

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

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: 03rd Sep 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., २९ , रेस कोर्स क्रॉस रोड, बंगलुरु –५६०००९ Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 02.09.2019.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 02-सितंबर-2019 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा०भा०प्रे०के० 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 2nd Sep 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 3-Sep-19

A. Power Supply Position at All India and Regional level

| | NR | WR | SR | ER | NER | Total |
|---|-------|-------|-------|-------|-------|--------|
| Demand Met during Evening Peak hrs(MW) (at 2000 hrs; from RLDCs) | 57109 | 42657 | 35835 | 22189 | 2800 | 160590 |
| Peak Shortage (MW) | 2798 | 0 | 0 | 0 | 228 | 3026 |
| Energy Met (MU) | 1308 | 973 | 840 | 475 | 54 | 3650 |
| Hydro Gen (MU) | 362 | 98 | 94 | 136 | 16 | 706 |
| Wind Gen (MU) | 3 | 51 | 133 | | | 187 |
| Solar Gen (MU)* | 21.08 | 17.08 | 59.39 | 2.10 | 0.03 | 100 |
| Energy Shortage (MU) | 14.3 | 0.0 | 0.0 | 0.0 | 1.6 | 15.8 |
| Maximum Demand Met during the day | 61199 | 43640 | 37651 | 22819 | 2866 | 163084 |
| (MW) & time (from NLDC SCADA) | 22:43 | 19:26 | 09:28 | 20:03 | 18:59 | 19:43 |

B. Frequency Profile (%)
Region
All India FVI <49.7 49.7-49.8 49.8-49.9 <49.9 49.9-50.05 > 50.05 70.34

| 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 | 10454 | 0 | 235.3 | 136.4 | -1.5 | 34 | 0.0 |
| | Haryana | 9571 | 0 | 204.6 | 159.5 | -0.4 | 108 | 0.0 |
| | Rajasthan | 9304 | 0 | 203.2 | 64.9 | -0.5 | 1208 | 0.0 |
| | Delhi | 6153 | 0 | 122.8 | 98.0 | 0.0 | 201 | 0.0 |
| NR | UP | 21217 | 0 | 425.6 | 200.9 | 1.8 | 903 | 4.8 |
| | Uttarakhand | 1994 | 0 | 41.1 | 13.9 | 0.1 | 132 | 0.0 |
| | HP | 1428 | 0 | 29.5 | -1.5 | 0.3 | 118 | 0.0 |
| | J&K | 1993 | 498 | 39.5 | 18.4 | -1.9 | 97 | 9.4 |
| | Chandigarh | 322 | 0 | 6.2 | 6.8 | -0.6 | 36 | 0.0 |
| | Chhattisgarh | 3841 | 0 | 90.0 | 31.5 | -1.1 | 158 | 0.0 |
| | Gujarat | 12795 | 0 | 289.7 | 79.2 | 5.9 | 609 | 0.0 |
| | MP | 8415 | 0 | 186.4 | 86.9 | -2.6 | 351 | 0.0 |
| WR | Maharashtra | 16614 | 0 | 369.2 | 115.2 | -1.4 | 460 | 0.0 |
| WK | Goa | 541 | 0 | 8.8 | 8.5 | -0.3 | 24 | 0.0 |
| | DD | 269 | 0 | 6.0 | 5.8 | 0.2 | 21 | 0.0 |
| | DNH | 741 | 0 | 17.4 | 17.5 | -0.1 | 30 | 0.0 |
| | Essar steel | 5656 | 0 | 5.7 | 5.6 | 0.1 | 264 | 0.0 |
| | Andhra Pradesh | 7085 | 0 | 157.2 | 31.7 | -0.8 | 417 | 0.0 |
| | Telangana | 7636 | 0 | 161.9 | 64.0 | 0.0 | 528 | 0.0 |
| SR | Karnataka | 9258 | 0 | 171.9 | 22.2 | -1.4 | 568 | 0.0 |
| 3N | Kerala | 3233 | 0 | 64.9 | 46.1 | 1.5 | 188 | 0.0 |
| | Tamil Nadu | 11974 | 0 | 276.8 | 112.9 | -0.9 | 395 | 0.0 |
| | Pondy | 327 | 0 | 7.0 | 7.3 | -0.4 | 21 | 0.0 |
| | Bihar | 5790 | 0 | 121.4 | 116.3 | -0.6 | 250 | 0.0 |
| | DVC | 2967 | 0 | 62.3 | -31.3 | -0.4 | 175 | 0.0 |
| ER | Jharkhand | 1259 | 0 | 24.2 | 16.3 | -1.5 | 70 | 0.0 |
| EN | Odisha | 4425 | 0 | 94.8 | 24.2 | 8.3 | 600 | 0.0 |
| | West Bengal | 8453 | 0 | 171.8 | 75.3 | 2.5 | 316 | 0.0 |
| | Sikkim | 86 | 0 | 0.9 | 1.2 | -0.3 | 8 | 0.0 |
| | Arunachal Pradesh | 126 | 2 | 2.5 | 2.2 | 0.3 | 14 | 0.0 |
| | Assam | 1822 | 105 | 35.5 | 30.8 | 0.4 | 155 | 1.5 |
| | Manipur | 156 | 3 | 2.4 | 2.4 | 0.0 | 27 | 0.0 |
| NER | Meghalaya | 302 | 0 | 5.0 | 2.1 | 0.0 | 46 | 0.0 |
| | Mizoram | 98 | 1 | 1.7 | 0.2 | 1.2 | 72 | 0.0 |
| | Nagaland | 133 | 1 | 2.0 | 2.3 | -0.5 | 40 | 0.0 |
| | Tripura | 291 | 5 | 4.7 | 4.4 | 0.6 | 87 | 0.0 |

