

National Load Despatch Centre राष्ट्रीय भार प्रेषण केंद्र

POWER SYSTEM OPERATION CORPORATION LIMITED पाँवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

(Government of India Enterprise/ भारत सरकार का उद्यम)

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Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 02nd August 2018

Τо

- 1. कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के.,14, गोल्फ क्लब रोड, कोलकाता ७०००३३ Executive Director, ERLDC, 14 Golf Club Road, Tolleygunge, Kolkata, 700033
- 2. महाप्रबंधक, ऊ. क्षे. भा. प्रे. के., 18/ ए, शहीद जीत सिंह सनसनवाल मार्ग, नई दिल्ली 110016 General Manager, 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 ७९३००६ Executive Director, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
- 5. महाप्रबंधक , द .क्षे .भा .प्रे .के., २९ , रेस कोर्स क्रॉस रोड, बंगलुरु -560009 General Manager, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 01.08.2018.

महोदय/Dear Sir.

आई॰ई॰जी॰सी॰-२०१० की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक ०१-अगस्त-२०१८ 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 01st August 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** 2-Aug-18

A. Maximum Demand

| | NR | WR | SR | ER | NER | Total |
|---|-------|-------|-------|-------|-------|--------|
| Demand Met during Evening Peak hrs(MW) (at 2000 hrs; from RLDCs) | 53562 | 45647 | 41600 | 19322 | 2655 | 162786 |
| Peak Shortage (MW) | 933 | 0 | 0 | 0 | 97 | 1030 |
| Energy Met (MU) | 1187 | 1062 | 976 | 413 | 50 | 3689 |
| Hydro Gen (MU) | 354 | 20 | 99 | 77 | 28 | 578 |
| Wind Gen (MU) | 48 | 154 | 214 | | | 416 |
| Solar Gen (MU)* | 16.44 | 16.25 | 46.81 | 0.32 | 0.01 | 80 |
| Energy Shortage (MU) | 8.6 | 0.0 | 0.2 | 0.0 | 0.9 | 9.6 |
| Maximum Demand Met during the day | 56759 | 47276 | 44927 | 20280 | 2659 | 168059 |
| (MW) & time (from NLDC SCADA) | 22:33 | 19:43 | 07:07 | 20:08 | 19:01 | 19:54 |

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 | 0.025 | 0.00 | 0.00 | 2.64 | 2.64 | 85.31 | 12.05 |

