

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

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 16th Mar 2019

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. मुख्य महाप्रबंधक, ऊ. पू. क्षे. भा. प्रे. के., डोंगतिएह, लोअर नोंग्रह , लापलंग, शिलोंग 793006 Chief General Manager, 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 15.03.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 15-मार्च-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 15th March 2019, is available at the NLDC website.

धन्यवाद,

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

Date of Reporting Report for previous day 16-Mar-19

A. Maximum Demand

| | NR | WR | SR | ER | NER | Total |
|---------------------------------------------------------------------|-------|-------|-------|-------|-------|--------|
| Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs) | 41330 | 47387 | 46148 | 17794 | 2455 | 155114 |
| Peak Shortage (MW) | 1001 | 0 | 0 | 0 | 64 | 1065 |
| Energy Met (MU) | 904 | 1134 | 1107 | 392 | 43 | 3580 |
| Hydro Gen (MU) | 146 | 30 | 70 | 40 | 3 | 290 |
| Wind Gen (MU) | 12 | 63 | 46 | | | 122 |
| Solar Gen (MU)* | 26.60 | 24.7 | 84.08 | 0.85 | 0.04 | 136 |
| Energy Shortage (MU) | 11.9 | 0.0 | 0.0 | 0.0 | 0.8 | 12.7 |
| Maximum Demand Met during the day | 42591 | 52884 | 47682 | 17982 | 2458 | 159866 |
| (MW) & time (from NLDC SCADA) | 19:02 | 11:04 | 09:41 | 19:05 | 18:47 | 10:25 |

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 | 0.021 | 0.00 | 0.00 | 2.06 | 2.06 | 82.95 | 14.99 |

| 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 | 5558 | 0 | 111.0 | 45.8 | -0.9 | 131 | 0.0 |
| | Haryana | 6102 | 0 | 118.4 | 71.5 | 0.2 | 170 | 0.0 |
| | Rajasthan | 10847 | 0 | 218.2 | 61.8 | -0.9 | 301 | 0.0 |
| | Delhi | 3745 | 0 | 64.2 | 54.0 | -0.6 | 194 | 0.0 |
| NR | UP | 13421 | 540 | 278.8 | 113.3 | 1.7 | 547 | 0.7 |
| | Uttarakhand | 1832 | 0 | 35.7 | 17.6 | -0.8 | 166 | 0.0 |
| | HP | 1662 | 0 | 29.1 | 20.3 | 0.4 | 99 | 0.0 |
| | J&K | 2194 | 548 | 45.8 | 39.0 | -1.2 | 351 | 11.2 |
| | Chandigarh | 205 | 0 | 3.2 | 3.8 | -0.5 | 6 | 0.0 |
| | Chhattisgarh | 4109 | 0 | 97.5 | 35.7 | -0.9 | 731 | 0.0 |
| | Gujarat | 15283 | 0 | 334.5 | 94.2 | 1.6 | 597 | 0.0 |
| | MP | 10912 | 0 | 210.7 | 95.4 | -0.4 | 493 | 0.0 |
| 14/15 | Maharashtra | 20667 | 0 | 448.9 | 138.8 | 0.6 | 657 | 0.0 |
| WR | Goa | 440 | 0 | 11.6 | 10.3 | 0.7 | 64 | 0.0 |
| | DD | 328 | 0 | 7.4 | 7.1 | 0.3 | 33 | 0.0 |
| | DNH | 777 | 0 | 18.2 | 18.2 | 0.0 | 50 | 0.0 |
| | Essar steel | 310 | 0 | 5.7 | 5.8 | -0.1 | 270 | 0.0 |
| | Andhra Pradesh | 8714 | 0 | 197.4 | 61.9 | 0.2 | 412 | 0.0 |
| | Telangana | 10392 | 0 | 229.3 | 112.1 | -0.7 | 449 | 0.0 |
| SR | Karnataka | 12214 | 0 | 249.9 | 85.4 | 0.4 | 480 | 0.0 |
| 3N | Kerala | 3980 | 0 | 80,9 | 56.8 | 1.0 | 156 | 0.0 |
| | Tamil Nadu | 15218 | 0 | 340.8 | 185.2 | -0.8 | 396 | 0.0 |
| | Pondy | 398 | 0 | 8.7 | 8.5 | 0.3 | 47 | 0.0 |
| | Bihar | 4350 | 0 | 78.0 | 73.1 | -0.6 | 460 | 0.0 |
| | DVC | 3020 | 0 | 63.4 | -46.1 | -0.4 | 396 | 0.0 |
| ER | Jharkhand | 1000 | 0 | 20.0 | 15.1 | -1.2 | 169 | 0.0 |
| EN | Odisha | 4005 | 0 | 85.5 | 39.5 | 1.8 | 267 | 0.0 |
| | West Bengal | 6660 | 0 | 143.7 | 36.7 | -0.2 | 309 | 0.0 |
| | Sikkim | 96 | 0 | 1.1 | 1.8 | -0.7 | 18 | 0.0 |
| | Arunachal Pradesh | 131 | 2 | 2.1 | 2.3 | -0.1 | 53 | 0.0 |
| | Assam | 1446 | 57 | 24.7 | 19.8 | 1.7 | 177 | 0.7 |
| | Manipur | 177 | 3 | 2.3 | 2.6 | -0.3 | 27 | 0.0 |
| NER | Meghalaya | 362 | 0 | 6.2 | 5.3 | 0.1 | 47 | 0.0 |
| | Mizoram | 89 | 2 | 1.6 | 1.4 | 0.1 | 5 | 0.0 |
| | Nagaland | 111 | 1 | 2.1 | 1.9 | 0.1 | 6 | 0.0 |
| | Tripura | 237 | 1 | 3,9 | 3.0 | 0.1 | 71 | 0.0 |

