | 95             | 203            | -----          | -----         | 324             |
| Solar Gen (MU)*   | 26.55          | 14.97          | 68.37          | 1.93           | 0.04          | 112             |
| Energy Shortage (MU)  | 11.4           | 0.0            | 0.0            | 0.0            | 1.0           | 12.4            |
| Maximum Demand Met during the day<br>(MW) & time (from NLDC SCADA)  | 66687<br>22:22 | 45641<br>19:35 | 42069<br>19:46 | 21426<br>20:40 | 2833<br>19:04 | 175162<br>21:31 |

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 | 0.049 | 0.00  | 0.52      | 12.07     | 12.59 | 70.08      | 17.33   |

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            | 13041                               | 0                                   | 300.0           | 145.9                | -2.1             | 47          | 0.0                  |
|             | Haryana           | 10850                               | 125                                 | 237.2           | 166.4                | 0.3              | 193         | 0.2                  |
|             | Rajasthan         | 11017                               | 0                                   | 242.7           | 65.4                 | -1.3             | 611         | 0.0                  |
|             | Delhi             | 6977                                | 0                                   | 145.3           | 123.2                | -0.2             | 272         | 0.2                  |
|             | UP                | 20648                               | 340                                 | 433.9           | 205.0                | -0.5             | 600         | 0.0                  |
|             | Uttarakhand       | 2128                                | 0                                   | 47.0            | 20.1                 | 1.0              | 122         | 0.1                  |
|             | HP                | 1499                                | 0                                   | 31.8            | 2.1                  | 0.8              | 250         | 0.0                  |
|             | J&K               | 2006                                | 354                                 | 45.9            | 22.1                 | -1.2             | 251         | 10.9                 |
| WR          | Chandigarh        | 367                                 | 0                                   | 7.4             | 8.1                  | -0.7             | 8           | 0.0                  |
|             | Chhattisgarh      | 3313                                | 0                                   | 73.8            | 25.8                 | -1.0             | 406         | 0.0                  |
|             | Gujarat           | 15030                               | 0                                   | 331.1           | 63.4                 | 4.7              | 580         | 0.0                  |
|             | MP                | 7428                                | 0                                   | 156.6           | 68.4                 | 0.0              | 738         | 0.0                  |
|             | Maharashtra       | 17477                               | 0                                   | 387.0           | 99.8                 | -2.9             | 433         | 0.0                  |
|             | Goa               | 541                                 | 0                                   | 10.0            | 10.7                 | -1.3             | 106         | 0.0                  |
|             | DD                | 335                                 | 0                                   | 7.5             | 6.8                  | 0.7              | 83          | 0.0                  |
|             | DNH               | 800                                 | 0                                   | 18.5            | 18.4                 | 0.1              | 82          | 0.0                  |
| SR          | Essar steel       | 284                                 | 0                                   | 4.7             | 4.7                  | 0.0              | 327         | 0.0                  |
|             | Andhra Pradesh    | 8164                                | 0                                   | 171.4           | 0.6                  | 0.8              | 495         | 0.0                  |
|             | Telangana         | 7085                                | 0                                   | 146.3           | 53.0                 | -0.3             | 377         | 0.0                  |
|             | Karnataka         | 9905                                | 0                                   | 195.9           | 58.0                 | -0.3             | 469         | 0.0                  |
|             | Kerala            | 3696                                | 0                                   | 75.2            | 57.8                 | 2.7              | 320         | 0.0                  |
|             | Tamil Nadu        | 15719                               | 0                                   | 342.8           | 148.2                | 2.9              | 1278        | 0.0                  |
|             | Pondy             | 436                                 | 0                                   | 8.9             | 8.8                  | 0.1              | 60          | 0.0                  |
|             | ER                | Bihar                               | 5286                                | 0               | 99.3                 | 96.7             | 0.2         | 50                   |
| DVC         |                   | 3029                                | 0                                   | 65.3            | -40.8                | -0.5             | 75          | 0.0                  |
| Jharkhand   |                   | 1022                                | 0                                   | 21.9            | 17.4                 | -0.7             | 70          | 0.0                  |
| Odisha      |                   | 3926                                | 0                                   | 80.4            | 27.5                 | -1.1             | 100         | 0.0                  |
| West Bengal |                   | 8285                                | 0                                   | 164.8           | 50.9                 | 3.4              | 250         | 0.0                  |
| NER         | Sikkim            | 93                                  | 0                                   | 1.2             | 1.4                  | -0.2             | 30          | 0.0                  |
|             | Arunachal Pradesh | 128                                 | 1                                   | 2.2             | 2.8                  | -0.6             | 67          | 0.0                  |
|             | Assam             | 1789                                | 82                                  | 30.9            | 28.1                 | -1.3             | 188         | 0.9                  |
|             | Manipur           | 167                                 | 2                                   | 2.4             | 2.4                  | 0.0              | 51          | 0.0                  |
|             | Meghalaya         | 330                                 | 0                                   | 6.2             | 2.0                  | -0.1             | 64          | 0.0                  |
|             | Mizoram           | 97                                  | 1                                   | 1.7             | 1.5                  | 0.1              | 13          | 0.0                  |
|             | Nagaland          | 132                                 | 2                                   | 2.6             | 2.3                  | 0.0              | 10          | 0.0                  |
|             | Tripura           | 278                                 | 1                                   | 5.0             | 4.0                  | -0.7             | 58          | 0.0                  |