| 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 |
|--------|-------------------|---|---|-----------------|-------------------------|---------------------|----------------|------------------------|
| | Punjab | 11154 | 0 | 252.8 | 145.3 | -0.8 | 125 | 0.0 |
| | Haryana | 9054 | 0 | 186.0 | 140.4 | 3.4 | 487 | 0.0 |
| | Rajasthan | 10437 | 0 | 217.6 | 64.7 | 1.4 | 427 | 0.0 |
| | Delhi | 5742 | 0 | 112.6 | 96.8 | -1.3 | 132 | 0.0 |
| NR | UP | 15916 | 0 | 309.3 | 157.8 | 1.4 | 435 | 0.0 |
| | Uttarakhand | 1788 | 0 | 39.0 | 20.8 | -0.4 | 155 | 0.0 |
| | HP | 1347 | 0 | 28.3 | -1.6 | 2.4 | 211 | 0.0 |
| | J&K | 1947 | 487 | 35.8 | 17.9 | -7.7 | 141 | 8.5 |
| | Chandigarh | 309 | 0 | 6.1 | 6.4 | -0.3 | 19 | 0.0 |
| | Chhattisgarh | 3666 | 0 | 87.8 | 22.4 | -4.5 | 80 | 0.0 |
| | Gujarat | 14509 | 0 | 323.7 | 73.9 | 3.1 | 768 | 0.0 |
| | MP | 7974 | 0 | 169.9 | 69.2 | -1.2 | 374 | 0.0 |
| WR | Maharashtra | 19582 | 0 | 435.7 | 126.4 | 1.1 | 443 | 0.0 |
| WK | Goa | 444 | 0 | 11.3 | 10.8 | -0.1 | 115 | 0.0 |
| | DD | 324 | 0 | 7.4 | 6.5 | 1.0 | 89 | 0.0 |
| | DNH | 725 | 0 | 16.9 | 16.3 | 0.5 | 78 | 0.0 |
| | Essar steel | 467 | 0 | 8.8 | 9.0 | -0.2 | 283 | 0.0 |
| | Andhra Pradesh | 8661 | 0 | 184.9 | 19.3 | 1.3 | 541 | 0.0 |
| | Telangana | 10149 | 0 | 209.5 | 119.2 | -0.5 | 406 | 0.0 |
| SR | Karnataka | 9274 | 0 | 190.2 | 56.9 | 1.6 | 587 | 0.0 |
| 3N | Kerala | 3272 | 0 | 64.0 | 22.6 | 0.7 | 201 | 0.0 |
| | Tamil Nadu | 14882 | 0 | 320.2 | 95.7 | -1.6 | 470 | 0.0 |
| | Pondy | 344 | 0 | 7.4 | 7.5 | -0.2 | 59 | 0.2 |
| | Bihar | 4464 | 0 | 82.0 | 82.1 | -0.2 | 50 | 0.0 |
| | DVC | 2815 | 0 | 68.3 | -40.5 | 0.0 | 150 | 0.0 |
| ER | Jharkhand | 980 | 0 | 21.8 | 19.5 | 0.1 | 50 | 0.0 |
| EN | Odisha | 4747 | 0 | 91.7 | 47.3 | 3.1 | 250 | 0.0 |
| | West Bengal | 7536 | 0 | 148.5 | 49.5 | 0.7 | 200 | 0.0 |
| | Sikkim | 90 | 0 | 1.1 | 1.1 | 0.0 | 20 | 0.0 |
| - | Arunachal Pradesh | 118 | 0 | 2.3 | 3.2 | -0.8 | 0 | 0.0 |
| | Assam | 1740 | 63 | 32.5 | 26.8 | 1.4 | 147 | 0.7 |
| NER | Manipur | 158 | 3 | 2.4 | 2.5 | -0.1 | 26 | 0.0 |
| | Meghalaya | 325 | 0 | 5.3 | 1.7 | -0.3 | 23 | 0.0 |
| | Mizoram | 95 | 2 | 1.6 | 1.2 | -0.1 | 14 | 0.0 |
| | Nagaland | 119 | 7 | 2.3 | 2.1 | -0.1 | 9 | 0.0 |
| | Tripura | 233 | 3 | 4.0 | 6.1 | -0.8 | 59 | 0.0 |

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

| | Bhutan | Nepal | Bangladesh |
|---------------|--------|--------|------------|
| Actual(MU) | 32.0 | -5.4 | -14.6 |
| Day peak (MW) | 1550.1 | -380.3 | -646.1 |

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

| | NR | WR | SR | ER | NER | TOTAL |
|--------------|-------|--------|------|-------|------|-------|
| Schedule(MU) | 242.2 | -245.5 | 52.0 | -46.2 | -2.2 | 0.3 |
| Actual(MU) | 235.5 | -245.5 | 55.4 | -42.0 | -6.1 | -2.6 |
| O/D/U/D(MU) | -6.6 | 0.0 | 3.4 | 4.3 | -3.9 | -2.9 |

F. Generation Outage(MW)

| | NR | WR | SR | ER | NER | Total |
|----------------|-------|-------|-------|------|-----|-------|
| Central Sector | 4822 | 15438 | 9972 | 1860 | 179 | 32271 |
| State Sector | 11900 | 16785 | 8610 | 5445 | 50 | 42790 |
| Total | 16722 | 32223 | 18582 | 7305 | 229 | 75061 |

G. Sourcewise generation (MU)

| | NR | WR | SR | ER | NER | All India |
|-------------------------------------|-----|------|-----|-----|-----|-----------|
| Thermal (Coal & Lignite) | 501 | 1068 | 467 | 393 | 8 | 2436 |
| Hydro | 354 | 20 | 99 | 77 | 28 | 578 |
| Nuclear | 28 | 27 | 49 | 0 | 0 | 104 |
| Gas, Naptha & Diesel | 17 | 41 | 21 | 0 | 24 | 103 |
| RES (Wind, Solar, Biomass & Others) | 79 | 171 | 309 | 0 | 0 | 560 |
| Total | 979 | 1326 | 945 | 471 | 60 | 3781 |

| Share of RES in total generation (%) | 8.10 | 12.87 | 32.73 | 0.09 | 0.04 | 14.80 |
|--|-------|-------|-------|-------|-------|-------|
| Share of Non-fossil fuel (Hydro, Nuclear and | 47.05 | 16.43 | 48.41 | 16.51 | 46.62 | 32.84 |
| RES) in total generation (%) | 47.05 | 10.43 | 40.41 | 16.51 | 40.02 | 32.64 |