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

| | Bhutan | Nepal | Bangladesh |
|---------------|--------|--------|------------|
| Actual(MU) | 1.7 | -11.9 | -19.4 |
| Day peak (MW) | 144.1 | -572.3 | -912.0 |

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

| | NR | WR | SR | ER | NER | TOTAL |
|--------------|-------|--------|-------|-------|------|-------|
| Schedule(MU) | 158.8 | -258.1 | 166.6 | -70.4 | 3.6 | 0.5 |
| Actual(MU) | 159.7 | -263.2 | 164.4 | -66.8 | 1.6 | -4.4 |
| O/D/U/D(MU) | 0.9 | -5.1 | -2,2 | 3.5 | -2.0 | -4.9 |

F. Generation Outage(MW)

| | NR | WR | SR | ER | NER | Total |
|----------------|-------|-------|-------|------|-----|-------|
| Central Sector | 5741 | 13476 | 5522 | 810 | 520 | 26069 |
| State Sector | 12085 | 15390 | 5090 | 4055 | 50 | 36670 |
| Total | 17826 | 28866 | 10612 | 4865 | 569 | 62738 |

G. Sourcewise generation (MU)

| | NR | WR | SR | ER | NER | All India |
|--------------------------------------|------|------|-------|------|------|-----------|
| Coal | 472 | 1194 | 606 | 462 | 10 | 2744 |
| Lignite | 23 | 17 | 49 | 0 | 0 | 88 |
| Hydro | 146 | 30 | 70 | 40 | 3 | 290 |
| Nuclear | 28 | 31 | 31 | 0 | 0 | 90 |
| Gas, Naptha & Diesel | 29 | 42 | 17 | 0 | 28 | 116 |
| RES (Wind, Solar, Biomass & Others) | 70 | 93 | 174 | 1 | 0 | 337 |
| Total . | 768 | 1406 | 947 | 504 | 42 | 3666 |
| | | | | | | |
| Share of RES in total generation (%) | 9.15 | 6.58 | 18 33 | 0.18 | 0.10 | 9.20 |

| Share of RES in total generation (%) | 9.15 | 6.58 | 18.33 | 0.18 | 0.10 | 9.20 |
|---------------------------------------------------------------------------|-------|-------|-------|------|------|-------|
| Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%) | 31.84 | 10.89 | 29.06 | 8.21 | 8.37 | 19.57 |

