

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

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 3rd Oct 2018

To,

- कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के.,14, गोल्फ क्लब रोड, कोलकाता 700033
 Executive Director, ERLDC, 14 Golf Club Road, Tolleygunge, 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 02.10.2018.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 02-अक्टूबर-2018 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 02nd October 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** 3-Oct-18

A. Maximum Demand

| | NR | WR | SR | ER | NER | Total |
|--|-------|-------|-------|-------|-------|--------|
| Demand Met during Evening Peak hrs(MW) | 45652 | 51042 | 39655 | 22081 | 2537 | 160967 |
| (at 2000 hrs; from RLDCs) | 43032 | 31042 | 37033 | 22001 | 2331 | 100907 |
| Peak Shortage (MW) | 802 | 0 | 0 | 1100 | 54 | 1956 |
| Energy Met (MU) | 1037 | 1236 | 915 | 485 | 47 | 3720 |
| Hydro Gen (MU) | 239 | 39 | 84 | 97 | 22 | 482 |
| Wind Gen (MU) | 14 | 13 | 25 | | | 52 |
| Solar Gen (MU)* | 22.33 | 20.4 | 59.32 | 0.98 | 0.01 | 103 |
| Energy Shortage (MU) | 9.5 | 0.0 | 0.0 | 3.3 | 1.4 | 14.2 |
| Maximum Demand Met during the day | 48371 | 54285 | 40057 | 22416 | 2649 | 164742 |
| (MW) & time (from NLDC SCADA) | 19:12 | 14:32 | 18:53 | 20:32 | 18:20 | 19:06 |

B. Frequency Profile (%) 49.9-50.05 Region FVI <49.7 49.7-49.8 49.8-49.9 <49.9 > 50.05 All India 0.029 0.00

| C | Down | Cumple | Position | in | Ctatac |
|---|------|--------|----------|----|--------|
| | | | | | |

