



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)  
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: 22<sup>nd</sup> Jan 2019

To,

- कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के., 14, गोल्फ क्लब रोड, कोलकाता - 700033  
Executive Director, ERLDC, 14 Golf Club Road, Tolleygunge, 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
- कार्यकारी निदेशक, ऊ.पू.क्षे.भा.प्रे.के., डोंगतिह, लोअर नोंग्रह, लापलंग, शिलोंग - 793006  
Executive Director, 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 21.01.2019.**

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.5.5.1 के प्रावधान के अनुसार, दिनांक 21-जनवरी-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 21<sup>st</sup> January 2019, is available at the NLDC website.

धन्यवाद,

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

Report for previous day

Date of Reporting

22-Jan-19

A. Maximum Demand

|   | NR             | WR             | SR             | ER             | NER           | Total           |
|---|----------------|----------------|----------------|----------------|---------------|-----------------|
| Demand Met during Evening Peak hrs(MW)<br>(at 1900 hrs: from RLDCs) | 39327          | 47632          | 40318          | 17950          | 2342          | 147569          |
| Peak Shortage (MW)  | 720            | 0              | 60             | 204            | 32            | 1016            |
| Energy Met (MU)   | 881            | 1120           | 907            | 353            | 42            | 3304            |
| Hydro Gen (MU)  | 115            | 23             | 75             | 24             | 7             | 243             |
| Wind Gen (MU)   | 16             | 52             | 42             | -----          | -----         | 110             |
| Solar Gen (MU)*   | 12.80          | 18.67          | 76.36          | 0.90           | 0.04          | 109             |
| Energy Shortage (MU)  | 10.6           | 0.2            | 0.3            | 0.6            | 0.3           | 11.9            |
| Maximum Demand Met during the day<br>(MW) & time (from NLDC SCADA)  | 43459<br>08:40 | 55783<br>09:50 | 43310<br>09:41 | 18643<br>18:30 | 2503<br>17:47 | 159826<br>09:21 |

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 | 0.056 | 0.08  | 2.19      | 8.37      | 10.64 | 67.27      | 22.09   |