H. Diversity Factor
All India Demand Diversity Factor
1.023
Diversity factor = Sum of regional maximum demands / All India maximum demand

 $[\]textbf{*Source:} \ RLDCs \ for \ solar \ connected \ to \ ISTS; \ SLDCs \ for \ embedded \ solar. \ Limited \ visibility \ of \ embedded \ solar \ data.$

| | INTER-REGIONAL EXCHANGES | | | | | Date of 1 | Reporting : | 2-Aug-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) | |
| Import/E | export of | ER (With NR) | | | | | | | |
| 1 | 7651-37 | GAYA-VARANASI | D/C | 0 | 365 | 0.0 | 7.5 | -7.5 | |
| 3 | 765kV | SASARAM-FATEHPUR GAYA-BALIA | S/C S/C | 258 0 | 55 339 | 2.3 0.0 | 5.3 | 2.3 -5.3 | |
| 4 | | ALIPURDUAR-AGRA | - | 0 | 397 | 0.0 | 9.9 | -9.9 | |
| 5 | HVDC | PUSAULI B/B | S/C | 0 | 147 | 0.0 | 3.7 | -3.7 | |
| 6 | | PUSAULI-VARANASI | S/C | 0 | 136 | 0.0 | 0.0 | 0.0 | |
| 7 | | PUSAULI -ALLAHABAD | S/C | 0 | 79 | 0.0 | 0.0 | 0.0 | |
| 8 | | MUZAFFARPUR-GORAKHPUR | D/C | 0 | 668 | 0.0 | 12.0 | -12.0 | |
| 9 | 400 kV | PATNA-BALIA | Q/C | 0 | 938 | 0.0 | 19.8 | -19.8 | |
| 10 | | BIHARSHARIFF-BALIA | D/C D/C | 240 | 272 0 | 0.0 4.1 | 4.5 0.0 | -4.5 4.1 | |
| 12 | | MOTIHARI-GORAKHPUR BIHARSHARIFF-VARANASI | D/C D/C | 607 | 0 | 0.0 | 2.0 | -2.0 | |
| 13 | 220 kV | PUSAULI-SAHUPURI | S/C | 0 | 134 | 0.0 | 2.7 | -2.7 | |
| 14 | 220 117 | SONE NAGAR-RIHAND | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 | |
| 15 | 400.00 | GARWAH-RIHAND | S/C | 35 | 0 | 0.5 | 0.0 | 0.5 | |
| 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 | Export of | ER (With WR) | | | ER-NR | 7.0 | 67.3 | -60.4 | |
| 18 | 765 kV | JHARSUGUDA-DHARAMJAIGARH S/C | D/C | 1311 | 6 | 20.9 | 0.0 | 20.9 | |
| 19 | 703 KV | NEW RANCHI-DHARAMJAIGARH | D/C | 709 | 52 | 8.2 | 0.0 | 8.2 | |
| 20 | 400 kV | JHARSUGUDA-RAIGARH | Q/C | 948 | 0 | 16.2 | 0.0 | 16.2 | |
| 21 | -100 K V | RANCHI-SIPAT | D/C | 372 | 0 | 4.6 | 0.0 | 4.6 | |
| 22 | 220 kV | BUDHIPADAR-RAIGARH | S/C | 83 | 22 | 0.6 | 0.0 | 0.6 | |
| 23 | | BUDHIPADAR-KORBA | D/C | 167 | 0 | 2.1 | 0.0 | 2.1 | |
| T | | ED (MYAL CD) | | | ER-WR | 52.5 | 0.0 | 52.5 | |
| 1mport/E | 765 kV | ER (With SR) | D/C | 0.0 | 1347.8 | 0.0 | 18.2 | -18.2 | |
| 25 | | ANGUL-SRIKAKULAM JEYPORE-GAZUWAKA B/B | D/C D/C | 0.0 | 478.2 | 0.0 | 9.8 | -18.2 -9.8 | |
| 26 | HVDC LINK | TALCHER-KOLAR BIPOLE | D/C | 0.0 | 2170.6 | 0.0 | 38.7 | -38.7 | |
| 27 | 400 kV | TALCHER-I/C | D/C | 653.6 | 0.0 | 2.2 | 5.7 | -3.5 | |
| 28 | 220 kV | BALIMELA-UPPER-SILERRU | S/C | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| | ı | | ı | | ER-SR | 0.0 | 66.8 | -66.8 | |