| 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 | 6507 | 0 | 151.8 | 14.1 | 0.0 | 101 | 0.0 |
| | Haryana | 6586 | 0 | 133.7 | 88.6 | 0.5 | 226 | 0.0 |
| Rajasthan Delhi NR UP Uttarakhai HP J&K Chandigar | Rajasthan | 9885 | 0 | 211.5 | 41.8 | 2.5 | 439 | 0.0 |
| | Delhi | 4164 | 0 | 83.7 | 54.7 | -1.2 | 147 | 0.0 |
| | UP | 16692 | 340 | 357.2 | 127.4 | -0.3 | 345 | 0.0 |
| | Uttarakhand | 1598 | 0 | 32.5 | 11.4 | -0.6 | 125 | 0.0 |
| | HP | 1194 | 0 | 23.3 | 3.3 | 0.8 | 128 | 0.0 |
| | J&K | 1954 | 488 | 40.0 | 32.0 | -4.3 | 222 | 9.5 |
| | Chandigarh | 188 | 0 | 3.6 | 4.2 | -0.6 | 19 | 0.0 |
| | Chhattisgarh | 4349 | 0 | 101.4 | 32.3 | -0.7 | 219 | 0.0 |
| Gujarat MP Maharashtra Goa DD DNH Essar steel | 17411 | 0 | 398.2 | 126.9 | 7.2 | 796 | 0.0 | |
| | 9311 | 0 | 209.8 | 112.5 | 0.6 | 401 | 0.0 | |
| | Maharashtra | 22505 | 0 | 486.1 | 185.0 | 2.2 | 563 | 0.0 |
| | Goa | 518 | 0 | 13.2 | 7.7 | 2.3 | 71 | 0.0 |
| | DD | 263 | 0 | 6.0 | 5.5 | 0.5 | 72 | 0.0 |
| | DNH | 706 | 0 | 16.5 | 16.0 | 0.5 | 74 | 0.0 |
| | Essar steel | 270 | 0 | 4.9 | 4.7 | 0.2 | 229 | 0.0 |
| | Andhra Pradesh | 8601 | 0 | 189.1 | 65.8 | 2.8 | 606 | 0.0 |
| | Telangana | 9817 | 0 | 208.6 | 90.2 | 1.6 | 562 | 0.0 |
| SR | Karnataka | 8135 | 0 | 168.7 | 25.7 | -1.0 | 455 | 0.0 |
| 3N | Kerala | 3165 | 0 | 65.0 | 38.0 | 1.4 | 216 | 0.0 |
| | Tamil Nadu | 12308 | 0 | 277.0 | 156.2 | 0.6 | 600 | 0.0 |
| | Pondy | 312 | 0 | 6.7 | 6.7 | -0.1 | 37 | 0.0 |
| | Bihar | 4979 | 0 | 104.0 | 99.6 | 1.5 | 402 | 0.0 |
| | DVC | 2737 | 200 | 57.9 | -26.1 | 8.6 | 415 | 1.8 |
| ER | Jharkhand | 1169 | 0 | 24.2 | 16.8 | 1.5 | 145 | 0.3 |
| EK | Odisha | 5473 | 400 | 123.5 | 44.9 | 7.9 | 542 | 1.2 |
| | West Bengal | 8685 | 0 | 174.7 | 67.1 | 3.2 | 445 | 0.0 |
| | Sikkim | 78 | 0 | 0.9 | 1.3 | -0.5 | 20 | 0.0 |
| | Arunachal Pradesh | 118 | 2 | 2.0 | 2.4 | -0.4 | 40 | 0.0 |
| | Assam | 1586 | 44 | 28.3 | 23.5 | 0.3 | 181 | 1.4 |
| | Manipur | 142 | 19 | 2.4 | 2.5 | -0.1 | 25 | 0.0 |
| NER | Meghalaya | 281 | 2 | 5.2 | 2.4 | 0.2 | 51 | 0.0 |
| | Mizoram | 78 | 3 | 1.4 | 1.1 | 0.0 | 22 | 0.0 |
| | Nagaland | 99 | 6 | 2.4 | 1.6 | 0.3 | 39 | 0.0 |
| Ī | Tripura | 280 | 3 | 4.9 | 4.7 | 0.1 | 105 | 0.0 |

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

| | Bhutan | Nepal | Bangladesh |
|---------------|--------|--------|------------|
| Actual(MU) | 19.7 | -3.8 | -22.3 |
| Day peak (MW) | 1025.0 | -198.0 | -952.2 |

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

| | NR | WR | SR | ER | NER | TOTAL |
|--------------|-------|--------|------|------|------|-------|
| Schedule(MU) | 47.3 | -135.1 | 86.5 | -0.1 | 1.3 | -0.1 |
| Actual(MU) | 35.5 | -158.5 | 92.3 | 27.5 | 1.0 | -2.2 |
| O/D/U/D(MU) | -11.8 | -23.5 | 5.8 | 27.6 | -0.3 | -2,2 |

F. Generation Outage(MW)

| | NR | WR | SR | ER | NER | Total |
|----------------|------|-------|-------|------|-----|-------|
| Central Sector | 2629 | 13338 | 6732 | 1950 | 368 | 25017 |
| State Sector | 6055 | 13390 | 7810 | 6265 | 50 | 33570 |
| Total | 8684 | 26728 | 14542 | 8215 | 418 | 58587 |

