

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, कृतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 05th Feb 2020

To,

- 1. कार्यकारी निदेशक, पू .क्षे .भा .प्रे .के.,14 , गोल्फ क्लब रोड , कोलकाता 700033 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.,29 , रेस कोर्स क्रॉस रोड, बंगलुरु -560009 Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 04.02.2020.

महोदय/Dear Sir,

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

धन्यवाद,

Report for previous day Date of Reporting

A. Power Supply Position at All India and Regional level

| | NR | WR | SR | ER | NER | Total |
|---|-------|-------|-------|-------|-------|--------|
| Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs) | 47447 | 48660 | 41794 | 18300 | 2438 | 158639 |
| Peak Shortage (MW) | 534 | 0 | 0 | 0 | 20 | 554 |
| Energy Met (MU) | 983 | 1182 | 1023 | 361 | 41 | 3590 |
| Hydro Gen (MU) | 128 | 50 | 80 | 29 | 4 | 292 |
| Wind Gen (MU) | 13 | 33 | 34 | | | 80 |
| Solar Gen (MU)* | 32.11 | 25.20 | 85.57 | 1.42 | 0.04 | 144 |
| Energy Shortage (MU) | 12.8 | 0.0 | 0.0 | 0.0 | 0.6 | 13.5 |
| Maximum Demand Met during the day (MW) & time | 49484 | 56543 | 47649 | 18327 | 2519 | 171085 |
| (from NLDC SCADA) | 09:31 | 09:36 | 10:20 | 18:37 | 18:02 | 09:32 |

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 | 0.064 | 0.16 | 2.31 | 13.32 | 15.80 | 73.40 | 10.80 |

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 |
|--------|------------------------|---|---|-----------------|-------------------------|---------------------|----------------|------------------------|
| | Punjab | 5918 | 0 | 120.2 | 64.5 | -1.1 | 39 | 0.0 |
| | Haryana | 6478 | 0 | 128.5 | 87.3 | 0.0 | 175 | 0.0 |
| | Rajasthan | 14088 | 0 | 249.0 | 97.2 | 3.0 | 472 | 0.0 |
| | Delhi | 4083 | 0 | 69.8 | 55.6 | -1.3 | 211 | 0.0 |
| NR | UP | 15903 | 0 | 287.4 | 114.2 | 0.6 | 740 | 0.2 |
| | Uttarakhand | 2151 | 0 | 39.3 | 21.4 | 0.5 | 151 | 0.0 |
| | HP | 1737 | 0 | 30.7 | 23.7 | -0.2 | 184 | 0.0 |
| | J&K(UT) and Ladakh(UT) | 2626 | 656 | 53.6 | 45.5 | 0.0 | 401 | 12.6 |
| | Chandigarh | 263 | 0 | 4.2 | 3.9 | 0.2 | 34 | 0.0 |
| | Chhattisgarh | 3753 | 0 | 77.7 | 32.8 | -1.5 | 192 | 0.0 |
| | Gujarat | 15786 | 0 | 333.9 | 77.9 | 3.5 | 638 | 0.0 |
| | MP | 14329 | 0 | 265.0 | 140.6 | -3.2 | 423 | 0.0 |
| WR | Maharashtra | 22722 | 0 | 464.5 | 139.3 | -2.2 | 761 | 0.0 |
| WK | Goa | 481 | 0 | 10.0 | 9.8 | -0.4 | 30 | 0.0 |
| | DD | 327 | 0 | 7.3 | 6.9 | 0.4 | 46 | 0.0 |
| | DNH | 766 | 0 | 18.0 | 18.1 | -0.1 | 56 | 0.0 |
| | Essar steel | 809 | 0 | 5.7 | 5.7 | 0.0 | 277 | 0.0 |
| | Andhra Pradesh | 8953 | 0 | 180.6 | 61.5 | -1.8 | 497 | 0.0 |
| | Telangana | 11110 | 0 | 215.2 | 105.6 | -0.4 | 560 | 0.0 |
| SR | Karnataka | 12369 | 0 | 233.9 | 67.8 | -0.2 | 639 | 0.0 |
| Sit | Kerala | 3660 | 0 | 74.3 | 55.9 | 0.9 | 342 | 0.0 |
| | Tamil Nadu | 14330 | 0 | 311.3 | 161.9 | -0.6 | 464 | 0.0 |
| | Pondy | 370 | 0 | 7.3 | 7.6 | -0.3 | 22 | 0.0 |
| | Bihar | 4423 | 0 | 77.8 | 73.5 | -0.4 | 233 | 0.0 |
| | DVC | 3057 | 0 | 65.3 | -38.0 | -0.8 | 189 | 0.0 |
| ER | Jharkhand | 1342 | 0 | 25.2 | 18.8 | -0.2 | 107 | 0.0 |
| | Odisha | 3841 | 0 | 69.9 | -0.6 | -1.1 | 237 | 0.0 |
| | West Bengal | 6444 | 0 | 121.4 | 27.9 | -1.4 | 67 | 0.0 |
| | Sikkim | 124 | 0 | 1.9 | 1.8 | 0.1 | 21 | 0.0 |
| | Arunachal Pradesh | 125 | 1 | 2.2 | 2.3 | -0.1 | 25 | 0.0 |
| | Assam | 1383 | 7 | 22.3 | 20.5 | -0.3 | 107 | 0.3 |
| | Manipur | 216 | 1 | 2.7 | 3.1 | -0.4 | 18 | 0.0 |
| NER | Meghalaya | 378 | 0 | 6.5 | 6.0 | -0.3 | 57 | 0.3 |
| | Mizoram | 108 | 0 | 1.7 | 1.7 | -0.3 | 18 | 0.0 |
| | Nagaland | 122 | 1 | 2.3 | 2.1 | 0.1 | 16 | 0.0 |
| | Tripura | 226 | 0 | 3.5 | 1.7 | -0.2 | 13 | 0.0 |

