



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)  
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बी-9, कुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 22<sup>nd</sup> Nov 2018

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 21.11.2018.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 21-नवंबर-2018 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रांभांप्रेके 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> November 2018, 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-Nov-18

A. Maximum Demand

|  | NR             | WR             | SR             | ER             | NER           | Total           |
|--|----------------|----------------|----------------|----------------|---------------|-----------------|
| Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs) | 41901          | 49355          | 39666          | 18964          | 2422          | 152308          |
| Peak Shortage (MW)   | 523            | 0              | 0              | 0              | 34            | 557             |
| Energy Met (MU)  | 894            | 1176           | 901            | 362            | 42            | 3375            |
| Hydro Gen (MU)   | 132            | 22             | 62             | 39             | 8             | 263             |
| Wind Gen (MU)  | 12             | 23             | 39             | -----          | -----         | 74              |
| Solar Gen (MU)*  | 20.90          | 18.16          | 61.39          | 0.82           | 0.04          | 101             |
| Energy Shortage (MU)   | 11.5           | 0.0            | 0.0            | 0.0            | 0.6           | 12.1            |
| Maximum Demand Met during the day (MW) & time (from NLDC SCADA)  | 43091<br>18:01 | 54702<br>11:01 | 40041<br>18:32 | 19109<br>18:26 | 2498<br>17:20 | 155570<br>18:26 |

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 | 0.032 | 0.00  | 0.08      | 6.11      | 6.19  | 86.67      | 7.14    |

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            | 5347                                | 0                                   | 115.3           | 27.6                 | 0.2              | 124         | 0.0                  |
|            | Haryana           | 5936                                | 0                                   | 116.9           | 69.1                 | 1.5              | 226         | 0.6                  |
|            | Rajasthan         | 11414                               | 0                                   | 227.1           | 58.9                 | 2.6              | 503         | 0.0                  |
|            | Delhi             | 3460                                | 0                                   | 61.3            | 43.6                 | 0.7              | 179         | 0.0                  |
|            | UP                | 12615                               | 0                                   | 270.4           | 115.0                | 0.6              | 246         | 0.0                  |
|            | Uttarakhand       | 1883                                | 0                                   | 35.2            | 21.1                 | 1.5              | 342         | 1.0                  |
|            | HP                | 1566                                | 0                                   | 28.3            | 18.7                 | 0.8              | 149         | 0.2                  |
|            | J&K               | 2250                                | 562                                 | 36.6            | 36.4                 | 2.3              | 328         | 9.7                  |
| Chandigarh | 181               | 0                                   | 3.2                                 | 3.0             | 0.2                  | 30               | 0.0         |                      |
| WR         | Chhattisgarh      | 3530                                | 0                                   | 76.4            | 8.7                  | -1.9             | 141         | 0.0                  |
|            | Gujarat           | 15092                               | 0                                   | 331.5           | 130.4                | 5.3              | 590         | 0.0                  |
|            | MP                | 13310                               | 0                                   | 272.3           | 158.2                | -2.7             | 286         | 0.0                  |
|            | Maharashtra       | 21126                               | 0                                   | 449.5           | 129.1                | -3.6             | 439         | 0.0                  |
|            | Goa               | 480                                 | 0                                   | 10.6            | 10.4                 | -0.1             | 25          | 0.0                  |
|            | DD                | 324                                 | 0                                   | 7.2             | 6.5                  | 0.7              | 84          | 0.0                  |
|            | DNH               | 670                                 | 0                                   | 15.5            | 15.0                 | 0.4              | 92          | 0.0                  |
|            | Essar steel       | 629                                 | 0                                   | 13.0            | 11.5                 | 1.4              | 307         | 0.0                  |
| SR         | Andhra Pradesh    | 8022                                | 0                                   | 174.9           | 62.4                 | 0.7              | 697         | 0.0                  |
|            | Telangana         | 8108                                | 0                                   | 176.7           | 81.7                 | 1.5              | 360         | 0.0                  |
|            | Karnataka         | 10543                               | 0                                   | 205.3           | 69.7                 | 0.4              | 402         | 0.0                  |
|            | Kerala            | 3655                                | 0                                   | 71.1            | 53.3                 | 0.8              | 218         | 0.0                  |
|            | Tamil Nadu        | 12609                               | 0                                   | 266.6           | 135.3                | 0.7              | 414         | 0.0                  |
|            | Pondy             | 303                                 | 0                                   | 6.4             | 6.9                  | -0.5             | 17          | 0.0                  |
| ER         | Bihar             | 4065                                | 0                                   | 70.8            | 69.0                 | -0.8             | 460         | 0.0                  |
|            | DVC               | 2927                                | 0                                   | 62.4            | -30.2                | 1.3              | 396         | 0.0                  |
|            | Jharkhand         | 1165                                | 0                                   | 24.9            | 14.7                 | -1.2             | 169         | 0.0                  |
|            | Odisha            | 4395                                | 0                                   | 86.3            | 35.8                 | 2.6              | 267         | 0.0                  |
|            | West Bengal       | 6811                                | 0                                   | 116.4           | 25.2                 | 1.9              | 309         | 0.0                  |
|            | Sikkim            | 100                                 | 0                                   | 1.4             | 1.5                  | -0.1             | 18          | 0.0                  |
| NER        | Arunachal Pradesh | 121                                 | 3                                   | 2.4             | 2.0                  | 0.4              | 40          | 0.0                  |
|            | Assam             | 1452                                | 23                                  | 23.9            | 18.8                 | 0.9              | 123         | 0.5                  |
|            | Manipur           | 151                                 | 6                                   | 2.5             | 2.6                  | -0.1             | 65          | 0.0                  |
|            | Meghalaya         | 348                                 | 4                                   | 6.2             | 3.7                  | 0.3              | 208         | 0.0                  |
|            | Mizoram           | 91                                  | 8                                   | 1.7             | 1.1                  | 0.1              | 0           | 0.0                  |
|            | Nagaland          | 129                                 | 3                                   | 2.2             | 1.8                  | 0.2              | 25          | 0.0                  |
| Tripura    | 218               | 7                                   | 3.4                                 | 1.5             | -0.2                 | 31               | 0.0         |                      |