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            | 5552                                | 0                                   | 102.8           | 28.0                 | -0.7             | 75          | 0.0                  |     |
|             | Haryana           | 5884                                | 0                                   | 115.2           | 65.3                 | -0.6             | 169         | 0.4                  |     |
|             | Rajasthan         | 11958                               | 0                                   | 225.2           | 63.8                 | -2.1             | 550         | 0.0                  |     |
|             | Delhi             | 3907                                | 0                                   | 67.9            | 53.0                 | -0.9             | 188         | 0.0                  |     |
|             | UP                | 12633                               | 0                                   | 259.4           | 103.3                | -0.3             | 399         | 0.3                  |     |
|             | Uttarakhand       | 2094                                | 0                                   | 35.0            | 22.7                 | -1.0             | 160         | 0.0                  |     |
|             | HP                | 1616                                | 0                                   | 29.0            | 23.6                 | 0.0              | 147         | 0.0                  |     |
|             | J&K               | 2234                                | 599                                 | 43.1            | 41.5                 | -3.7             | 141         | 9.9                  |     |
|             | Chandigarh        | 228                                 | 0                                   | 3.7             | 3.9                  | -0.3             | 27          | 0.0                  |     |
|             | WR                | Chhattisgarh                        | 3732                                | 0               | 80.8                 | 33.6             | -0.8        | 220                  | 0.2 |
| Gujarat     |                   | 16008                               | 0                                   | 333.9           | 80.2                 | 7.3              | 720         | 0.0                  |     |
| MP          |                   | 13800                               | 0                                   | 243.7           | 133.3                | -2.4             | 401         | 0.0                  |     |
| Maharashtra |                   | 20632                               | 0                                   | 412.4           | 123.8                | 0.5              | 515         | 0.0                  |     |
| Goa         |                   | 498                                 | 0                                   | 12.0            | 10.6                 | 0.8              | 35          | 0.0                  |     |
| DD          |                   | 297                                 | 0                                   | 6.8             | 6.6                  | 0.1              | 38          | 0.0                  |     |
| DNH         |                   | 774                                 | 0                                   | 17.9            | 17.8                 | 0.0              | 48          | 0.0                  |     |
| Essar steel |                   | 595                                 | 0                                   | 13.0            | 12.6                 | 0.4              | 274         | 0.0                  |     |
| SR          |                   | Andhra Pradesh                      | 8121                                | 0               | 165.2                | 65.5             | 0.2         | 564                  | 0.0 |
|             |                   | Telangana                           | 8808                                | 0               | 181.9                | 71.0             | 0.4         | 526                  | 0.0 |
|             | Karnataka         | 11390                               | 0                                   | 211.9           | 76.7                 | 0.0              | 517         | 0.0                  |     |
|             | Kerala            | 3376                                | 0                                   | 62.7            | 46.1                 | 0.7              | 155         | 0.3                  |     |
|             | Tamil Nadu        | 13444                               | 0                                   | 278.2           | 146.4                | 0.6              | 564         | 0.0                  |     |
|             | Pondy             | 355                                 | 0                                   | 6.9             | 7.1                  | -0.3             | 64          | 0.0                  |     |
|             | ER                | Bihar                               | 4202                                | 0               | 75.3                 | 69.0             | 0.9         | 460                  | 0.0 |
| DVC         |                   | 3176                                | 0                                   | 65.6            | -45.4                | -0.6             | 396         | 0.0                  |     |
| Jharkhand   |                   | 999                                 | 204                                 | 22.8            | 15.6                 | 0.5              | 169         | 0.6                  |     |
| Odisha      |                   | 3919                                | 0                                   | 67.6            | 21.4                 | -2.3             | 267         | 0.0                  |     |
| West Bengal |                   | 6657                                | 0                                   | 120.6           | 18.9                 | 1.4              | 309         | 0.0                  |     |
| Sikkim      |                   | 93                                  | 0                                   | 1.3             | 1.6                  | -0.4             | 18          | 0.0                  |     |
| NER         | Arunachal Pradesh | 114                                 | 2                                   | 2.2             | 2.0                  | 0.2              | 37          | 0.0                  |     |
|             | Assam             | 1388                                | 21                                  | 23.2            | 17.5                 | 1.5              | 138         | 0.2                  |     |
|             | Manipur           | 189                                 | 3                                   | 2.9             | 3.0                  | -0.1             | 44          | 0.0                  |     |
|             | Meghalaya         | 336                                 | 0                                   | 6.2             | 5.3                  | -0.1             | 52          | 0.0                  |     |
|             | Mizoram           | 97                                  | 1                                   | 1.8             | 1.7                  | 0.0              | 3           | 0.0                  |     |
|             | Nagaland          | 112                                 | 3                                   | 2.1             | 2.0                  | 0.0              | 12          | 0.0                  |     |
|             | Tripura           | 270                                 | 1                                   | 3.9             | 3.9                  | 0.3              | 57          | 0.0                  |     |

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

|               | Bhutan | Nepal  | Bangladesh |
|---------------|--------|--------|------------|
| Actual(MU)    | 0.6    | -7.1   | -14.0      |
| Day peak (MW) | 116.0  | -327.0 | -811.0     |

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

|              | NR    | WR     | SR    | ER    | NER | TOTAL |
|--------------|-------|--------|-------|-------|-----|-------|
| Schedule(MU) | 158.3 | -189.2 | 103.6 | -73.1 | 0.1 | -0.4  |
| Actual(MU)   | 155.6 | -190.1 | 103.0 | -73.4 | 0.8 | -4.2  |
| O/D/U/D(MU)  | -2.8  | -0.9   | -0.6  | -0.2  | 0.7 | -3.8  |

