

# 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, क़ुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 19<sup>th</sup> Oct 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. कार्यकारी निदेशक, ऊ. पू. क्षे. भा. प्रे. के., डोंगतिएह, लोअर नोंग्रह , लापलंग, शिलोंग 793006 Executive Director, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
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Sub: Daily PSP Report for the date 18.10.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 18-अक्टूबर-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 18<sup>th</sup> Oct 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 19-Oct-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 1900 hrs; from RLDCs) | 46959 | 47944 | 37804 | 21222 | 2735  | 156664 |
| Peak Shortage (MW)  | 460   | 0     | 0     | 0     | 199   | 659    |
| Energy Met (MU)   | 986   | 1121  | 833   | 430   | 49    | 3419   |
| Hydro Gen (MU)  | 158   | 59    | 133   | 98    | 12    | 460    |
| Wind Gen (MU)   | 8     | 24    | 26    |       |       | 58     |
| Solar Gen (MU)*   | 29.30 | 19.7  | 61.52 | 2.02  | 0.02  | 113    |
| Energy Shortage (MU)  | 11.8  | 0.0   | 0.0   | 0.0   | 2.6   | 14.4   |
| Maximum Demand Met during the day                                   | 47463 | 49481 | 39797 | 21776 | 2849  | 159750 |
| (MW) & time (from NLDC SCADA)                                       | 18:53 | 11:27 | 18:34 | 19:07 | 17:39 | 18:53  |

B. Frequency Profile (%) Region All India FVI <49.7 49.7-49.8 49.8-49.9 49.9-50.05 0.024

C. Power Supply Position in States

| C. Power Supply Po | Sition in States  | Max. Demand    | Shortage during |                 | ъ .           | OD(.)/IID(.) | M 0D   |                         |
|--------------------|-------------------|----------------|-----------------|-----------------|---------------|--------------|--------|-------------------------|
| Region             | States            | Met during the | maximum Demand  | Energy Met (MU) | Drawal        | OD(+)/UD(-)  | Max OD | Energy<br>Shortage (MU) |
|                    |                   | day (MW)       | (MW)            |                 | Schedule (MU) | (MU)         | (MW)   |                         |
|                    | Punjab            | 5892           | 0               | 118.8           | 60.7          | -2.1         | 59     | 0.0                     |
|                    | Haryana           | 7001           | 0               | 145.9           | 116.5         | -1.0         | 309    | 0.0                     |
|                    | Rajasthan         | 10041          | 0               | 213.0           | 64.8          | -4.2         | 161    | 0.0                     |
|                    | Delhi             | 4341           | 0               | 86.4            | 70.6          | -0.4         | 160    | 0.0                     |
| NR                 | UP                | 16308          | 0               | 323.6           | 134.5         | 1.5          | 660    | 4.4                     |
|                    | Uttarakhand       | 1763           | 0               | 35.7            | 19.7          | -0.1         | 91     | 0.0                     |
|                    | HP                | 1479           | 0               | 28.1            | 15.0          | 0.2          | 222    | 0.0                     |
|                    | J&K               | 2104           | 526             | 30.5            | 24.8          | -2.7         | 115    | 7.4                     |
|                    | Chandigarh        | 214            | 0               | 4.1             | 4.1           | 0.1          | 21     | 0.0                     |
|                    | Chhattisgarh      | 3755           | 0               | 83.1            | 31.8          | -0.8         | 355    | 0.0                     |
|                    | Gujarat           | 16499          | 0               | 364.7           | 70.1          | 5.7          | 512    | 0.0                     |
|                    | MP                | 8706           | 0               | 187.1           | 120.2         | -2.3         | 400    | 0.0                     |
| WD                 | Maharashtra       | 20217          | 0               | 441.8           | 170.5         | -4.7         | 452    | 0.0                     |
| WR                 | Goa               | 541            | 0               | 12.8            | 11.8          | 0.4          | 50     | 0.0                     |
|                    | DD                | 343            | 0               | 7.6             | 7.1           | 0.5          | 53     | 0.0                     |
|                    | DNH               | 776            | 0               | 18.3            | 18.5          | -0.2         | 31     | 0.0                     |
|                    | Essar steel       | 308            | 0               | 5.7             | 5.6           | 0.1          | 312    | 0.0                     |
|                    | Andhra Pradesh    | 7244           | 0               | 154.9           | 56.7          | 0.0          | 495    | 0.0                     |
|                    | Telangana         | 7754           | 0               | 163.4           | 33.9          | 0.0          | 354    | 0.0                     |
| SR                 | Karnataka         | 8461           | 0               | 162.5           | 37.5          | -1.9         | 492    | 0.0                     |
| 311                | Kerala            | 3362           | 0               | 67.9            | 49.9          | 1.3          | 196    | 0.0                     |
|                    | Tamil Nadu        | 13655          | 0               | 276.9           | 157.5         | 0.3          | 499    | 0.0                     |
|                    | Pondy             | 378            | 0               | 7.5             | 7.9           | -0.3         | 26     | 0.0                     |
|                    | Bihar             | 5255           | 0               | 95.5            | 91.7          | -0.7         | 30     | 0.0                     |
|                    | DVC               | 3046           | 0               | 65.0            | -17.9         | -0.5         | 240    | 0.0                     |
| ER                 | Jharkhand         | 1313           | 0               | 25.5            | 16.9          | -0.6         | 20     | 0.0                     |
| EN                 | Odisha            | 4114           | 0               | 81.7            | 12.8          | 7.0          | 510    | 0.0                     |
|                    | West Bengal       | 8446           | 0               | 161.1           | 49.1          | 3.5          | 590    | 0.0                     |
|                    | Sikkim            | 95             | 0               | 0.9             | 1.4           | -0.5         | 25     | 0.0                     |
|                    | Arunachal Pradesh | 129            | 1               | 2.1             | 2.1           | -0.3         | 33     | 0.0                     |
|                    | Assam             | 1714           | 110             | 30.1            | 23.0          | 1.4          | 192    | 2.5                     |
|                    | Manipur           | 165            | 2               | 2.6             | 2.3           | 0.2          | 33     | 0.0                     |
| NER                | Meghalaya         | 329            | 0               | 5.4             | 1.8           | 0.3          | 66     | 0.0                     |
|                    | Mizoram           | 95             | 1               | 1.7             | 0.5           | 0.9          | 67     | 0.0                     |
|                    | Nagaland          | 126            | 2               | 1.8             | 2.1           | -0.6         | 32     | 0.0                     |
|                    | Tripura           | 292            | 1               | 4.9             | 3.4           | 0.3          | 85     | 0.0                     |