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

|               | Bhutan | Nepal  | Bangladesh |
|---------------|--------|--------|------------|
| Actual(MU)    | 7.0    | -2.8   | -16.0      |
| Day peak (MW) | 305.0  | -134.0 | -825.0     |

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

|              | NR    | WR     | SR    | ER    | NER  | TOTAL |
|--------------|-------|--------|-------|-------|------|-------|
| Schedule(MU) | 135.4 | -162.3 | 117.9 | -90.2 | -0.2 | 0.6   |
| Actual(MU)   | 136.6 | -182.4 | 123.7 | -81.6 | -0.5 | -4.2  |
| O/D/U/D(MU)  | 1.3   | -20.2  | 5.8   | 8.6   | -0.3 | -4.8  |

F. Generation Outage(MW)

|                | NR    | WR    | SR    | ER   | NER | Total |
|----------------|-------|-------|-------|------|-----|-------|
| Central Sector | 5093  | 12945 | 8042  | 600  | 131 | 26811 |
| State Sector   | 11895 | 12177 | 8710  | 5925 | 50  | 38757 |
| Total          | 16988 | 25122 | 16752 | 6525 | 181 | 65568 |

G. Sourcewise generation (MU)

|                                     | NR  | WR   | SR  | ER  | NER | All India |
|-------------------------------------|-----|------|-----|-----|-----|-----------|
| Thermal (Coal & Lignite)            | 535 | 1233 | 531 | 442 | 9   | 2750      |
| Hydro                               | 132 | 22   | 62  | 39  | 8   | 263       |
| Nuclear                             | 24  | 17   | 36  | 0   | 0   | 78        |
| Gas, Naptha & Diesel                | 31  | 41   | 23  | 0   | 29  | 125       |
| RES (Wind, Solar, Biomass & Others) | 63  | 44   | 137 | 1   | 0   | 244       |
| Total                               | 785 | 1357 | 790 | 481 | 46  | 3459      |

|   |       |      |       |      |       |       |
|---|-------|------|-------|------|-------|-------|
| Share of RES in total generation (%)                                      | 7.99  | 3.21 | 17.32 | 0.18 | 0.09  | 7.05  |
| Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%) | 27.89 | 6.09 | 29.78 | 8.21 | 18.29 | 16.90 |

H. Diversity Factor

|                                   |       |
|-----------------------------------|-------|
| All India Demand Diversity Factor | 1.025 |
|-----------------------------------|-------|

