

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) B-9, QUTUB INSTITUTIONAL AREA, KATWARIA SARAI, NEW DELHI -110016 बी-9, कृतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 05th Jun 2020

To,

- 1. कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के.,14, गोल्फ क्लब रोड, कोलकाता ७०००३३ 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
- 5. कार्यकारी निदेशक , द .क्षे .भा .प्रे .के., २९ , रेस कोर्स क्रॉस रोड, बंगलुरु –५६०००९ Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 04.06.2020.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 04-जून-2020 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 04th Jun 2020, is available at the NLDC website.

धन्यवाद,

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



Report for previous day
A. Power Supply Position at All India and Regional level **Date of Reporting:** 05-Jun-2020

| | NR | WR | SR | ER | NER | TOTAL |
|--|-------|-------|-------|-------|-------|--------|
| Demand Met during Evening Peak hrs(MW) (at 2000 hrs; from RLDCs) | 42146 | 36681 | 36690 | 18379 | 2312 | 136208 |
| Peak Shortage (MW) | 488 | 0 | 0 | 0 | 12 | 500 |
| Energy Met (MU) | 1009 | 841 | 877 | 415 | 41 | 3183 |
| Hydro Gen (MU) | 279 | 35 | 68 | 103 | 20 | 505 |
| Wind Gen (MU) | 3 | 66 | 112 | - | - | 181 |
| Solar Gen (MU)* | 33.19 | 20.70 | 70.74 | 4.57 | 0.02 | 129 |
| Energy Shortage (MU) | 10.6 | 0.0 | 0.0 | 0.0 | 0.0 | 10.6 |
| Maximum Demand Met During the Day (MW) (From NLDC SCADA) | 47281 | 35999 | 40046 | 19836 | 2380 | 138280 |
| Time Of Maximum Demand Met (From NLDC SCADA) | 00:00 | 15:02 | 14:52 | 00:18 | 19:07 | 22:14 |

| B. Frequency P | rofile (%) | | | | | | |
|----------------|------------|--------|-------------|-------------|--------|--------------|---------|
| Region | FVI | < 49.7 | 49.7 - 49.8 | 49.8 - 49.9 | < 49.9 | 49.9 - 50.05 | > 50.05 |
| All India | 0.028 | 0.00 | 0.00 | 2.68 | 2.68 | 82.84 | 14.48 |

| Ali India | 0.028 | 0.00 | 0.00 | 2.68 | 2.68 | 82.84 | 14.48 |
|----------------|----------------------|----------------|-----------------|------------|----------|-------------|---------|
| C. Power Suppl | y Position in States | | | | | | |
| | | Max.Demand | Shortage during | Energy Met | Drawal | OD(+)/UD(-) | Max OD |
| Region | States | Met during the | maximum | (MU) | Schedule | (MU) | (MW) |
| | | day(MW) | Demand(MW) | (1410) | (MU) | (1110) | (17177) |
| | Punjab | 6732 | 0 | 146.5 | 109.6 | -0.7 | 306 |
| | Haryana | 5868 | 0 | 126.0 | 120.2 | -0.6 | 446 |
| | | | | | | | |