## $\textbf{D. Transnational Exchanges} \ \ (\textbf{MU}) \ \textbf{- Import} (+\textbf{ve}) / \textbf{Export} (-\textbf{ve})$

|               | Bhutan | Nepal  | Bangladesh |
|---------------|--------|--------|------------|
| Actual(MU)    | 24.8   | -2.6   | -17.0      |
| Day peak (MW) | 1235.3 | -264.5 | -1109.0    |

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

|              | NR    | WR     | SR   | ER    | NER  | TOTAL |
|--------------|-------|--------|------|-------|------|-------|
| Schedule(MU) | 240.2 | -226.0 | 53.9 | -73.6 | 6.0  | 0.5   |
| Actual(MU)   | 231.1 | -221.9 | 52.7 | -72.6 | 11.1 | 0.3   |
| O/D/U/D(MU)  | -9.1  | 4.1    | -1.2 | 0.9   | 5.2  | -0.2  |

#### F. Generation Outage(MW)

| 1. Generation Gatage(N1V) |       |       |       |      |     |       |  |  |  |  |
|---------------------------|-------|-------|-------|------|-----|-------|--|--|--|--|
|                           | NR    | WR    | SR    | ER   | NER | Total |  |  |  |  |
| Central Sector            | 3284  | 16305 | 7652  | 2495 | 910 | 30646 |  |  |  |  |
| State Sector              | 8761  | 17415 | 8573  | 5340 | 11  | 40100 |  |  |  |  |
| Total                     | 12045 | 33720 | 16225 | 7835 | 922 | 70746 |  |  |  |  |