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-Nov-18

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     | 35              | 477             | 0.0         | 5.4          | -5.4         |
| 2                                     |               | SASARAM-FATEHPUR             | S/C     | 161             | 149             | 0.4         | 0.0          | 0.4          |
| 3                                     |               | GAYA-BALIA                   | S/C     | 0               | 185             | 0.0         | 2.8          | -2.8         |
| 4                                     | HVDC          | ALIPURDUAR-AGRA              | -       | 0               | 300             | 0.0         | 7.1          | -7.1         |
| 5                                     |               | PUSAULI B/B                  | S/C     | 0               | 348             | 0.0         | 8.4          | -8.4         |
| 6                                     | 400 kV        | PUSAULI-VARANASI             | S/C     | 0               | 239             | 0.0         | 4.9          | -4.9         |
| 7                                     |               | PUSAULI -ALLAHABAD           | S/C     | 0               | 171             | 0.0         | 3.2          | -3.2         |
| 8                                     |               | MUZAFFARPUR-GORAKHPUR        | D/C     | 167             | 373             | 0.0         | 1.8          | -1.8         |
| 9                                     |               | PATNA-BALIA                  | Q/C     | 0               | 667             | 0.0         | 13.1         | -13.1        |
| 10                                    |               | BIHARSHARIFF-BALIA           | D/C     | 28              | 49              | 0.0         | 0.6          | -0.6         |
| 11                                    |               | MOTIHARI-GORAKHPUR           | D/C     | 0               | 389             | 0.0         | 7.5          | -7.5         |
| 12                                    |               | BIHARSHARIFF-VARANASI        | D/C     | 164             | 92              | 0.4         | 0.0          | 0.4          |
| 13                                    | 220 kV        | PUSAULI-SAHUPURI             | S/C     | 0               | 124             | 0.0         | 1.9          | -1.9         |
| 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     | 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>1.4</b>  | <b>56.7</b>  | <b>-55.3</b> |
| <b>Import/Export of ER (With WR)</b>  |               |                              |         |                 |                 |             |              |              |
| 18                                    | 765 kV        | JHARSUGUDA-DHARAMJAIGARH S/C | D/C     | 1620            | 0               | 24.2        | 0.0          | 24.2         |
| 19                                    | 400 kV        | NEW RANCHI-DHARAMJAIGARH     | D/C     | 163             | 380             | 0.0         | 0.9          | -0.9         |
| 20                                    |               | JHARSUGUDA-RAIGARH           | Q/C     | 293             | 0               | 4.3         | 0.0          | 4.3          |
| 21                                    |               | RANCHI-SIPAT                 | D/C     | 184             | 2               | 2.8         | 0.0          | 2.8          |
| 22                                    | 220 kV        | BUDHIPADAR-RAIGARH           | S/C     | 0               | 89              | 0.0         | 1.0          | -1.0         |
| 23                                    |               | BUDHIPADAR-KORBA             | D/C     | 230             | 0               | 4.1         | 0.0          | 4.1          |
| <b>ER-WR</b>                          |               |                              |         |                 |                 | <b>35.4</b> | <b>1.9</b>   | <b>33.5</b>  |
| <b>Import/Export of ER (With SR)</b>  |               |                              |         |                 |                 |             |              |              |
| 24                                    | 765 kV        | ANGUL-SRIKAKULAM             | D/C     | 0.0             | 1783.0          | 0.0         | 33.2         | -33.2        |
| 25                                    | HVDC          | JEYPORE-GAZUWAKA B/B         | D/C     | 0.0             | 623.0           | 0.0         | 14.6         | -14.6        |
| 26                                    | LINK          | TALCHER-KOLAR BIPOLE         | D/C     | 0.0             | 2467.0          | 0.0         | 51.9         | -51.9        |
| 27                                    | 400 kV        | TALCHER-I/C                  | D/C     | 0.0             | 840.0           | 0.0         | 6.4          | -6.4         |
| 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>99.7</b>  | <b>-99.7</b> |
| <b>Import/Export of ER (With NER)</b> |               |                              |         |                 |                 |             |              |              |
| 29                                    | 400 kV        | BINAGURI-BONGAIGAON          | D/C     | 0               | 496             | 0.0         | 8.0          | -8           |
| 30                                    |               | ALIPURDUAR-BONGAIGAON        | D/C     | 0               | 297             | 0.0         | 3.7          | -4           |
| 31                                    | 220 kV        | ALIPURDUAR-SALAKATI          | D/C     | 0               | 130             | 0.0         | 1.9          | -2           |
| <b>ER-NER</b>                         |               |                              |         |                 |                 | <b>0.0</b>  | <b>13.6</b>  | <b>-13.6</b> |
| <b>Import/Export of NER (With NR)</b> |               |                              |         |                 |                 |             |              |              |
| 32                                    | HVDC          | BISWANATH CHARIALI-AGRA      | -       | 0               | 753             | 0.0         | 13.9         | -13.9        |