G. Sourcewise generation (MU)

| | NR | WR | SR | ER | NER | All India |
|-------------------------------------|------|------|-----|-----|-----|-----------|
| Thermal (Coal & Lignite) | 648 | 1214 | 565 | 360 | 4 | 2792 |
| Hydro | 239 | 39 | 84 | 97 | 22 | 482 |
| Nuclear | 23 | 27 | 29 | 0 | 0 | 79 |
| Gas, Naptha & Diesel | 42 | 79 | 25 | 0 | 24 | 170 |
| RES (Wind, Solar, Biomass & Others) | 56 | 34 | 125 | 1 | 0 | 216 |
| Total | 1008 | 1394 | 828 | 459 | 50 | 3739 |
| | | | | | | |

| Share of RES in total generation (%) | 5.53 | 2.47 | 15.08 | 0.22 | 0.08 | 5.78 |
|--|-------|------|-------|-------|-------|-------|
| Share of Non-fossil fuel (Hydro, Nuclear and | 21 55 | 7.27 | 28.71 | 21.44 | 43.66 | 20.79 |
| RES) in total generation (%) | 31.55 | 1.21 | 20./1 | 21.44 | 43.00 | 20.79 |

H. Diversity Factor
All India Demand Diversity Factor
1.018
Diversity factor = Sum of regional maximum demands / All India maximum demand