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

| The state of the s | Bhutan | Nepal | Bangladesh |
|--|--------|--------|------------|
| Actual(MU) | 1.7 | -10.8 | -10.9 |
| Day peak (MW) | 405.0 | -576.3 | -673.0 |

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

| | NR | WR | SR | ER | NER | TOTAL |
|--------------|-------|--------|-------|--------|------|-------|
| Schedule(MU) | 237.8 | -251.2 | 113.0 | -107.4 | 7.5 | -0.2 |
| Actual(MU) | 236.3 | -266.8 | 134.2 | -107.2 | 2.4 | -1.1 |
| O/D/U/D(MU) | -1.5 | -15.6 | 21.2 | 0.2 | -5.2 | -0.9 |

F. Generation Outage(MW)

| | NR | WR | SR | ER | NER | Total |
|----------------|-------|-------|-------|------|-----|-------|
| Central Sector | 5938 | 14998 | 6632 | 2055 | 703 | 30326 |
| State Sector | 13135 | 15471 | 5740 | 3640 | 11 | 37997 |
| Total | 19073 | 30468 | 12372 | 5695 | 715 | 68323 |

G. Sourcewise generation (MU)

| | NR | WR | SR | ER | NER | All India |
|-------------------------------------|-----|------|-----|-----|-----|-----------|
| Coal | 488 | 1247 | 550 | 458 | 14 | 2757 |
| Lignite | 21 | 12 | 48 | 0 | 0 | 81 |
| Hydro | 128 | 50 | 80 | 29 | 4 | 292 |
| Nuclear | 24 | 33 | 39 | 0 | 0 | 96 |
| Gas, Naptha & Diesel | 31 | 39 | 18 | 0 | 23 | 111 |
| RES (Wind, Solar, Biomass & Others) | 73 | 66 | 164 | 1 | 0 | 304 |
| Total | 765 | 1446 | 900 | 489 | 41 | 3642 |

| Share of RES in total generation (%) | 9.59 | 4.54 | 18.21 | 0.30 | 0.10 | 8.36 |
|--|-------|-------|-------|------|-------|-------|
| Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%) | 29.46 | 10.29 | 31.47 | 6.30 | 10.73 | 19.02 |

H. All India Demand Diversity Factor

| 11 11 India Demand Diversity Luctor | | |
|-------------------------------------|-------|--|
| Based on Regional Max Demands | 1.020 | |
| Based on State Max Demands | 1.080 | |

Diversity factor = Sum of regional or state-wise maximum demands / All India maximum demand