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

|               | Bhutan | Nepal  | Bangladesh |
|---------------|--------|--------|------------|
| Actual(MU)    | 23.2   | -10.3  | -25.0      |
| Day peak (MW) | 1143.9 | -576.0 | -1058.0    |

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

|              | NR    | WR     | SR   | ER    | NER  | TOTAL |
|--------------|-------|--------|------|-------|------|-------|
| Schedule(MU) | 332.2 | -271.3 | 14.0 | -71.9 | -3.0 | 0.0   |
| Actual(MU)   | 332.8 | -280.5 | 29.9 | -83.7 | -3.8 | -5.3  |
| O/D/U/D(MU)  | 0.6   | -9.1   | 15.9 | -11.8 | -0.9 | -5.3  |

F. Generation Outage(MW)

|                | NR   | WR    | SR    | ER   | NER | Total |
|----------------|------|-------|-------|------|-----|-------|
| Central Sector | 4415 | 18435 | 7792  | 1970 | 56  | 32668 |
| State Sector   | 4850 | 15179 | 8310  | 2880 | 50  | 31269 |
| Total          | 9265 | 33614 | 16102 | 4850 | 106 | 63937 |

G. Sourcewise generation (MU)

|                                     | NR   | WR   | SR  | ER  | NER | All India |
|-------------------------------------|------|------|-----|-----|-----|-----------|
| Coal                                | 667  | 1078 | 454 | 446 | 25  | 2671      |
| Lignite                             | 22   | 15   | 49  | 0   | 0   | 86        |
| Hydro                               | 365  | 13   | 41  | 93  | 37  | 548       |
| Nuclear                             | 27   | 27   | 55  | 0   | 0   | 109       |
| Gas, Naptha & Diesel                | 34   | 41   | 16  | 0   | 50  | 142       |
| RES (Wind, Solar, Biomass & Others) | 70   | 114  | 297 | 2   | 0   | 484       |
| Total                               | 1186 | 1289 | 912 | 541 | 113 | 4041      |

|   |       |       |       |       |       |       |
|---|-------|-------|-------|-------|-------|-------|
| Share of RES in total generation (%)                                      | 5.90  | 8.87  | 32.63 | 0.36  | 0.04  | 11.97 |
| Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%) | 38.98 | 11.97 | 43.10 | 17.52 | 32.92 | 28.25 |

H. Diversity Factor

|                                   |       |
|-----------------------------------|-------|
| All India Demand Diversity Factor | 1.020 |
|-----------------------------------|-------|