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

| | Bhutan | Nepal | Bangladesh |
|---------------|--------|--------|------------|
| Actual(MU) | 41.7 | -5.5 | -25.9 |
| Day peak (MW) | 1764.4 | -387.1 | -1083.0 |

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

| | NR | WR | SR | ER | NER | TOTAL |
|--------------|-------|--------|-------|-------|------|-------|
| Schedule(MU) | 278.2 | -259.6 | 17.9 | -55.4 | 19.0 | 0.0 |
| Actual(MU) | 280.7 | -272.7 | 3.9 | -33.4 | 22.0 | 0.5 |
| O/D/U/D(MU) | 2.5 | -13.1 | -13.9 | 22.0 | 3.0 | 0.5 |

F. Generation Outage(MW)

| | NR | WR | SR | ER | NER | Total |
|----------------|-------|-------|-------|------|-----|-------|
| Central Sector | 4163 | 15700 | 8182 | 1200 | 504 | 29749 |
| State Sector | 7065 | 20963 | 8110 | 6130 | 85 | 42353 |
| Total | 11228 | 36662 | 16292 | 7330 | 589 | 72101 |

G. Sourcewise generation (MU)

| | NR | WR | SR | ER | NER | All India |
|-------------------------------------|------|------|-----|-----|-----|-----------|
| Coal | 566 | 996 | 405 | 404 | 8 | 2378 |
| Lignite | 16 | 4 | 35 | 0 | 0 | 55 |
| Hydro | 362 | 98 | 94 | 136 | 16 | 706 |
| Nuclear | 27 | 31 | 56 | 0 | 0 | 114 |
| Gas, Naptha & Diesel | 37 | 46 | 16 | 0 | 15 | 113 |
| RES (Wind, Solar, Biomass & Others) | 40 | 72 | 232 | 2 | 0 | 346 |
| Total | 1047 | 1246 | 839 | 542 | 38 | 3712 |

| Share of RES in total generation (%) | 3.81 | 5.76 | 27.71 | 0.39 | 0.08 | 9.32 |
|--|-------|-------|-------|-------|-------|-------|
| Share of Non-fossil fuel (Hydro, Nuclear and | 40.97 | 16.12 | 45.59 | 25.42 | 41.41 | 31.40 |
| RES) in total generation (%) | 40.57 | 10.12 | 43.39 | 23,42 | 41.41 | 31.40 |