| | | Max.Demand | Shortage during | Energy Met | Drawal | OD(+)/UD(-) | Max OD | Energy |
|--------|----------------------|----------------|-----------------|------------|----------|-------------|--------|----------|
| Region | States | Met during the | maximum | (MU) | Schedule | (MU) | (MW) | Shortage |
| | | day(MW) | Demand(MW) | | (MU) | | | (MU) |
| | Punjab | 6732 | 0 | 146.5 | 109.6 | -0.7 | 306 | 0.0 |
| | Haryana | 5868 | 0 | 126.0 | 120.2 | -0.6 | 446 | 0.0 |
| | Rajasthan | 9482 | 0 | 201.2 | 75.5 | -0.7 | 481 | 0.0 |
| | Delhi | 4186 | 0 | 85.1 | 74.9 | -2.0 | 64 | 0.0 |
| NR | UP | 18335 | 0 | 342.0 | 200.8 | -2.7 | 1117 | 0.0 |
| | Uttarakhand | 1637 | 0 | 35.1 | 16.8 | -0.1 | 128 | 0.0 |
| | HP | 1271 | 0 | 24.9 | 1.5 | 0.8 | 168 | 0.0 |
| | J&K(UT) & Ladakh(UT) | 2115 | 529 | 44.4 | 20.0 | 1.4 | 176 | 10.6 |
| | Chandigarh | 221 | 0 | 4.1 | 4.0 | 0.1 | 27 | 0.0 |
| | Chhattisgarh | 3263 | 0 | 76.4 | 24.4 | 2.0 | 267 | 0.0 |
| | Gujarat | 14581 | 0 | 298.3 | 91.1 | 1.1 | 592 | 0.0 |
| | MP | 6776 | 0 | 143.2 | 65.0 | -2.6 | 1002 | 0.0 |
| WR | Maharashtra | 13766 | 0 | 283.6 | 81.8 | -0.6 | 580 | 0.0 |
| | Goa | 400 | 0 | 8.4 | 7.8 | 0.1 | 74 | 0.0 |
| | DD | 228 | 0 | 4.1 | 3.9 | 0.2 | 32 | 0.0 |
| | DNH | 434 | 0 | 8.9 | 8.7 | 0.2 | 40 | 0.0 |
| | AMNSIL | 786 | 0 | 17.7 | 1.4 | 0.3 | 262 | 0.0 |
| | Andhra Pradesh | 8227 | 0 | 174.3 | 61.8 | -0.7 | 523 | 0.0 |
| | Telangana | 6570 | 0 | 142.8 | 72.8 | 1.6 | 626 | 0.0 |
| SR | Karnataka | 8150 | 0 | 166.4 | 57.1 | -0.7 | 604 | 0.0 |
| | Kerala | 3204 | 0 | 66.3 | 48.7 | 0.3 | 199 | 0.0 |
| | Tamil Nadu | 13979 | 0 | 319.5 | 150.1 | -0.1 | 526 | 0.0 |
| | Puducherry | 371 | 0 | 7.8 | 7.9 | -0.1 | 22 | 0.0 |
| | Bihar | 5068 | 0 | 100.7 | 94.0 | 1.4 | 120 | 0.0 |
| | DVC | 2768 | 0 | 59.5 | -40.4 | -0.3 | 443 | 0.0 |
| | Jharkhand | 1259 | 0 | 25.0 | 18.6 | -2.1 | 119 | 0.0 |
| ER | Odisha | 3822 | 0 | 79.6 | 10.9 | -1.3 | 235 | 0.0 |
| | West Bengal | 7509 | 0 | 148.8 | 54.2 | 2.0 | 680 | 0.0 |
| | Sikkim | 99 | 0 | 1.4 | 1.5 | -0.1 | 19 | 0.0 |
| | Arunachal Pradesh | 100 | 1 | 2.0 | 1.9 | 0.1 | 38 | 0.0 |
| | Assam | 1424 | 20 | 23.9 | 20.7 | 0.0 | 111 | 0.0 |
| | Manipur | 182 | 1 | 2.4 | 2.2 | 0.2 | 28 | 0.0 |
| NER | Meghalaya | 303 | 0 | 5.1 | 1.0 | -0.3 | 34 | 0.0 |
| | Mizoram | 95 | 1 | 1.7 | 1.4 | 0.2 | 34 | 0.0 |
| | Nagaland | 118 | 2 | 2.3 | 2.1 | 0.1 | 21 | 0.0 |
| | Tripura | 233 | 5 | 3.8 | 4.5 | -0.4 | 36 | 0.0 |

| D. Transnational Exchanges (MU) - Import(+ve)/Export(-ve) | | | |
|---|--------|--------|------------|
| | Bhutan | Nepal | Bangladesh |
| Actual (MU) | 29.9 | -1.3 | -25.7 |
| Dav Peak (MW) | 1435.5 | -223.5 | -1111.0 |

| E. Import/Export by Regions (in MU) - Import(+ve)/Export(-ve); OD(+)/UD(-) | | | | | | | | | | | |
|--|-------|--------|-------|--------|------|-------|--|--|--|--|--|
| | NR | WR | SR | ER | NER | TOTAL | | | | | |
| Schedule(MU) | 264.0 | -257.1 | 100.9 | -104.1 | -3.7 | 0.0 | | | | | |
| Actual(MU) | 259.1 | -284.0 | 118.8 | -91.6 | -6.3 | -4.0 | | | | | |
| O/D/U/D(MU) | -5.0 | -26.8 | 17.9 | 12.5 | -2.7 | -4.0 | | | | | |