F. Generation Outage(MW)

|                | NR    | WR    | SR    | ER   | NER | Total |
|----------------|-------|-------|-------|------|-----|-------|
| Central Sector | 3370  | 15387 | 6602  | 2905 | 207 | 28470 |
| State Sector   | 10810 | 16436 | 9330  | 4165 | 50  | 40791 |
| Total          | 14180 | 31823 | 15932 | 7070 | 256 | 69261 |

G. Sourcewise generation (MU)

|                                     | NR  | WR   | SR  | ER  | NER | All India |
|-------------------------------------|-----|------|-----|-----|-----|-----------|
| Coal                                | 515 | 1143 | 471 | 409 | 9   | 2548      |
| Lignite                             | 17  | 19   | 53  | 0   | 0   | 88        |
| Hydro                               | 115 | 23   | 75  | 24  | 7   | 243       |
| Nuclear                             | 24  | 29   | 32  | 0   | 0   | 85        |
| Gas, Naptha & Diesel                | 26  | 42   | 18  | 0   | 29  | 115       |
| RES (Wind, Solar, Biomass & Others) | 58  | 71   | 160 | 1   | 0   | 291       |
| Total                               | 755 | 1327 | 809 | 434 | 45  | 3370      |

|   |       |      |       |      |       |       |
|---|-------|------|-------|------|-------|-------|
| Share of RES in total generation (%)                                      | 7.69  | 5.38 | 19.80 | 0.22 | 0.09  | 8.62  |
| Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%) | 26.07 | 9.30 | 32.92 | 5.76 | 15.42 | 18.35 |

H. Diversity Factor

|                                   |       |
|-----------------------------------|-------|
| All India Demand Diversity Factor | 1.024 |
|-----------------------------------|-------|