## G. Sourcewise generation (MU)

|                                     | NR  | WR   | SR  | ER  | NER | All India |
|-------------------------------------|-----|------|-----|-----|-----|-----------|
| Coal                                | 497 | 1116 | 408 | 418 | 7   | 2445      |
| Lignite                             | 19  | 14   | 55  | 0   | 0   | 88        |
| Hydro                               | 158 | 59   | 133 | 98  | 12  | 460       |
| Nuclear                             | 28  | 29   | 59  | 0   | 0   | 116       |
| Gas, Naptha & Diesel                | 27  | 74   | 14  | 0   | 24  | 139       |
| RES (Wind, Solar, Biomass & Others) | 46  | 48   | 119 | 2   | 0   | 215       |
| Total                               | 774 | 1340 | 788 | 518 | 43  | 3463      |
| -                                   |     |      | ·   |     |     |           |

| Share of RES in total generation (%)         | 5.90  | 3.57  | 15.10 | 0.40  | 0.05  | 6.20  |
|--|-------|-------|-------|-------|-------|-------|
| Share of Non-fossil fuel (Hydro, Nuclear and | 29.83 | 10.16 | 39.49 | 10.20 | 28.89 | 22.83 |
| RES) in total generation (%)                 | 47.03 | 10.10 | 37.49 | 19.29 | 40.09 | 22.63 |