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

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

| <u>INTER-REGIONAL EXCHANGES</u> Date of Reporting: | | | | | | | | 16-Mar-19 |
|----------------------------------------------------|------------------|---------------------------------------------|------------|--------------------|-----------------|--------------------|---------------------|------------------------------------------------|
| | | | | | | | | 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 | xport of | ER (With NR) | | 1 | | | | |
| 1 | 765kV | GAYA-VARANASI | D/C | 0 | 556 | 0.0 | 6.9 | -6.9 |
| 3 | 705KV | SASARAM-FATEHPUR GAYA-BALIA | S/C S/C | 0 | 286 384 | 0.0 | 7.1 | -4.6 -7.1 |
| 4 | HVDC | ALIPURDUAR-AGRA | - | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 5 | n.bc | PUSAULI B/B | S/C | 3 | 0 | 0.0 | 0.0 | 0.0 |
| 7 | | PUSAULI-VARANASI | S/C S/C | 7 | 70 43 | 0.0 | 0.8 | -0.8 0.3 |
| 8 | | PUSAULI -ALLAHABAD MUZAFFARPUR-GORAKHPUR | D/C | 46 0 | 676 | 0.0 | 8.9 | -8.9 |
| 9 | 400 kV | PATNA-BALIA | Q/C | 0 | 851 | 0.0 | 16.5 | -16.5 |
| 10 | | BIHARSHARIFF-BALIA | D/C | 0 | 379 | 0.0 | 7.5 | -7.5 |
| 11 | | MOTIHARI-GORAKHPUR | D/C | 0 | 291 | 0.0 | 5.7 | -5.7 |
| 12 | | BIHARSHARIFF-VARANASI | D/C | 71 | 210 | 0.0 | 1.4 | -1.4 |
| 13 | 220 kV | PUSAULI-SAHUPURI | S/C | 0 | 148 0 | 0.0 | 0.0 | -2.7 |
| 15 | | SONE NAGAR-RIHAND GARWAH-RIHAND | S/C S/C | 30 | 0 | 0.0 | 0.0 | 0.0 |
| 16 | 132 kV | KARMANASA-SAHUPURI | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 17 | | KARMANASA-CHANDAULI | S/C | 1 | 0 | 0.0 | 0.0 | 0.0 |
| | | | | | ER-NR | 0.9 | 62.0 | -61.2 |
| Import/E | xport of | ER (With WR) | 1 | _ | | | | |
| 18 | 765 kV | JHARSUGUDA-DHARAMJAIGARH S/C | D/C | 1987 | 0 | 37.1 | 0.0 | 37.1 |
| 19 | | NEW RANCHI-DHARAMJAIGARH | D/C | 369 | 52 | 3.7 | 0.0 | 3.7 |
| 20 | 400 kV | JHARSUGUDA-RAIGARH | Q/C | 183 | 121 | 0.1 | 0.0 | 0.1 |
| 21 | | RANCHI-SIPAT | D/C | 213 | 0 | 3.0 | 0.0 | 3.0 |
| 22 | 220 kV | BUDHIPADAR-RAIGARH BUDHIPADAR-KORBA | S/C D/C | 0 192 | 125 0 | 0.0 3.4 | 0.0 | -2.1 3.4 |
| 23 | l | BUDIIII ADAK-KOKBA | D/C | 172 | ER-WR | 47.3 | 2.1 | 45.2 |
| Import/E | xport of | ER (With SR) | | | | | | |
| 24 | 765 kV | ANGUL-SRIKAKULAM | D/C | 0.0 | 1950.0 | 0.0 | 39.0 | -39.0 |
| 25 | HVDC | JEYPORE-GAZUWAKA B/B | D/C | 0.0 | 619.0 | 0.0 | 14.6 | -14.6 |
| 26 | LINK | TALCHER-KOLAR BIPOLE | D/C | 0.0 | 2447.0 | 0.0 | 50.3 | -50.3 |
| 27 | 400 kV 220 kV | TALCHER-I/C BALIMELA-UPPER-SILERRU | D/C S/C | 0.0 1.0 | 636.0 0.0 | 0.0 | 0.0 | -5.3 0.0 |