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 : 4-Jul-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                | 0               | 502             | 0.0         | 8.5          | -8.5          |     |
| 2                                     |               | SASARAM-FATEHPUR        | S/C                | 297             | 0               | 4.0         | 0.0          | 4.0           |     |
| 3                                     |               | GAYA-BALIA              | S/C                | 0               | 654             | 0.0         | 12.5         | -12.5         |     |
| 4                                     | HVDC          | ALIPURDUAR-AGRA         | -                  | 0               | 1304            | 0.0         | 29.2         | -29.2         |     |
| 5                                     |               | PUSAULI B/B             | S/C                | 0               | 346             | 0.0         | 8.5          | -8.5          |     |
| 6                                     | 400 kV        | PUSAULI-VARANASI        | S/C                | 0               | 273             | 0.0         | 6.0          | -6.0          |     |
| 7                                     |               | PUSAULI -ALLAHABAD      | S/C                | 0               | 119             | 0.0         | 2.2          | -2.2          |     |
| 8                                     |               | MUZAFFARPUR-GORAKHPUR   | D/C                | 0               | 604             | 0.0         | 8.6          | -8.6          |     |
| 9                                     |               | PATNA-BALIA             | Q/C                | 0               | 1153            | 0.0         | 22.3         | -22.3         |     |
| 10                                    |               | BIHARSHARIFF-BALIA      | D/C                | 0               | 407             | 0.0         | 7.9          | -7.9          |     |
| 11                                    |               | MOTIHARI-GORAKHPUR      | D/C                | 311             | 0               | 5.7         | 0.0          | 5.7           |     |
| 12                                    | 220 kV        | BIHARSHARIFF-VARANASI   | D/C                | 170             | 28              | 2.0         | 0.0          | 2.0           |     |
| 13                                    |               | PUSAULI-SAHUPURI        | S/C                | 0               | 185             | 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           | 0.5          | 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           |     |
| <b>ER-NR</b>                          |               |                         |                    |                 |                 | <b>12.2</b> | <b>108.9</b> | <b>-96.8</b>  |     |
| <b>Import/Export of ER (With WR)</b>  |               |                         |                    |                 |                 |             |              |               |     |
| 18                                    | 765 kV        | JHARSUGUDA-DHARAMAJGARH | Q/C                | 899             | 0               | 11.7        | 0.0          | 11.7          |     |
| 19                                    |               | NEW RANCHI-DHARAMAJGARH | D/C                | 1065            | 0               | 16.3        | 0.0          | 16.3          |     |
| 20                                    |               | JHARSUGUDA-DURG         | D/C                | 199             | 23              | 2.3         | 0.0          | 2.3           |     |
| 21                                    | 400 kV        | JHARSUGUDA-RAIGARH      | Q/C                | 501             | 0               | 7.9         | 0.0          | 7.9           |     |
| 22                                    |               | RANCHI-SIPAT            | D/C                | 430             | 0               | 7.7         | 0.0          | 7.7           |     |
| 23                                    | 220 kV        | BUDHIPADAR-RAIGARH      | S/C                | 0               | 69              | 0.0         | 0.9          | -0.9          |     |
| 24                                    |               | BUDHIPADAR-KORBA        | D/C                | 208             | 0               | 2.0         | 0.0          | 2.0           |     |
| <b>ER-WR</b>                          |               |                         |                    |                 |                 | <b>47.9</b> | <b>0.9</b>   | <b>47.1</b>   |     |
| <b>Import/Export of ER (With SR)</b>  |               |                         |                    |                 |                 |             |              |               |     |
| 25                                    | 765 kV        | ANGUL-SRIKAKULAM        | D/C                | 0.0             | 1331.0          | 0.0         | 20.0         | -20.0         |     |
| 26                                    | HVDC          | JEYPORE-GAZUWAKA B/B    | D/C                | 0.0             | 312.0           | 0.0         | 7.2          | -7.2          |     |
| 27                                    | LINK          | TALCHER-KOLAR BIPOLE    | D/C                | 0.0             | 1787.0          | 0.0         | 35.8         | -35.8         |     |
| 28                                    | 400 kV        | TALCHER-I/C             | D/C                | 238.0           | 795.0           | 0.0         | 7.1          | -7.1          |     |
| 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>63.0</b>  | <b>-63.0</b>  |     |
| <b>Import/Export of ER (With NER)</b> |               |                         |                    |                 |                 |             |              |               |     |
| 30                                    | 400 kV        | BINAGURI-BONGAIGAON     | D/C                | 0               | 534             | 0.0         | 8.7          | -9            |     |
| 31                                    |               | ALIPURDUAR-BONGAIGAON   | D/C                | 366             | 48              | 3.2         | 0.0          | 3             |     |
| 32                                    | 220 kV        | ALIPURDUAR-SALAKATI     | D/C                | 0               | 89              | 0.0         | 1.2          | -1            |     |
| <b>ER-NER</b>                         |               |                         |                    |                 |                 | <b>3.2</b>  | <b>10.0</b>  | <b>-6.8</b>   |     |
| <b>Import/Export of NER (With NR)</b> |               |                         |                    |                 |                 |             |              |               |     |