5-Feb-20

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

| | | <u>IN7</u> | TER-REGI | ONAL EXCH | ANGES | Date of l | Reporting | 5-Feb-20 |
|----------|------------------|---|------------|--------------------|--------------------|--------------------|----------------|--|
| | | | | | | | | 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) |
| | xport of | ER (With NR) | | | | | | |
| 5 | HVDC | ALIPURDUAR-AGRA PUSAULI B/B | S/C | 0 | 0 297 | 0.0 | 6.9 | 0.0 -6.9 |
| 1 | | GAYA-VARANASI | D/C | 0 | 997 | 0.0 | 14.0 | -14.0 |
| 2 | 765kV | SASARAM-FATEHPUR | S/C | 0 | 435 | 0.0 | 5.5 | -5.5 |
| 3 | | GAYA-BALIA | S/C | 0 | 435 | 0.0 | 7.5 | -7.5 |
| 6 7 | | PUSAULI-VARANASI PUSAULI -ALLAHABAD | S/C S/C | 0 | 201 171 | 0.0 | 3.9 2.8 | -3.9 -2.8 |
| 8 | | MUZAFFARPUR-GORAKHPUR | D/C | 0 | 624 | 0.0 | 6.2 | -6.2 |
| 9 | 400 kV | PATNA-BALIA | Q/C | 0 | 868 | 0.0 | 14.1 | -14.1 |
| 10 | | BIHARSHARIFF-BALIA | D/C | 0 | 379 | 0.0 | 5.8 | -5.8 |
| 11 | | MOTIHARI-GORAKHPUR | D/C | 0 | 337 | 0.0 | 5.9 | -5.9 |
| 12 | 220 kV | BIHARSHARIFF-VARANASI PUSAULI-SAHUPURI | D/C S/C | 2 8 | 353 97 | 0.0 | 3.9 0.8 | -3.9 -0.8 |
| 14 | 220 KV | SONE NAGAR-RIHAND | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 15 | | GARWAH-RIHAND | S/C | 30 | 0 | 0.7 | 0.0 | 0.7 |
| 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 | vnout -P | FD (With WP) | | | ER-NR | 0.7 | 77.3 | -76.6 |
| - | xport of | ER (With WR) | | | _ | | | |
| 18 | 765 kV | JHARSUGUDA-DHARAMJAIGARH | Q/C | 1295 | 0 | 14.2 | 0.0 | 14.2 |
| 19 20 | | NEW RANCHI-DHARAMJAIGARH JHARSUGUDA-DURG | D/C D/C | 450 31 | 293 367 | 1.6 0.0 | 3.8 | 1.6 -3.8 |
| 21 | | JHARSUGUDA-BURG JHARSUGUDA-RAIGARH | Q/C | 59 | 514 | 0.0 | 5.1 | -5.1 |
| 22 | 400 kV | RANCHI-SIPAT | D/C | 215 | 73 | 2.0 | 0.0 | 2.0 |
| 23 | 220 kV | BUDHIPADAR-RAIGARH | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 24 | | BUDHIPADAR-KORBA | D/C | 70 | 29 ER-WR | 0.6 | 0.0 | 0.6 |
| Import/E | xport of | ER (With SR) | | | ER-WR | 18.4 | 8.9 | 9.5 |
| 26 | | JEYPORE-GAZUWAKA B/B | D/C | 0.0 | 537.0 | 0.0 | 12.6 | -12.6 |
| 27 | HVDC | TALCHER-KOLAR BIPOLE | D/C | 0.0 | 1978.0 | 0.0 | 35.7 | -35.7 |
| 25 | 765 kV | ANGUL-SRIKAKULAM | D/C | 0.0 | 2284.0 | 0.0 | 43.3 | -43.3 |
| 28 | 400 kV | TALCHER-I/C | D/C | 239.0 | 646.0 | 0.0 | 2.1 | -2.1 |
| 29 | 220 kV | BALIMELA-UPPER-SILERRU | S/C | 1.0 | 0.0 ER-SR | 0.0 | 0.0 91.6 | 0.0 -91.6 |
| Import/E | export of | ER (With NER) | | | ER-SK | 0.0 | 91.0 | -91.0 |