| F. Generation Outage(MW) | | | | | | |
|--------------------------|-------|-------|-------|------|-----|-------|
| | NR | WR | SR | ER | NER | TOTAL |
| Central Sector | 5105 | 20203 | 9112 | 1450 | 377 | 36246 |
| State Sector | 16950 | 24174 | 13438 | 4962 | 11 | 59535 |
| Total | 22055 | 44377 | 22550 | 6412 | 388 | 95781 |

| | NR | WR | SR | ER | NER | All India |
|--------------------------------------|------|------|--------|-------|-------|-----------|
| Coal | 357 | 885 | 371 | 431 | 9 | 2053 |
| Lignite | 23 | 14 | 36 | 0 | 0 | 74 |
| Hydro | 279 | 35 | 68 | 103 | 20 | 505 |
| Nuclear | 28 | 37 | 46 | 0 | 0 | 110 |
| Gas, Naptha & Diesel | 28 | 69 | 18 | 0 | 24 | 139 |
| RES (Wind, Solar, Biomass & Others) | 58 | 96 | 226 | 5 | 0 | 384 |
| Total | 772 | 1135 | 766 | 538 | 54 | 3265 |
| | | 1 | 1 | 0.04 | 1 | 1 |
| Share of RES in total generation (%) | 7.46 | 8.44 | 29.54 | 0.86 | 0.04 | 11.77 |
| | 4-44 | | 4 4 40 | 40.00 | 20.44 | 20.00 |

| Diginee | =0 | 17 | | v | U | / 7 |
|---|-------|-------|-------|-------|-------|-------|
| Hydro | 279 | 35 | 68 | 103 | 20 | 505 |
| Nuclear | 28 | 37 | 46 | 0 | 0 | 110 |
| Gas, Naptha & Diesel | 28 | 69 | 18 | 0 | 24 | 139 |
| RES (Wind, Solar, Biomass & Others) | 58 | 96 | 226 | 5 | 0 | 384 |
| Total | 772 | 1135 | 766 | 538 | 54 | 3265 |
| Share of RES in total generation (%) | 7.46 | 8.44 | 29.54 | 0.86 | 0.04 | 11.77 |
| Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%) | 47.12 | 14.71 | 44.48 | 19.92 | 38.11 | 30.60 |
| H. All India Demand Diversity Factor | | | | | | |

1.053

1.111

Diversity factor = Sum of regional or state maximum demands / All India maximum demand *Source: RLDCs for solar connected to ISTS; SLDCs for embedded solar. Limited visibility of embedded solar data.