| 28 | 220 KV | BALINELA-UI I EK-SILEKKU | 5/C | 1.0 | ER-SR | 0.0 | 103.9 | -103.9 |
| Import/E | xport of | ER (With NER) | | | | | | |
| 29 | 400 kV | BINAGURI-BONGAIGAON | D/C | 255 | 40 | 3.0 | 0.0 | 3 |
| 30 | | ALIPURDUAR-BONGAIGAON | D/C | 367 | 0 | 4.8 | 0.0 | 5 |
| 31 | 220 kV | ALIPURDUAR-SALAKATI | D/C | 64 | 36 | 0.4 | 0.0 | 0 |
| Import/E | vnort of | NER (With NR) | | | ER-NER | 8.2 | 0.0 | 8.2 |
| 32 | <u> </u> | BISWANATH CHARIALI-AGRA | - | 0 | 462 | 10.8 | 0.0 | 10.8 |
| | | | 1 | | NER-NR | 10.8 | 0.0 | 10.8 |
| Import/E | xport of | WR (With NR) | | | | | | |
| 33 | | CHAMPA-KURUKSHETRA | D/C | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 34 | HVDC | V'CHAL B/B | D/C | 245 | 0 | 6.0 | 0.0 | 6.0 |
| 35 | | APL -MHG | D/C | 0 | 1922 | 0.0 | 48.4 | -48.4 |
| 36 | | GWALIOR-AGRA PHAGI-GWALIOR | D/C D/C | 0 | 2188 1053 | 0.0 | 38.7 18.4 | -38.7 -18.4 |
| 38 | | JABALPUR-ORAI | D/C | 0 | 612 | 0.0 | 21.5 | -21.5 |
| 39 | 765 kV | GWALIOR-ORAI | S/C | 505 | 0 | 9.9 | 0.0 | 9.9 |
| 40 | | SATNA-ORAI | S/C | 0 | 1337 | 0.0 | 28.2 | -28.2 |
| 41 | | CHITORGARH-BANASKANTHA | D/C | 0 | 0 | 4.1 | 0.0 | 4.1 |
| 42 | | ZERDA-KANKROLI | S/C | 158 164 | 0 91 | 3.3 | 0.0 | 3.3 1.0 |
| 43 | 400 kV | ZERDA -BHINMAL V'CHAL -RIHAND | S/C S/C | 959 | 0 | 1.0 21.5 | 0.0 | 21.5 |
| 45 | | RAPP-SHUJALPUR | D/C | 163 | 185 | 0 | 0.0 | 0 |
| 46 | | BADOD-KOTA | S/C | 26 | 58 | 0.0 | 1.1 | -1.1 |
| 47 | 220 kV | BADOD-MORAK | S/C | 0 | 120 | 0.0 | 1.4 | -1.4 |
| 48 | | MEHGAON-AURAIYA | S/C | 111 | 0 | 1.6 | 0.0 | 1.6 |
| 49 | 4227 | MALANPUR-AURAIYA | S/C | 51 | 17 | 0.4 | 0.0 | 0.4 |
| 50 | 132kV | GWALIOR-SAWAI MADHOPUR | S/C | 0 | 0 WR-NR | 0.0 47.7 | 0.0 157.6 | 0.0 - 109.9 |
| Import/E | xport of | WR (With SR) | | | WK-INK | 41.1 | 137.0 | -107.7 |
| 51 | HVDC | BHADRAWATI B/B | - | 0 | 999 | 0.0 | 23.9 | -23.9 |
| 52 | LINK | BARSUR-L.SILERU | - | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 53 | 765 kV | SOLAPUR-RAICHUR | D/C | 0 | 2246 | 0.0 | 42.6 | -42.6 |
| 54 | | WARDHA-NIZAMABAD | D/C | 0 | 2596 | 0.0 | 51.3 | -51.3 |
| 55 | 400 kV | KOLHAPUR-KUDGI | D/C | 651 | 0 | 8.7 | 0.0 | 8.7 |
| 56 57 | 220 kV | KOLHAPUR-CHIKODI PONDA-AMBEWADI | D/C S/C | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 58 | | XELDEM-AMBEWADI | S/C | 1 | 54 | 0.8 | 0.0 | 0.8 |
| | | | | | WR-SR | 9.5 | 117.7 | -108.1 |
| | | TRA | ANSNAT | IONAL EXC | | * ** | ** | 1 |
| 59 | | BHUTAN | L | | | | | 1.7 |
| 60 | | NEPAL | | | | | | -11.9 |
| 61 | <u> </u> | BANGLADESH | 1 | | | | | -19.4 |