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

| | | INTE | K-KEGI | UNAL EX | <u>CHANGES</u> | Date of I | Reporting : | 3-Oct |
|--|--|---|---|--|--|--|---|---|
| | | | | | | | | Import=(+ve) /Export =(-ve) |
| Sl No | Voltage Level | Line Details | Circuit | Max Import (MW) | Max Export (MW) | Import (MU) | Export (MU) | for NET (MU) NET (MU) |
| | Export of | ER (With NR) | | | 1 | | | 1 |
| 2 | 765kV | GAYA-VARANASI | D/C | 502 | 0 | 9.6 9.2 | 0.0 | 9.6 9.2 |
| 3 | 705KV | SASARAM-FATEHPUR GAYA-BALIA | S/C S/C | 556 108 | 88 | 0.0 | 0.0 2.4 | -2.4 |
| 4 | | ALIPURDUAR-AGRA | - | 0 | 401 | 0.0 | 9.7 | -9.7 |
| 5 | HVDC | PUSAULI B/B | S/C | 0 | 398 | 0.0 | 9.6 | -9.6 |
| 6 | _ | PUSAULI-VARANASI | S/C | 0 | 343 | 0.0 | 0.0 | 0.0 |
| 7 | 1 | PUSAULI -ALLAHABAD | S/C | 0 | 106 | 0.0 | 1.7 | -1.7 |
| 9 | 400 1-37 | MUZAFFARPUR-GORAKHPUR | D/C | 216 | 253 | 0.3 | 0.0 | 0.3 |
| 10 | 400 KV | PATNA-BALIA BIHARSHARIFF-BALIA | Q/C D/C | 30 172 | 373 4 | 0.0 2.1 | 0.0 | -2.4 2.1 |
| 11 | 1 | MOTIHARI-GORAKHPUR | D/C | 203 | 0 | 5.0 | 0.0 | 5.0 |
| 12 | 1 | BIHARSHARIFF-VARANASI | D/C | 441 | 0 | 8.3 | 0.0 | 8.3 |
| 13 | 220 kV | PUSAULI-SAHUPURI | S/C | 0 | 190 | 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 | 35 | 0 | 0.4 | 0.0 | 0.4 |
| 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 |
| iport/E | Export of | ER (With WR) | | | ER-NR | 34.9 | 29.7 | 5.3 |
| 18 | | JHARSUGUDA-DHARAMJAIGARH S/C | D/C | 1696 | 0 | 37.7 | 0.0 | 37.7 |
| 19 | 765 kV | NEW RANCHI-DHARAMJAIGARH | D/C | 923 | 0 | 10.4 | 0.0 | 10.4 |
| 20 | 4 | JHARSUGUDA-RAIGARH | Q/C | 1142 | 0 | 21.6 | 0.0 | 21.6 |
| 21 | 400 kV | RANCHI-SIPAT | D/C | 532 | 0 | 9.2 | 0.0 | 9.2 |
| 22 | 220 kV | BUDHIPADAR-RAIGARH | S/C | 0 | 2 | 0.0 | 0.0 | 0.0 |
| 23 | 220 R V | BUDHIPADAR-KORBA | D/C | 311 | 0 ER-WR | 5.9 84.7 | 0.0 | 5.9 84.7 |
| nport/I | Export of | ER (With SR) | | | ER-WK | 64./ | 0.0 | 04./ |
| 24 | 765 kV | ANGUL-SRIKAKULAM | D/C | 0.0 | 1627.0 | 0.0 | 28.8 | -28.8 |
| 25 | HVDC | JEYPORE-GAZUWAKA B/B | D/C | 0.0 | 361.0 | 0.0 | 8.9 | -8.9 |
| 26 | LINK | TALCHER-KOLAR BIPOLE | D/C | 0.0 | 1914.0 | 0.0 | 31.9 | -31.9 |
| 27 | 400 kV 220 kV | TALCHER-I/C BALIMELA-UPPER-SILERRU | D/C S/C | 0.0 1.0 | 1219.0 0.0 | 0.0 | 15.3 0.0 | -15.3 0.0 |
| | 1 | CED (Wild MED) | | | ER-SR | 0.0 | 69.5 | -69.5 |
| nport/l 29 | T . | ER (With NER) BINAGURI-BONGAIGAON | D/C | 887 | 0 | 0.0 | 9.3 | -9 |
| 30 | 400 kV | ALIPURDUAR-BONGAIGAON | D/C | 0 | 373 | 0.0 | 5.3 | -5 |
| 31 | | | | | | | | 1 |
| | 220 kV | ALIPURDUAR-SALAKATI | D/C | 0 | 121 | 0.0 | 3.7 | -4 |
| nnort/F | | | D/C | 0 | 121 ER-NER | 0.0 | 3.7 18.2 | -4 -18.2 |
| mport/I | Export of | NER (With NR) BISWANATH CHARIALI-AGRA | D/C | 0 | | | | - |
| 32 | Export of HVDC | NER (With NR) BISWANATH CHARIALI-AGRA | | - | ER-NER | 0.0 | 18.2 | -18.2 |
| 32 | Export of HVDC | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) | - | 0 | FR-NER 702 NER-NR | 0.0 | 18.2 16.6 16.6 | -18.2 -16.6 -16.6 |
| 32 mport/I 33 | Export of HVDC Export of | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA | D/C | 0 | 702 NER-NR | 0.0 0.0 0.0 | 18.2 16.6 16.6 | -18.2 -16.6 -16.6 |
| 32 | Export of HVDC Export of | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) | - | 0 | FR-NER 702 NER-NR | 0.0 | 18.2 16.6 16.6 | -18.2 -16.6 -16.6 |
| 32 nport/I 33 34 | Export of HVDC Export of | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B | D/C D/C | 0 0 240 | 702 NER-NR 703 0 | 0.0 0.0 0.0 0.0 6.0 | 16.6 16.6 16.6 0.0 | -18.2 -16.6 -16.6 -16.6 6.0 |
| 32 nport/F 33 34 35 | Export of HVDC Export of | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL -MHG | D/C D/C D/C | 0 0 240 0 | 702 NER-NR 703 0 1266 | 0.0 0.0 0.0 0.0 6.0 0.0 | 18.2 16.6 16.6 16.6 0.0 22.9 | -18.2 -16.6 -16.6 -16.6 6.0 -22.9 |
| 32 nport/I 33 34 35 36 | Export of HVDC HVDC | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL -MHG GWALIOR-AGRA | D/C D/C D/C D/C | 0 240 0 51 | 702 NER-NR 703 0 1266 474 | 0.0 0.0 0.0 0.0 6.0 0.0 | 18.2 16.6 16.6 16.6 0.0 22.9 9.0 | -18.2 -16.6 -16.6 -16.6 -10.6 -10.6 -10.6 -10.6 -10.6 |