Based on Regional Max Demands

Based on State Max Demands

INTER-REGIONAL EXCHANGES

Import=(+ve) /Export =(-ve) for NET (MU)
Date of Reporting: 05-Jun-2020

| C1 | | | <u></u> | <u> </u> | , | | Date of Reporting: | 05-Jun-2020 |
|------------|-------------------------------|---|--------------------------------|---------------------------------------|-----------------|-------------|--------------------|------------------------|
| Sl No | Voltage Level | Line Details | Circuit | Max Import (MW) | Max Export (MW) | Import (MU) | Export (MU) | NET (MU) |
| | rt/Export of ER (| | | | 1 200 1 | 0.0 | | 7.4 |
| 2 | | ALIPURDUAR-AGRA PUSAULI B/B | S/C | 0 4 | 309 247 | 0.0 | 7.4 | -7.4 -2.0 |
| 3 | 765 kV | GAYA-VARANASI | D/C | 0 | 513 | 0.0 | 8.9 | -8.9 |
| 5 | | SASARAM-FATEHPUR GAYA-BALIA | S/C S/C | 123 | 160 432 | 0.0 | 0.7 7.3 | -0.7 -7.3 |
| 6 | | PUSAULI-VARANASI | S/C | 60 | 194 | 0.0 | 1.0 | -1.0 |
| 7 | 400 kV | PUSAULI -ALLAHABAD | S/C | 112 | 95 | 0.7 | 0.0 | 0.7 |
| 8 | | MUZAFFARPUR-GORAKHPUR PATNA-BALIA | D/C O/C | 0 | 636 819 | 0.0 | 12.5 14.4 | -12.5 -14.4 |
| 10 | | BIHARSHARIFF-BALIA | D/C | 0 | 321 | 0.0 | 5.4 | - <u>14.4</u> -5.4 |
| 11 | | MOTIHARI-GORAKHPUR | D/C | 0 | 307 | 0.0 | 4.9 | -4.9 |
| 12 13 | | BIHARSHARIFF-VARANASI PUSAULI-SAHUPURI | D/C S/C | 7 | 148 167 | 0.0 | 0.4 3.2 | -0.4 -3.2 |
| 14 | 132 kV | SONE NAGAR-RIHAND | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 15 16 | | GARWAH-RIHAND KARMANASA-SAHUPURI | S/C S/C | 30 | 0 | 0.3 | 0.0 | 0.3 |
| 17 | | KARMANASA-CHANDAULI | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 |
| | | | | • | ER-NR | 1.0 | 68.0 | -67.0 |
| | rt/Export of ER (\) 765 kV | With WR) JHARSUGUDA-DHARAMJAIGARH | Q/C | 1062 | 0 | 15.2 | 0.0 | 15.2 |
| 2 | 765 kV | NEW RANCHI-DHARAMJAIGARH | D/C | 1218 | 0 | 18.3 | 0.0 | 18.3 |
| 3 | 765 kV | JHARSUGUDA-DURG | D/C | 115 | 60 | 0.9 | 0.0 | 0.9 |
| 4 | 400 kV | JHARSUGUDA-RAIGARH | Q/C | 342 | 66 | 3.7 | 0.0 | 3.7 |
| 5 | 400 kV | RANCHI-SIPAT | D/C | 444 | 0 | 6.9 | 0.0 | 6.9 |
| 6 | | BUDHIPADAR-RAIGARH | S/C | 22 | 90 | 0.0 | 0.7 | -0.7 |
| 7 | 220 kV | BUDHIPADAR-KORBA | D/C | 216 | 0 | 3.8 | 0.0 | 3.8 |
| T | | W:4L CD) | | | ER-WR | 48.7 | 0.7 | 48.0 |
| Impor 1 | rt/Export of ER (\) HVDC | With SR) JEYPORE-GAZUWAKA B/B | D/C | 0 | 274 | 0.0 | 6.1 | -6.1 |
| 2 | HVDC | TALCHER-KOLAR BIPOLE | D/C | 0 | 1505 | 0.0 | 40.7 | -40.7 |
| 3 | | ANGUL-SRIKAKULAM TALCHER-I/C | D/C | 0 | 2967 | 0.0 | 50.2 | -50.2 7.5 |
| 5 | | TALCHER-I/C BALIMELA-UPPER-SILERRU | D/C S/C | 284 | 790 0 | 0.0 | 7.5 0.0 | -7.5 0.0 |
| | | | · ~ ~ | · - | ER-SR | 0.0 | 96.9 | -96.9 |
| Impor | rt/Export of ER (\) 400 kV | With NER) BINAGURI-BONGAIGAON | D/C | 7 | 316 | 0.0 | 2.9 | -2.9 |
| 2 | | <u>BINAGURI-BUNGAIGAON</u> ALIPURDUAR-BONGAIGAON | D/C | 0 | 466 | 0.0 | 5.2 | -5.2 |
| 3 | | ALIPURDUAR-SALAKATI | D/C | 0 | 86 | 0.0 | 1.0 | -1.0 |
| Imnor | rt/Export of NER | (With NR) | | | ER-NER | 0.0 | 9.2 | -9.2 |
| 1 | | BISWANATH CHARIALI-AGRA | - | 0 | 704 | 0.0 | 17.3 | -17.3 |