| Import/E | Export of | ER (With NER) | | | | | | | |
| 29 | 400 kV | BINAGURI-BONGAIGAON | D/C | 62 | 325 | 0.0 | 2.5 | -2 | |
| 30 | | ALIPURDUAR-BONGAIGAON | D/C | 265 | 169 | 2.2 | 0.0 | 2 | |
| 31 | 220 kV | ALIPURDUAR-SALAKATI | D/C | 2 | 96 | 0.0 | 1.0 | -1 | |
| Import/E | export of | NER (With NR) | | | ER-NER | 2.2 | 3.5 | -1.3 | |
| 32 | HVDC | BISWANATH CHARIALI-AGRA | - | 0 | 600 | 0.0 | 9.4 | -9.4 | |
| | | | | • | NER-NR | 0.0 | 9.4 | -9.4 | |
| Import/E | export of | WR (With NR) | | | | | | | |
| 33 | | CHAMPA-KURUKSHETRA | D/C | 0 | 0 | 0.0 | 39.9 | -39.9 | |
| 34 | HVDC | V'CHAL B/B | D/C | 0 | 0 | 6.1 | 0.0 | 6.1 | |
| 35 | | APL -MHG | D/C | 0 | 0 | 0.0 | 25.3 | -25.3 | |
| 36 | | GWALIOR-AGRA | D/C | 0 | 0 | 0.0 | 49.6 | -49.6 | |
| 37 | 700.00 | PHAGI-GWALIOR | D/C | 0 | 0 | 0.0 | 25.7 | -25.7 | |
| 38 | 765 kV | JABALPUR-ORAI GWALIOR-ORAI | D/C S/C | 0 | 0 | 0.0 | 23.4 | -23.4 | |
| 39 40 | | GWALIOR-ORAI SATNA-ORAI | S/C S/C | 0 | 0 | 0.0 | 0.0 39.8 | 8.0 -39.8 | |
| 41 | | ZERDA-KANKROLI | S/C | 0 | 0 | 0.0 | 0.0 | 0.3 | |
| 42 | | ZERDA-BHINMAL | S/C | 0 | 0 | 0.0 | 0.0 | -0.1 | |
| 43 | 400 kV | V'CHAL -RIHAND | S/C | 0 | 0 | 21.7 | 0.0 | 21.7 | |
| 44 | | RAPP-SHUJALPUR | D/C | 0 | 0 | 0 | 2 | -2 | |
| 45 | | BADOD-KOTA | S/C | 0 | 0 | 0.1 | 1.0 | -1.0 | |
| 46 | 220 1-37 | BADOD-MORAK | S/C | 0 | 0 | 0.0 | 1.8 | -1.8 | |
| 47 | 220 kV | MEHGAON-AURAIYA | S/C | 0 | 0 | 0.1 | 0.2 | -0.1 | |
| 48 | | MALANPUR-AURAIYA | S/C | 0 | 0 | 0.0 | 0.7 | -0.7 | |
| 49 | 132kV | GWALIOR-SAWAI MADHOPUR | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 | |
| Import/E | export of | WR (With SR) | | | WR-NR | 36.2 | 208.9 | -172.8 | |
| 50 | | BHADRAWATI B/B | - | 0 | 0 | 0.0 | 15.6 | -15.6 | |
| 51 | | BARSUR-L.SILERU | - | 0 | 0 | 0.0 | 0.0 | 0.0 | |
| 52 | 765 kV | SOLAPUR-RAICHUR | D/C | 0 | 0 | 6.0 | 0.0 | 6.0 | |
| 53 | 703 KV | WARDHA-NIZAMABAD | D/C | 0 | 0 | 0.0 | 26.4 | -26.4 | |
| 54 | 400 kV | KOLHAPUR-KUDGI | D/C | 0 | 0 | 10.4 | 0.0 | 10.4 | |
| 55 | | KOLHAPUR-CHIKODI | D/C | 0 | 0 | 0.0 | 0.0 | 0.0 | |
| 56 | 220 kV | PONDA-AMBEWADI | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 | |
| 57 | | XELDEM-AMBEWADI | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 | |
| | | | | | WR-SR | 16.4 | 42.0 | -25.6 | |
| | | TRA | NSNATI | ONAL EX | CHANGE | | | | |
| 58 | | BHUTAN | | | | | | 32.0 | |
| 59 | - | NEPAL BANGLADESH | 1 | | | | | -5.4 | |
| 60 | <u> </u> | BANGLADESH | 1 | | | | | -14.6 | |