H. Diversity Factor All India Demand Diversity Factor

All India Demand Diversity Factor 1.031

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} \ \text{for embedded solar.} \ Limited \ visibility \ \text{of embedded solar} \ \text{data}.$

| | | <u>IN'</u> | FER-REGI | ONAL EXCH | ANGES | Date of 1 | Reporting : | 3-Sep-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 | | ER (With NR) | | | | | | |
| 2 | 765kV | GAYA-VARANASI SASARAM-FATEHPUR | D/C S/C | 95 355 | 298 | 0.0 3.8 | 0.0 | -2.9 3.8 |
| 3 | 705K | GAYA-BALIA | S/C | 0 | 470 | 0.0 | 6.9 | -6.9 |
| 4 | HVDC | ALIPURDUAR-AGRA | - | 0 | 901 | 0.0 | 21.9 | -21.9 |
| 5 | пове | PUSAULI B/B | S/C | 0 | 198 | 0.0 | 4.9 | -4.9 |
| 6 | | PUSAULI-VARANASI | S/C | 0 | 212 | 0.0 | 4.4 | -4.4 |
| 7 8 | | PUSAULI -ALLAHABAD MUZAFFARPUR-GORAKHPUR | S/C D/C | 0 | 50 678 | 0.0 | 0.4 8.7 | -0.4 -8.7 |
| 9 | 400 kV | PATNA-BALIA | O/C | 0 | 799 | 0.0 | 9.4 | -8.7 |
| 10 | 10011 | BIHARSHARIFF-BALIA | D/C | 0 | 355 | 0.0 | 4.6 | -4.6 |
| 11 | | MOTIHARI-GORAKHPUR | D/C | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 12 | | BIHARSHARIFF-VARANASI | D/C | 193 | 84 | 1.5 | 0.0 | 1.5 |
| 13 | 220 kV | PUSAULI-SAHUPURI | S/C | 0 | 206 | 0.0 | 4.0 | -4.0 |
| 14 | | SONE NAGAR-RIHAND | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 15 | 132 kV | GARWAH-RIHAND | S/C | 30 | 0 | 0.4 | 0.0 | 0.4 |
| 16 | | KARMANASA-SAHUPURI | S/C | 0 | 137 | 0.0 | 0.0 | 0.0 |
| 17 | | KARMANASA-CHANDAULI | S/C | 0 | 0 ER-NR | 0.0 5.8 | 0.0 68.0 | 0.0 -62.3 |
| Import/F | xport of | ER (With WR) | | | 2K-14K | 5.0 | 00.0 | -0210 |
| 18 | 1 | JHARSUGUDA-DHARAMJAIGARH | Q/C | 1343 | 0 | 24.0 | 0.0 | 24.0 |
| | 765 kV | | | | | | | |
| 19 20 | 1 | NEW RANCHI-DHARAMJAIGARH JHARSUGUDA-DURG | D/C D/C | 1347 322 | 0 | 24.3 5.5 | 0.0 | 24.3 5.5 |
| 21 | 400 1 77 | JHARSUGUDA-RAIGARH | Q/C | 325 | 0 | 4.5 | 0.0 | 4.5 |
| 22 | 400 kV | RANCHI-SIPAT | D/C | 433 | 0 | 8.4 | 0.0 | 8.4 |
| 23 | 220 kV | BUDHIPADAR-RAIGARH | S/C | 0 | 85 | 0.0 | 1.3 | -1.3 |
| 24 | | BUDHIPADAR-KORBA | D/C | 156 | 0 | 2.7 | 0.0 | 2.7 |
| Y 400 | | ED (WAL CD) | | | ER-WR | 69.3 | 1.3 | 68.1 |
| 25 25 | 765 kV | ER (With SR) ANGUL-SRIKAKULAM | D/C | 0.0 | 1632.0 | 0.0 | 18.6 | -18.6 |
| 26 | HVDC | JEYPORE-GAZUWAKA B/B | D/C | 313.0 | 0.0 | 7.3 | 0.0 | 7.3 |
| 27 | LINK | TALCHER-KOLAR BIPOLE | D/C | 0.0 | 1187.0 | 0.0 | 27.1 | -27.1 |
| 28 | 400 kV | TALCHER-I/C | D/C | 622.0 | 172.0 | 0.7 | 0.0 | 0.7 |
| 29 | 220 kV | BALIMELA-UPPER-SILERRU | S/C | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | ER-SR | 7.3 | 45.7 | -38.4 |