| 32 mport/F 33 34 35 36 37 | Export of HVDC HVDC | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI | D/C D/C D/C D/C D/C D/C | 0 240 0 51 44 | 702 NER-NR 703 0 1266 474 500 | 0.0 0.0 0.0 0.0 6.0 0.0 0.0 | 18.2 16.6 16.6 0.0 22.9 9.0 4.9 | -16.6 -16.6 -16.6 -16.6 -16.6 -10.6 |
| 32 mport/F 33 34 35 36 37 38 39 40 | Export of HVDC HVDC | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI | D/C D/C D/C D/C D/C D/C D/C S/C S/C | 0 240 0 51 44 292 367 0 | 702 NER-NR 703 0 1266 474 500 54 0 1280 | 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 26.1 | -18.2 -16.6 -16.6 -16.6 -10.6 -1 |
| 32 mport/F 33 34 35 36 37 38 39 40 41 | Export of HVDC HVDC | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI | D/C D/C D/C D/C D/C D/C D/C S/C S/C S/C | 0 240 0 51 44 292 367 0 492 | 702 NER-NR 703 0 1266 474 500 54 0 1280 | 0.0 0.0 0.0 6.0 0.0 0.0 0.0 0.0 | 16.6 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 26.1 | -18.2 -16.6 -16.6 -16.6 -10.6 -1 |
| 32 mport/F 33 34 35 36 37 38 39 40 41 42 | Export of HVDC HVDC | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL | D/C D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C | 0 240 0 51 44 292 367 0 492 398 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 | 0.0 0.0 0.0 6.0 0.0 0.0 0.0 0.0 | 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 26.1 0.0 | -18.2 -16.6 -16.6 -16.6 6.0 -22.9 -4.9 -5.4 6.5 -26.1 9.6 6.8 |
| 32 mport/F 33 34 35 36 37 38 39 40 41 42 43 | Export of HVDC Export of HVDC 765 kV | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND | D/C D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C | 0 240 0 51 44 292 367 0 492 398 488 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 0 0 | 0.0 0.0 0.0 6.0 0.0 0.0 0.0 0.0 | 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 26.1 0.0 | -18.2 -16.6 -16.6 -16.6 6.0 -22.9 -9.0 -4.9 -5.4 6.5 -26.1 9.6 6.8 11.1 |
| 32 mport/F 33 34 35 36 37 38 39 40 41 42 43 44 | Export of HVDC Export of HVDC 765 kV | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR | D/C D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C D/C | 0 240 0 51 44 292 367 0 492 398 488 455 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 0 0 | 0.0 0.0 0.0 6.0 0.0 0.0 0.0 0.0 | 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 26.1 0.0 0.0 | -18.2 -16.6 -16.6 -16.6 6.0 -22.9 -9.0 -4.9 -5.4 6.5 -26.1 9.6 6.8 11.1 |
| 32 mport/F 33 34 35 36 37 38 39 40 41 42 43 44 45 | Export of HVDC Export of HVDC 765 kV | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA | D/C D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C | 0 240 0 51 44 292 367 0 492 398 488 455 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 0 0 0 | 0.0 0.0 0.0 6.0 0.0 0.0 0.0 0.0 | 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 26.1 0.0 0.0 | -18.2 -16.6 -1 |
| 32 mport/F 33 34 35 36 37 38 39 40 41 42 43 44 | Export of HVDC Export of HVDC 765 kV | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK | D/C D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C | 0 240 0 51 44 292 367 0 492 398 488 455 107 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 0 0 0 0 | 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 26.1 0.0 0.0 0.0 | -18.2 -16.6 -16.6 -16.6 6.0 -22.9 -9.0 -4.9 -5.4 6.5 -26.1 9.6 6.8 11.1 3 2.6 1.4 |
| 32 nport/F 33 34 35 36 37 38 39 40 41 42 43 44 45 46 | Export of HVDC Export of HVDC 765 kV | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA | D/C D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C | 0 240 0 51 44 292 367 0 492 398 488 455 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 0 0 0 | 0.0 0.0 0.0 6.0 0.0 0.0 0.0 0.0 | 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 26.1 0.0 0.0 | -18.2 -16.6 -16.6 -16.6 6.0 -22.9 -9.0 -4.9 -5.4 6.5 -26.1 9.6 6.8 11.1 3 2.6 |
| 32 33 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 | Export of HVDC Export of HVDC 765 kV | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK | D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S | 0 240 0 51 44 292 367 0 492 398 488 455 107 104 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 0 0 0 0 0 | 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 26.1 0.0 0.0 0.0 | -18.2 -16.6 -16.6 -16.6 -22.9 -9.0 -4.9 -5.4 6.5 -26.1 9.6 6.8 11.1 3 2.6 1.4 2.1 |