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 : 22-Jan-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               | 737             | 0.0         | 9.5          | -9.5          |
| 2                                     |               | SASARAM-FATEHPUR             | S/C                    | 37              | 287             | 0.0         | 2.7          | -2.7          |
| 3                                     |               | GAYA-BALIA                   | S/C                    | 0               | 395             | 0.0         | 6.1          | -6.1          |
| 4                                     |               | ALIPURDUAR-AGRA              | -                      | 0               | 0               | 0.0         | 0.0          | 0.0           |
| 5                                     |               | PUSAULI B/B                  | S/C                    | 0               | 150             | 0.0         | 3.6          | -3.6          |
| 6                                     | 400 kV        | PUSAULI-VARANASI             | S/C                    | 0               | 114             | 0.0         | 2.1          | -2.1          |
| 7                                     |               | PUSAULI -ALLAHABAD           | S/C                    | 0               | 106             | 0.0         | 1.4          | -1.4          |
| 8                                     |               | MUZAFFARPUR-GORAKHPUR        | D/C                    | 0               | 647             | 0.0         | 8.2          | -8.2          |
| 9                                     |               | PATNA-BALIA                  | Q/C                    | 0               | 731             | 0.0         | 13.5         | -13.5         |
| 10                                    |               | BIHARSHARIFF-BALIA           | D/C                    | 0               | 372             | 0.0         | 5.3          | -5.3          |
| 11                                    |               | MOTIHARI-GORAKHPUR           | D/C                    | 0               | 280             | 0.0         | 4.7          | -4.7          |
| 12                                    |               | BIHARSHARIFF-VARANASI        | D/C                    | 56              | 259             | 0.0         | 2.3          | -2.3          |
| 13                                    | 220 kV        | PUSAULI-SAHUPURI             | S/C                    | 0               | 151             | 0.0         | 2.8          | -2.8          |
| 14                                    | 132 kV        | SONE NAGAR-RIHAND            | S/C                    | 0               | 0               | 0.0         | 0.0          | 0.0           |
| 15                                    |               | GARWAH-RIHAND                | S/C                    | 25              | 0               | 0.6         | 0.0          | 0.6           |
| 16                                    |               | KARMANASA-SAHUPURI           | S/C                    | 42              | 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>0.6</b>  | <b>62.1</b>  | <b>-61.5</b>  |
| <b>Import/Export of ER (With WR)</b>  |               |                              |                        |                 |                 |             |              |               |
| 18                                    | 765 kV        | JHARSUGUDA-DHARAMJAIGARH S/C | D/C                    | 1645            | 0               | 23.6        | 0.0          | 23.6          |
| 19                                    |               | NEW RANCHI-DHARAMJAIGARH     | D/C                    | 338             | 463             | 0.0         | 3.2          | -3.2          |
| 20                                    | 400 kV        | JHARSUGUDA-RAIGARH           | Q/C                    | 110             | 143             | 0.0         | 0.9          | -0.9          |
| 21                                    |               | RANCHI-SIPAT                 | D/C                    | 179             | 102             | 0.9         | 0.0          | 0.9           |
| 22                                    | 220 kV        | BUDHIPADAR-RAIGARH           | S/C                    | 6               | 85              | 0.0         | 1.0          | -1.0          |
| 23                                    |               | BUDHIPADAR-KORBA             | D/C                    | 103             | 2               | 1.2         | 0.0          | 1.2           |
| <b>ER-WR</b>                          |               |                              |                        |                 |                 | <b>25.7</b> | <b>5.1</b>   | <b>20.6</b>   |
| <b>Import/Export of ER (With SR)</b>  |               |                              |                        |                 |                 |             |              |               |
| 24                                    | 765 kV        | ANGUL-SRIKAKULAM             | D/C                    | 0.0             | 1634.0          | 0.0         | 25.5         | -25.5         |
| 25                                    | HVDC          | JEYPORE-GAZUWAKA B/B         | D/C                    | 0.0             | 646.0           | 0.0         | 16.0         | -16.0         |
| 26                                    | LINK          | TALCHER-KOLAR BIPOLE         | D/C                    | 0.0             | 1984.0          | 0.0         | 43.0         | -43.0         |
| 27                                    | 400 kV        | TALCHER-I/C                  | D/C                    | 251.0           | 343.0           | 0.0         | 6.6          | -6.6          |
| 28                                    | 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>84.5</b>  | <b>-84.5</b>  |
| <b>Import/Export of ER (With NER)</b> |               |                              |                        |                 |                 |             |              |               |
| 29                                    | 400 kV        | BINAGURI-BONGAIGAON          | D/C                    | 326             | 0               | 4.8         | 0.0          | 5             |
| 30                                    |               | ALIPURDUAR-BONGAIGAON        | D/C                    | 462             | 0               | 6.9         | 0.0          | 7             |
| 31                                    | 220 kV        | ALIPURDUAR-SALAKATI          | D/C                    | 79              | 8               | 0.8         | 0.0          | 1             |
| <b>ER-NER</b>                         |               |                              |                        |                 |                 | <b>12.5</b> | <b>0.0</b>   | <b>12.5</b>   |
| <b>Import/Export of NER (With NR)</b> |               |                              |                        |                 |                 |             |              |               |