H. Diversity Factor
All India Demand Diversity Factor

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

| INTER-REGIONAL EXCHANGES  Date of Reporting: 19-Oct-19 |                  |   |            |                    |                    |                    |                |  |  |  |
|--|------------------|---|------------|--------------------|--------------------|--------------------|----------------|--|--|--|
|  |                  |   |            |                    |                    | Dute of            | reporting .    |  |  |  |
|  |                  |   |            |                    |                    |                    |                | 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 (MU)                                 |  |  |
| Import/E   |                  | ER (With NR)                                |            |                    |                    |                    | (1.10)         | (1.10)                                   |  |  |
| 1  | 765kV            | GAYA-VARANASI                               | D/C        | 97                 | 414                | 0.0                | 5.2            | -5.2                                     |  |  |
| 3  | /05KV            | SASARAM-FATEHPUR<br>GAYA-BALIA              | S/C<br>S/C | 243<br>0           | 118<br>361         | 0.9                | 6.8            | 0.9<br>-6.8                              |  |  |
| 4  | HVDC             | ALIPURDUAR-AGRA                             | -          | 0                  | 401                | 0.0                | 9.6            | -9.6                                     |  |  |
| 5  | пове             | PUSAULI B/B                                 | S/C        | 0                  | 198                | 0.0                | 4.8            | -4.8                                     |  |  |
| 7  | 7                | PUSAULI-VARANASI<br>PUSAULI -ALLAHABAD      | S/C<br>S/C | 0                  | 184<br>101         | 0.0                | 3.5<br>1.2     | -3.5<br>-1.2                             |  |  |
|  | 9 <b>400 kV</b>  | MUZAFFARPUR-GORAKHPUR                       | D/C        | 0                  | 644                | 0.0                | 7.6            | -7.6                                     |  |  |
|  |                  | PATNA-BALIA                                 | Q/C        | 0                  | 1020               | 0.0                | 20.9           | -20.9                                    |  |  |
| 10   |                  | BIHARSHARIFF-BALIA                          | D/C        | 0                  | 300                | 0.0                | 3.7            | -3.7                                     |  |  |
| 11   |                  | MOTIHARI-GORAKHPUR                          | D/C        | 0                  | 5                  | 0.0                | 0.0            | 0.0                                      |  |  |
| 12   | 220 kV           | BIHARSHARIFF-VARANASI                       | D/C<br>S/C | 208<br>0           | 95<br>166          | 0.0                | 0.0<br>2.5     | 1.3<br>-2.5                              |  |  |
| 14   | 220 KV           | PUSAULI-SAHUPURI<br>SONE NAGAR-RIHAND       | S/C        | 0                  | 0                  | 0.0                | 0.0            | 0.0                                      |  |  |
| 15   | 122 1 77         | GARWAH-RIHAND                               | S/C        | 30                 | 0                  | 0.4                | 0.0            | 0.4                                      |  |  |
| 16   | 132 kV           | 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                                      |  |  |
| Import/E   | Evnort of        | ER (With WR)                                |            |                    | ER-NR              | 2.6                | 65.8           | -63.1                                    |  |  |
|  | Export or        | T ,   | 0/0        | 1252               | 0                  | 21.2               | 0.0            | 21.2                                     |  |  |
| 18   | 765 kV           | JHARSUGUDA-DHARAMJAIGARH                    | Q/C        | 1353               | 0                  | 21.2               | 0.0            | 21.2                                     |  |  |
| 19<br>20   | 1                | NEW RANCHI-DHARAMJAIGARH<br>JHARSUGUDA-DURG | D/C<br>D/C | 850<br>167         | 72                 | 11.6               | 0.0            | 11.6<br>1.5                              |  |  |
| 21   | 400 kV           | JHARSUGUDA-RAIGARH                          | Q/C        | 201                | 85                 | 1.1                | 0.0            | 1.1                                      |  |  |
| 22   | 400 KV           | RANCHI-SIPAT                                | D/C        | 313                | 0                  | 4.1                | 0.0            | 4.1                                      |  |  |
| 23   | 220 kV           | BUDHIPADAR-RAIGARH                          | S/C        | 12                 | 44                 | 0.0                | 0.9            | -0.9                                     |  |  |
| 24   |                  | BUDHIPADAR-KORBA                            | D/C        | 142                | 0<br>ER-WR         | 2.5<br><b>42.0</b> | 0.0            | 2.5<br>41.1                              |  |  |
| Import/F   | Export of        | ER (With SR)                                |            |                    | 221 1121           | 42.0               | 0.7            | 71.1                                     |  |  |
| 25   | 765 kV           | ANGUL-SRIKAKULAM                            | D/C        | 0.0                | 1592.0             | 0.0                | 23.4           | -23.4                                    |  |  |
| 26   | HVDC             | JEYPORE-GAZUWAKA B/B                        | D/C        | 0.0                | 480.0              | 0.0                | 11.1           | -11.1                                    |  |  |
| 27   | LINK             | TALCHER-KOLAR BIPOLE                        | D/C        | 0.0                | 1487.0             | 0.0                | 26.4           | -26.4                                    |  |  |
| 28   | 400 kV<br>220 kV | TALCHER-I/C<br>BALIMELA-UPPER-SILERRU       | D/C<br>S/C | 461.0<br>1.0       | 467.0<br>0.0       | 0.5                | 0.0            | 0.5                                      |  |  |
| 2)   | 220 K V          | BALIMELA-OTTEK-SILEKKO                      | 3/C        | 1.0                | ER-SR              | 0.0                | 60.9           | -60.9                                    |  |  |
| Import/E   | Export of        | ER (With NER)                               |            |                    |                    |                    |                |  |  |  |
| 30   | 400 kV           | BINAGURI-BONGAIGAON                         | D/C        | 0                  | 740                | 0.0                | 9.0            | -9                                       |  |  |
| 31   |                  | ALIPURDUAR-BONGAIGAON                       | D/C        | 0                  | 711                | 0.0                | 8.5            | -9                                       |  |  |