| <b>NER-NR</b>                         |               |                              |         |                 |                 | <b>0.0</b>  | <b>13.9</b>  | <b>-13.9</b> |
| <b>Import/Export of WR (With NR)</b>  |               |                              |         |                 |                 |             |              |              |
| 33                                    | HVDC          | CHAMPA-KURUKSHETRA           | D/C     | 0               | 903             | 0.0         | 21.6         | -21.6        |
| 34                                    |               | V'CHAL B/B                   | D/C     | 241             | 0               | 6.0         | 0.0          | 6.0          |
| 35                                    |               | APL -MHG                     | D/C     | 0               | 790             | 0.0         | 19.4         | -19.4        |
| 36                                    | 765 kV        | GWALIOR-AGRA                 | D/C     | 0               | 913             | 0.0         | 30.7         | -30.7        |
| 37                                    |               | PHAGI-GWALIOR                | D/C     | 0               | 1182            | 0.0         | 20.0         | -20.0        |
| 38                                    |               | JABALPUR-ORAI                | D/C     | 72              | 175             | 0.0         | 5.6          | -5.6         |
| 39                                    |               | GWALIOR-ORAI                 | S/C     | 469             | 0               | 9.2         | 0.0          | 9.2          |
| 40                                    |               | SATNA-ORAI                   | S/C     | 0               | 1693            | 0.0         | 37.8         | -37.8        |
| 41                                    | 400 kV        | ZERDA-KANKROLI               | S/C     | 322             | 0               | 5.9         | 0.0          | 5.9          |
| 42                                    |               | ZERDA -BHINMAL               | S/C     | 220             | 95              | 2.2         | 0.0          | 2.2          |
| 43                                    |               | V'CHAL -RIHAND               | S/C     | 986             | 0               | 22.6        | 0.0          | 22.6         |
| 44                                    |               | RAPP-SHUJALPUR               | D/C     | 351             | 0               | 3           | 0            | 3            |
| 45                                    | 220 kV        | BADOD-KOTA                   | S/C     | 62              | 2               | 0.9         | 0.0          | 0.9          |
| 46                                    |               | BADOD-MORAK                  | S/C     | 129             | 23              | 1.1         | 0.0          | 1.1          |
| 47                                    |               | MEHGAON-AURAIYA              | S/C     | 111             | 0               | 1.5         | 0.0          | 1.5          |
| 48                                    |               | MALANPUR-AURAIYA             | S/C     | 66              | 0               | 0.7         | 0.0          | 0.7          |
| 49                                    | 132kV         | GWALIOR-SAWAI MADHOPUR       | S/C     | 0               | 0               | 0.0         | 0.0          | 0.0          |
| <b>WR-NR</b>                          |               |                              |         |                 |                 | <b>52.8</b> | <b>135.1</b> | <b>-82.3</b> |
| <b>Import/Export of WR (With SR)</b>  |               |                              |         |                 |                 |             |              |              |
| 50                                    | HVDC          | BHADRAWATI B/B               | -       | 0               | 1002            | 0.0         | 21.6         | -21.6        |
| 51                                    | LINK          | BARSUR-L.SILERU              | -       | 0               | 0               | 0.0         | 0.0          | 0.0          |
| 52                                    | 765 kV        | SOLAPUR-RAICHUR              | D/C     | 5               | 1994            | 0.0         | 25.2         | -25.2        |
| 53                                    |               | WARDHA-NIZAMABAD             | D/C     | 0               | 2338            | 0.0         | 35.6         | -35.6        |
| 54                                    | 400 kV        | KOLHAPUR-KUDGI               | D/C     | 899             | 0               | 10.7        | 0.0          | 10.7         |
| 55                                    | 220 kV        | KOLHAPUR-CHIKODI             | D/C     | 0               | 0               | 0.0         | 0.0          | 0.0          |
| 56                                    |               | PONDA-AMBEWADI               | S/C     | 1               | 0               | 0.0         | 0.0          | 0.0          |
| 57                                    |               | XELDEM-AMBEWADI              | S/C     | 0               | 65              | 1.3         | 0.0          | 1.3          |
| <b>WR-SR</b>                          |               |                              |         |                 |                 | <b>12.0</b> | <b>82.5</b>  | <b>-70.5</b> |
| <b>TRANSNATIONAL EXCHANGE</b>         |               |                              |         |                 |                 |             |              |              |
| 58                                    |               | BHUTAN                       |         |                 |                 |             |              | <b>7.0</b>   |
| 59                                    |               | NEPAL                        |         |                 |                 |             |              | <b>-2.8</b>  |
| 60                                    |               | BANGLADESH                   |         |                 |                 |             |              | <b>-16.0</b> |