| 32                                    | HVDC          | BISWANATH CHARIALI-AGRA      | -                      | 661             | 0               | 14.0        | 0.0          | 14.0          |
| <b>NER-NR</b>                         |               |                              |                        |                 |                 | <b>14.0</b> | <b>0.0</b>   | <b>14.0</b>   |
| <b>Import/Export of WR (With NR)</b>  |               |                              |                        |                 |                 |             |              |               |
| 33                                    | HVDC          | CHAMPA-KURUKSHETRA           | D/C                    | 0               | 1303            | 0.0         | 21.0         | -21.0         |
| 34                                    |               | V'CHAL B/B                   | D/C                    | 241             | 253             | 3.7         | 2.3          | 1.4           |
| 35                                    |               | APL -MHG                     | D/C                    | 0               | 1736            | 0.0         | 38.6         | -38.6         |
| 36                                    |               | GWALIOR-AGRA                 | D/C                    | 0               | 1108            | 0.0         | 33.7         | -33.7         |
| 37                                    | 765 kV        | PHAGI-GWALIOR                | D/C                    | 0               | 842             | 0.0         | 11.1         | -11.1         |
| 38                                    |               | JABALPUR-ORAI                | D/C                    | 0               | 721             | 0.0         | 18.3         | -18.3         |
| 39                                    |               | GWALIOR-ORAI                 | S/C                    | 536             | 0               | 9.3         | 0.0          | 9.3           |
| 40                                    |               | SATNA-ORAI                   | S/C                    | 0               | 1230            | 0.0         | 23.4         | -23.4         |
| 41                                    |               | ZERDA-KANKROLI               | S/C                    | 210             | 120             | 1.8         | 0.0          | 1.8           |
| 42                                    | 400 kV        | ZERDA -BHINMAL               | S/C                    | 198             | 307             | 0.0         | 1.2          | -1.2          |
| 43                                    |               | V'CHAL -RIHAND               | S/C                    | 964             | 0               | 19.7        | 0.0          | 19.7          |
| 44                                    |               | RAPP-SHUJALPUR               | D/C                    | 318             | 206             | 1           | 0            | 1             |
| 45                                    | 220 kV        | BADOD-KOTA                   | S/C                    | 49              | 32              | 0.7         | 0.1          | 0.6           |
| 46                                    |               | BADOD-MORAK                  | S/C                    | 16              | 122             | 0.0         | 1.1          | -1.1          |
| 47                                    |               | MEHGAON-AURAIYA              | S/C                    | 115             | 0               | 1.4         | 0.0          | 1.4           |
| 48                                    | 400 kV        | MALANPUR-AURAIYA             | S/C                    | 64              | 16              | 0.5         | 0.0          | 0.5           |
| 49                                    |               | 132kV                        | GWALIOR-SAWAI MADHOPUR | S/C             | 0               | 0           | 0.0          | 0.0           |
| <b>WR-NR</b>                          |               |                              |                        |                 |                 | <b>38.2</b> | <b>150.8</b> | <b>-112.5</b> |
| <b>Import/Export of WR (With SR)</b>  |               |                              |                        |                 |                 |             |              |               |
| 50                                    | HVDC          | BHADRAWATI B/B               | -                      | 0               | 1006            | 0.0         | 19.6         | -19.6         |
| 51                                    | LINK          | BARSUR-L.SILERU              | -                      | 0               | 0               | 0.0         | 0.0          | 0.0           |
| 52                                    | 765 kV        | SOLAPUR-RAICHUR              | D/C                    | 488             | 2131            | 0.0         | 23.2         | -23.2         |
| 53                                    |               | WARDHA-NIZAMABAD             | D/C                    | 0               | 1988            | 0.0         | 28.6         | -28.6         |
| 54                                    | 400 kV        | KOLHAPUR-KUDGI               | D/C                    | 1033            | 0               | 13.8        | 0.0          | 13.8          |
| 55                                    |               | KOLHAPUR-CHIKODI             | D/C                    | 0               | 0               | 0.0         | 0.0          | 0.0           |
| 56                                    | 220 kV        | PONDA-AMBEWADI               | S/C                    | 1               | 71              | 0.0         | 0.7          | -0.7          |
| 57                                    |               | XELDEM-AMBEWADI              | S/C                    | 1               | 53              | 0.8         | 0.0          | 0.8           |
| <b>WR-SR</b>                          |               |                              |                        |                 |                 | <b>14.6</b> | <b>72.1</b>  | <b>-57.5</b>  |
| <b>TRANSNATIONAL EXCHANGE</b>         |               |                              |                        |                 |                 |             |              |               |
| 58                                    |               | BHUTAN                       |                        |                 |                 |             |              | <b>0.6</b>    |
| 59                                    |               | NEPAL                        |                        |                 |                 |             |              | <b>-7.1</b>   |
| 60                                    |               | BANGLADESH                   |                        |                 |                 |             |              | <b>-14.0</b>  |