| 32   | 220 kV           | ALIPURDUAR-SALAKATI                         | D/C        | 0                  | 182<br>ER-NER      | 0.0                | 2.4<br>19.8    | -2<br>-19.8                              |  |  |
| Import/E   | Export of        | NER (With NR)                               |            |                    | ER-HER             | 0.0                | 17.0           | -17.0                                    |  |  |
| 33   | HVDC             | BISWANATH CHARIALI-AGRA                     | -          | 0                  | 504                | 0.0                | 10.3           | -10.3                                    |  |  |
|  |                  |   |            |                    | NER-NR             | 0.0                | 10.3           | -10.3                                    |  |  |
| Import/E   | Export of        | WR (With NR) CHAMPA-KURUKSHETRA             | D/C        | 0                  | 1138               | 0.0                | 27.7           | -27.7                                    |  |  |
| 35   | HVDC             | V'CHAL B/B                                  | D/C<br>D/C | 451                | 0                  | 11.3               | 0.0            | 11.3                                     |  |  |
| 36   |                  | APL -MHG                                    | D/C        | 0                  | 1738               | 0.0                | 41.7           | -41.7                                    |  |  |
| 37   |                  | GWALIOR-AGRA                                | D/C        | 0                  | 2197               | 0.0                | 43.8           | -43.8                                    |  |  |
| 38   |                  | PHAGI-GWALIOR                               | D/C        | 0                  | 968                | 0.0                | 16.4           | -16.4                                    |  |  |
| 39   | 765 kV           | JABALPUR-ORAI                               | D/C        | 0                  | 732                | 0.0                | 26.8           | -26.8                                    |  |  |
| 40   | 1                | GWALIOR-ORAI                                | S/C<br>S/C | 349<br>0           | 0<br>1495          | 7.1<br>0.0         | 0.0<br>30.6    | 7.1<br>-30.6                             |  |  |
| 41   | 1                | SATNA-ORAI<br>CHITTORGARH-BANASKANTHA       | D/C        | 0                  | 603                | 0.0                | 5.5            | -30.6<br>-5.5                            |  |  |
| 43   |                  | ZERDA-KANKROLI                              | S/C        | 50                 | 82                 | 0.1                | 0.4            | -0.4                                     |  |  |
| 44   | 400 kV           | ZERDA -BHINMAL                              | S/C        | 177                | 238                | 0.4                | 2.6            | -2.2                                     |  |  |
| 45   | .50 K 7          | V'CHAL -RIHAND                              | S/C        | 976                | 0                  | 22.4               | 0.0            | 22.4                                     |  |  |
| 46   | -                | RAPP-SHUJALPUR                              | D/C        | 8                  | 265                | 0                  | 3              | -3                                       |  |  |
| 47   | 1                | BHANPURA-RANPUR<br>BHANPURA-MORAK           | S/C<br>S/C | 0                  | 53<br>77           | 0.1                | 0.5            | -0.4<br>-1.2                             |  |  |
| 48   | 220 kV           | MEHGAON-AURAIYA                             | S/C<br>S/C | 73                 | 17                 | 0.0                | 0.0            | 0.2                                      |  |  |
| 50   | 1                | MALANPUR-AURAIYA                            | S/C        | 38                 | 40                 | 0.1                | 0.5            | -0.5                                     |  |  |
| 51   | 132kV            | GWALIOR-SAWAI MADHOPUR                      | S/C        | 0                  | 0                  | 0.0                | 0.0            | 0.0                                      |  |  |
| Imma4/T  | Turnout - 6      | WD (With CD)                                |            |                    | WR-NR              | 41.7               | 200.6          | -158.9                                   |  |  |
| Import/E   | HVDC             | WR (With SR) BHADRAWATI B/B                 | _          | 0                  | 512                | 0.0                | 6.0            | -6.0                                     |  |  |
| 53   | LINK             | BARSUR-L.SILERU                             | -          | 0                  | 0                  | 0.0                | 0.0            | 0.0                                      |  |  |
| 54   | 7/5:37           | SOLAPUR-RAICHUR                             | D/C        | 668                | 1386               | 3.5                | 7.1            | -3.6                                     |  |  |
| 55   | 765 kV           | WARDHA-NIZAMABAD                            | D/C        | 0                  | 1742               | 0.0                | 21.8           | -21.8                                    |  |  |
| 56   | 400 kV           | KOLHAPUR-KUDGI                              | D/C        | 777                | 0                  | 11.3               | 0.0            | 11.3                                     |  |  |
| 57   | 220 1-87         | KOLHAPUR-CHIKODI                            | D/C        | 0                  | 0                  | 0.0                | 0.0            | 0.0                                      |  |  |
| 58<br>59   | 220 kV           | PONDA-AMBEWADI<br>XELDEM-AMBEWADI           | S/C<br>S/C | 0                  | 65<br>38           | 0.0                | 0.0            | -1.3<br>0.8                              |  |  |
| 37   | L                | ALEDENI-AMBEWADI                            | 3/C        | U                  | WR-SR              | 15.5               | 36.1           | -20.6                                    |  |  |
|  |                  | Т   | RANSNATI   | ONAL EXCHA         |                    | 10.0               | 50.1           | -2010                                    |  |  |
| 60   |                  | BHUTAN                                      |            | LACITA             |                    |                    |                | 24.8                                     |  |  |
| 61   |                  | NEPAL                                       |            |                    |                    |                    |                | -2.6                                     |  |  |
| 62   |                  | BANGLADESH                                  |            |                    |                    |                    |                | -17.0                                    |  |  |
|  |                  |   |            |                    |                    |                    |                |  |  |  |