| | export of | ER (With NER) | T T | | | | | |
| 30 | 400 kV | BINAGURI-BONGAIGAON | D/C D/C | 0 | 796 706 | 0.0 | 13.1 | -13 -13 |
| 32 | 220 kV | ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI | D/C | 0 | 176 | 0.0 | 4.5 | -13 |
| 32 | 220 R T | THE ORDOTAL STEETHERT | D/C | 0 | ER-NER | 0.0 | 30.1 | -30.1 |
| Import/E | export of | NER (With NR) | | | | | | |
| 33 | HVDC | BISWANATH CHARIALI-AGRA | - | 502 | 503 | 0.0 | 9.5 | -9.5 |
| | | | | | NER-NR | 0.0 | 9.5 | -9.5 |
| | xport of | WR (With NR) | | | 1 | | | |
| 34 | HVDC | CHAMPA-KURUKSHETRA V'CHAL B/B | D/C | 0 | 3004 | 0.0 | 49.3 | -49.3 |
| 35 | HVDC | APL -MHG | D/C D/C | 363 0 | 490 982 | 6.7 0.0 | 1.5 | 5.2 -19.5 |
| 36 37 | | GWALIOR-AGRA | D/C D/C | 0 | 2956 | 0.0 | 56.9 | -19.5 |
| 38 | 1 | PHAGI-GWALIOR | D/C | 0 | 1247 | 0.0 | 19.2 | -19.2 |
| 39 | 765 kV | JABALPUR-ORAI | D/C | 0 | 1053 | 0.0 | 38.9 | -38.9 |
| 40 | /05 KV | GWALIOR-ORAI | S/C | 394 | 0 | 7.5 | 0.0 | 7.5 |
| 41 | | SATNA-ORAI | S/C | 0 | 1463 | 0.0 | 30.5 | -30.5 |
| 42 | | CHITTORGARH-BANASKANTHA | D/C | 0 | 1116 | 0.0 | 17.6 | 17.6 |
| 43 | | ZERDA-KANKROLI | S/C | 0 | 189 | 0.0 | 2.3 | -2.3 |
| 44 | 400 kV | ZERDA -BHINMAL V'CHAL -RIHAND | S/C S/C | 962 | 282 | 0.0 22.6 | 0.0 | -4.2 22.6 |
| 45 | 1 | RAPP-SHUJALPUR | D/C | 0 | 451 | 0 | 3 | -3 |
| 47 | | BHANPURA-RANPUR | S/C | 14 | 42 | 0.0 | 0.4 | -0.3 |
| 48 | 200 | BHANPURA-MORAK | S/C | 0 | 95 | 0.0 | 1.2 | -1.2 |
| 49 | 220 kV | MEHGAON-AURAIYA | S/C | 47 | 28 | 0.1 | 0.1 | 0.0 |
| 50 | | MALANPUR-AURAIYA | S/C | 10 | 57 | 0.0 | 0.8 | -0.8 |
| 51 | 132kV | GWALIOR-SAWAI MADHOPUR | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 |
| T | · | WD (With CD) | | | WR-NR | 36.9 | 245.2 | -173.1 |
| | · - | WR (With SR) | | 207 | 410 | 1.4 | | 5.2 |
| 52 53 | HVDC LINK | BHADRAWATI B/B BARSUR-L.SILERU | - | 287 0 | 410 0 | 0.0 | 0.0 | -5.2 0.0 |
| 54 | | SOLAPUR-RAICHUR | D/C | 1537 | 870 | 10.4 | 0.0 | 10.4 |
| 55 | 765 kV | WARDHA-NIZAMABAD | D/C | 339 | 1547 | 0.0 | 13.8 | -13.8 |
| 56 | 400 kV | KOLHAPUR-KUDGI | D/C | 872 | 0 | 13.7 | 0.0 | 13.7 |
| | | KOLHAPUR-CHIKODI | D/C | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 57 | 220 kV | PONDA-AMBEWADI | S/C | 0 | 46 | 0.0 | 0.9 | -0.9 |
| 57 58 | | XELDEM-AMBEWADI | S/C | 0 | 26 | 0.5 | 0.0 | 0.5 |
| | <u> </u> | ALEDEM-AMBEWADI | | | | | | 1 |
| 58 | <u> </u> | ALEBENT-NINDEW ADI | | | WR-SR | 26.0 | 21.2 | 4.8 |
| 58 | 1 | | RANSNATI | ONAL EXCHA | | 26.0 | 21.2 | 4.8 |
| 58 59 60 | | T BHUTAN | RANSNATI | ONAL EXCHA | | 26.0 | 21.2 | 41.7 |
| 58 59 | | Т | RANSNATI | ONAL EXCHA | | 26.0 | 21.2 | |