| 30 | Ĺ | BINAGURI-BONGAIGAON | D/C | 224 | 155 | 2.5 | 0.0 | 3 |
| 31 | 400 kV | ALIPURDUAR-BONGAIGAON | D/C | 373 | 162 | 4.2 | 0.0 | 4 |
| 32 | 220 kV | ALIPURDUAR-SALAKATI | D/C | 65 | 34 | 0.7 | 0.0 | 1 |
| I/E | · 6 | MED (With MD) | | | ER-NER | 7.4 | 0.0 | 7.4 |
| 33 | HVDC | NER (With NR) BISWANATH CHARIALI-AGRA | 1 . 1 | 605 | 0 | 10.9 | 0.0 | 10.9 |
| 33 | IIVDC | BISWANTIII CIBARALI-AGRA | | 003 | NER-NR | | 0.0 | 10.9 |
| Import/E | export of | WR (With NR) | | | | | | 1 |
| 34 | | CHAMPA-KURUKSHETRA | D/C | 0 | 2506 | 0.0 | 41.9 | -41.9 |
| 35 | HVDC | V'CHAL B/B | D/C | 448 | 0 | 12.1 | 0.0 | 12.1 |
| 36 | | APL -MHG | D/C | 0 | 1923 | 0.0 | 45.4 | -45.4 |
| 37 38 | | GWALIOR-AGRA PHAGI-GWALIOR | D/C D/C | 0 | 2616 1840 | 0.0 | 44.4 28.9 | -44.4 -28.9 |
| 39 | | JABALPUR-ORAI | D/C | 0 | 954 | 0.0 | 32.4 | -32.4 |
| 40 | 765 kV | GWALIOR-ORAI | S/C | 790 | 0 | 13.5 | 0.0 | 13.5 |
| 41 | | SATNA-ORAI | S/C | 0 | 1435 | 0.0 | 29.5 | -29.5 |
| 42 | | CHITTORGARH-BANASKANTHA | D/C | 161 | 876 | 0.0 | 4.9 | -4.9 |
| 43 | | ZERDA-KANKROLI ZERDA RHINMAI | S/C S/C | 166 213 | 172 435 | 0.0 | 0.0 2.7 | 0.0 -2.7 |
| 44 | 400 kV | ZERDA -BHINMAL V'CHAL -RIHAND | S/C S/C | 985 | 0 | 22.7 | 0.0 | 22.7 |
| 46 | 1 | RAPP-SHUJALPUR | D/C | 35 | 465 | 0 | 3 | -3 |
| 47 | | BHANPURA-RANPUR | S/C | 19 | 92 | 0.2 | 0.6 | -0.4 |
| 48 | 220 kV | BHANPURA-MORAK | S/C | 12 | 136 | 0.0 | 1.4 | -1.4 |
| 49 | | MEHGAON-AURAIYA | S/C | 115 | 0 | 1.6 | 0.0 | 1.6 |
| 50 | 1221.57 | MALANPUR-AURAIYA | S/C | 72 | 15 | 0.7 | 0.0 | 0.7 |
| 51 | 132kV | GWALIOR-SAWAI MADHOPUR | S/C | 0 | 0 WR-NR | 0.0 50.8 | 0.0 234.6 | 0.0 -183.8 |
| Import/E | xport of | WR (With SR) | | | | 2010 | 200 | 100.0 |
| 52 | HVDC | BHADRAWATI B/B | - | 0 | 1006 | 0.0 | 22.1 | -22.1 |
| 53 | 111110 | BARSUR-L.SILERU | - | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 54 | 765 kV | SOLAPUR-RAICHUR | D/C | 409 | 1736 | 0.0 | 17.2 | -17.2 |
| 55 | | WARDHA-NIZAMABAD | D/C | 650 | 2259 | 0.0 | 36.3 | -36.3 |
| 56 57 | 400 kV | KOLHAPUR-KUDGI KOLHAPUR-CHIKODI | D/C D/C | 650 | 0 | 0.0 | 8.1 0.0 | -8.1 0.0 |
| 58 | 220 kV | PONDA-AMBEWADI | S/C | 1 | 0 | 0.0 | 0.0 | 0.0 |
| 59 | 1 | XELDEM-AMBEWADI | S/C | 0 | 84 | 1.5 | 0.0 | 1.5 |
| | • | • | | | WR-SR | 1.5 | 83.7 | -82.2 |
| | | Т | RANSNATI | ONAL EXCHA | NGE | | | 1 |
| 60 | | BHUTAN | | | | | | 1.7 |
| 61 62 | | NEPAL BANGLADESH | | | | | · · | -10.8 |
| 02 | 1 | DANGEADESII | | | | | | -10.9 |