| T | -4/E | (XX:41, NID) | | | NER-NR | 0.0 | 17.3 | -17.3 |
| 1mpor | rt/Export of WR (HVDC | With NR) CHAMPA-KURUKSHETRA | D/C | 0 | 903 | 0.0 | 28.6 | -28.6 |
| 2 | HVDC | V'CHAL B/B | D/C | 0 | 205 | 0.0 | 4.9 | -4.9 |
| 3 | | APL -MHG | D/C | 0 | 981 | 0.0 | 24.3 | -24.3 |
| 5 | | GWALIOR-AGRA PHAGI-GWALIOR | D/C D/C | 0 | 2545 1124 | 0.0 | 44.9 22.1 | -44.9 -22.1 |
| 6 | 765 kV | JABALPUR-ORAI | D/C | 0 | 1062 | 0.0 | 39.3 | -39.3 |
| 7 | | GWALIOR-ORAI | S/C S/C | 338 | 0 1259 | 7.0 | 0.0 25.8 | 7.0 -25.8 |
| 8 | 765 kV 765 kV | SATNA-ORAI CHITORGARH-BANASKANTHA | D/C | 0 | 823 | 0.0 | 10.2 | -25.8 -10.2 |
| 10 | 400 kV | ZERDA-KANKROLI | S/C | 41 | 94 | 0.0 | 0.5 | -0.5 |
| 11 12 | | ZERDA -BHINMAL V'CHAL -RIHAND | S/C S/C | 66 976 | 124 | 0.0 20.3 | 0.8 0.0 | -0.8 20.3 |
| 13 | | RAPP-SHUJALPUR | D/C | 0 | 362 | 0.0 | 3.1 | -3.1 |
| 14 | | BHANPURA-RANPUR | S/C | 0 | 88 | 2.0 | 3.2 | -1.2 |
| 15 16 | | BHANPURA-MORAK MEHGAON-AURAIYA | S/C S/C | 0 169 | 138 | 0.0 3.2 | 2.0 0.0 | -2.0 3.2 |
| 17 | 220 kV | MALANPUR-AURAIYA | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 18 | | GWALIOR-SAWAI MADHOPUR | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 19 | 132 kV | RAJGHAT-LALITPUR | D/C | 0 | 0 WR-NR | 0.0 32.5 | 0.0 209.6 | 0.0 -177.1 |
| | rt/Export of WR (| | 1 | | | | • | |
| 1 2 | | BHADRAWATI B/B BARSUR-L.SILERU | - | 107 | 522 | 0.0 | 5.5 0.0 | -5.5 0.0 |
| 3 | HVDC | HVDC-RAIGARH-PUGALUR | D/C | 0 | 449 | 0.0 | 0.0 | 0.0 |
| 4 | 765 kV | SOLAPUR-RAICHUR | D/C | 410 | 1882 | 0.6 | 23.1 | -22.5 |
| 5 | | WARDHA-NIZAMABAD KOLHAPUR-KUDGI | D/C D/C | 0 664 | 2425 | 0.0 7.8 | 35.4 0.0 | -35.4 7.8 |
| 7 | 220 kV | KOLHAPUR-CHIKODI | D/C | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 8 | | PONDA-AMBEWADI | S/C | 1 | 0 | 0.0 | 0.0 | 0.0 |
| 9 | 220 kV | XELDEM-AMBEWADI | S/C | 0 | 103 WR-SR | 1.5 10.0 | 0.0 64.0 | 1.5 -54.0 |
| | | | INTEI | RNATIONAL EXCHA | | | | |
| | State | Region | | e Name | Max (MW) | Min (MW) | Avg (MW) | Energy Exchange |
| | | | | | ` ′ | . , | | (MU) |
| | | ER | DAGACHU (2 * 63 | 3) | 0 | 0 | 0 | 0.0 |
| | | ER | CHUKA (4 * 84) I | BIRPARA RECEIPT | 163 | 148 | 132 | 3.2 |
| | | | MANGDECHHU (4 | | | | | |
| | BHUTAN | ER | ALIPURDUAR RE | · · · · · · · · · · · · · · · · · · · | 528 | 474 | 463 | 11.1 |
| | | ER | | INAGURI RECEIPT | 588 | 519 | 510 | 12.2 |
| | | | , , , | | | | | |
| | | NER | 132KV-SALAKAT | I - GELEPHU | 1 | 0 | 19 | 0.5 |
| | | NER | 132KV-RANGIA - | DEOTHANG | 0 | 0 | 52 | 1.2 |
| | | NID | 132KV-Tanakpur(N | NH) - | Δ. | Λ | Δ. | Λ 2 |
| | | NR | Mahendranagar(PO | <u>G</u>) | 0 | 0 | 0 | -0.3 |
| | NEPAL | ER | 132KV-BIHAR - N | EPAL | -77 | -3 | -28 | -0.7 |
| | | ER | 220KV-MUZAFFA | | -114 | -2 | -14 | -0.3 |
| | | 12K | DHALKEBAR DC | | -114 | -4 | -14 | -0.5 |
| | | ER | Bheramara HVDC | (Bangladesh) | -965 | -766 | -940 | -22.6 |
| BA | ANGLADESH | NER | 132KV-SURAJMA | | 73 | 0 | -67 | -1.6 |
| | | | COMILLA(BANG) 132KV-SURAJMA | | | | | |
| L | | NER | COMILLA(BANG) | | 73 | 0 | -64 | -1.5 |
| | | | | | | | | |