| 33                                    | HVDC          | BISWANATH CHARIALI-AGRA | -                  | 0               | 503             | 0.0         | 12.3         | -12.3         |     |
| <b>NER-NR</b>                         |               |                         |                    |                 |                 | <b>0.0</b>  | <b>12.3</b>  | <b>-12.3</b>  |     |
| <b>Import/Export of WR (With NR)</b>  |               |                         |                    |                 |                 |             |              |               |     |
| 34                                    | HVDC          | CHAMPA-KURUKSHETRA      | D/C                | 0               | 3012            | 0.0         | 71.1         | -71.1         |     |
| 35                                    |               | V'CHAL B/B              | D/C                | 0               | 490             | 0.0         | 4.5          | -4.5          |     |
| 36                                    |               | APL -MHG                | D/C                | 0               | 1916            | 0.0         | 48.4         | -48.4         |     |
| 37                                    | 765 kV        | GWALIOR-AGRA            | D/C                | 0               | 2602            | 0.0         | 51.0         | -51.0         |     |
| 38                                    |               | PHAGI-GWALIOR           | D/C                | 0               | 1239            | 0.0         | 21.8         | -21.8         |     |
| 39                                    |               | JABALPUR-ORAI           | D/C                | 0               | 970             | 0.0         | 37.6         | -37.6         |     |
| 40                                    |               | GWALIOR-ORAI            | S/C                | 411             | 0               | 7.8         | 0.0          | 7.8           |     |
| 41                                    |               | SATNA-ORAI              | S/C                | 0               | 1427            | 0.0         | 30.4         | -30.4         |     |
| 42                                    |               | CHITTORGARH-BANASKANTHA | D/C                | 428             | 352             | 1.1         | 2.2          | 1.1           |     |
| 43                                    | 400 kV        | ZERDA-KANKROLI          | S/C                | 195             | 15              | 1.6         | 0.0          | 1.6           |     |
| 44                                    |               | ZERDA -BHINMAL          | S/C                | 330             | 28              | 3.5         | 0.0          | 3.5           |     |
| 45                                    |               | V'CHAL -RIHAND          | S/C                | 971             | 0               | 22.4        | 0.0          | 22.4          |     |
| 46                                    | 220 kV        | RAPP-SHUJALPUR          | D/C                | 0               | 407             | 0           | 3            | -3            |     |
| 47                                    |               | BHANPURA-RANPUR         | S/C                | 20              | 53              | 0.0         | 0.7          | -0.6          |     |
| 48                                    |               | BHANPURA-MORAK          | S/C                | 0               | 110             | 0.0         | 1.6          | -1.6          |     |
| 49                                    |               | MEHGAON-AURAIYA         | S/C                | 42              | 31              | 0.1         | 0.2          | -0.1          |     |
| 50                                    |               | MALANPUR-AURAIYA        | S/C                | 13              | 55              | 0.0         | 0.8          | -0.8          |     |
| 51                                    | 132kV         | GWALIOR-SAWAI MADHOPUR  | S/C                | 0               | 0               | 0.0         | 0.0          | 0.0           |     |
| <b>WR-NR</b>                          |               |                         |                    |                 |                 | <b>36.4</b> | <b>273.0</b> | <b>-234.3</b> |     |
| <b>Import/Export of WR (With SR)</b>  |               |                         |                    |                 |                 |             |              |               |     |
| 52                                    | HVDC          | BHADRAWATI B/B          | -                  | 97              | 109             | 0.7         | 1.8          | -1.1          |     |
| 53                                    | LINK          | BARSUR-L.SILERU         | -                  | 0               | 0               | 0.0         | 0.0          | 0.0           |     |
| 54                                    | 765 kV        | SOLAPUR-RAICHUR         | D/C                | 1097            | 835             | 5.3         | 4.1          | 1.2           |     |
| 55                                    |               | WARDHA-NIZAMABAD        | D/C                | 344             | 1305            | 0.0         | 10.8         | -10.8         |     |
| 56                                    | 400 kV        | KOLHAPUR-KUDGI          | D/C                | 1150            | 0               | 15.2        | 0.0          | 15.2          |     |
| 57                                    | 220 kV        | KOLHAPUR-CHIKODI        | D/C                | 0               | 0               | 0.0         | 0.0          | 0.0           |     |
| 58                                    |               | PONDA-AMBEWADI          | S/C                | 0               | 64              | 0.0         | 1.2          | -1.2          |     |
| 59                                    |               | XELDEM-AMBEWADI         | S/C                | 0               | 37              | 0.7         | 0.0          | 0.7           |     |
| <b>WR-SR</b>                          |               |                         |                    |                 |                 | <b>21.9</b> | <b>17.9</b>  | <b>4.0</b>    |     |
| <b>TRANSNATIONAL EXCHANGE</b>         |               |                         |                    |                 |                 |             |              |               |     |
| 60                                    |               | BHUTAN                  |                    |                 |                 |             |              | <b>23.2</b>   |     |
| 61                                    |               | NEPAL                   |                    |                 |                 |             |              | <b>-10.3</b>  |     |
| 62                                    |               | BANGLADESH              |                    |                 |                 |             |              | <b>-25.0</b>  |     |