| 32 33 34 35 36 37 38 39 40 41 42 44 45 46 47 48 49 | Export of HVDC Export of HVDC 765 kV 400 kV | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR | D/C D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S | 0 240 0 51 44 292 367 0 492 398 488 455 107 104 126 89 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 0 0 0 0 0 0 | 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 26.1 0.0 0.0 0.0 0.0 0.0 0.0 | -18.2 -16.6 -16.6 -16.6 -10.6 -1 |
| 32 apport/I 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 | Export of HVDC Export of HVDC 765 kV 400 kV 132kV | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) | D/C D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S | 0 240 0 51 44 292 367 0 492 398 488 455 107 104 126 89 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 0 0 0 0 0 0 0 | 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 26.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | -18.2 -16.6 -16.6 -16.6 -10.6 -1 |
| 32 33 34 35 36 37 38 39 40 41 42 44 45 46 47 48 49 | Export of HVDC Export of HVDC 765 kV 400 kV 132kV Export of | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR | D/C D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S | 0 240 0 51 44 292 367 0 492 398 488 455 107 104 126 89 0 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 0 0 0 0 WR-NR | 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | 18.2 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 26.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | -18.2 -16.6 -16.6 -16.6 -10.6 -1 |
| 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 | Export of HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B | D/C D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S | 0 240 0 51 44 292 367 0 492 398 488 455 107 104 126 89 0 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 0 0 0 0 WR-NR | 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 26.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0 | -18.2 -16.6 -16.6 -16.6 -16.6 -10.6 -1 |
| 32 33 34 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 **port/I 50 51 | Export of HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU | D/C D/C D/C D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S | 0 240 0 51 44 292 367 0 492 398 488 455 107 104 126 89 0 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 0 0 0 0 WR-NR | 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | 18.2 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | -18.2 -16.6 -16.6 -16.6 -16.6 -10.6 -1 |
| 32 33 34 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 | Export of HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR | D/C D/C D/C D/C D/C D/C D/C S/C S/C | 0 240 0 51 44 292 367 0 492 398 488 455 107 104 126 89 0 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 0 0 0 0 WR-NR | 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | 18.2 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | -18.2 -16.6 -16.6 -16.6 -16.6 -10.6 -1 |
| 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 **sport/It 50 51 52 53 | Export of HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK 765 kV | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L-SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD | D/C D/C D/C D/C D/C D/C S/C S/C | 0 240 0 51 44 292 367 0 492 398 488 455 107 104 126 89 0 0 0 0 0 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 0 0 0 0 WR-NR 995 0 841 1926 | 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | 18.2 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | -18.2 -16.6 -16.5 -16.6 -1 |
| 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 49 49 49 40 50 51 51 52 53 54 | Export of HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK 765 kV | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI | D/C D/C D/C D/C D/C D/C D/C D/C S/C S/C | 0 240 0 240 0 51 44 292 367 0 492 398 488 455 107 104 126 89 0 0 0 624 0 869 0 1 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 0 0 0 0 0 WR-NR 995 0 841 1926 0 0 0 0 0 | 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | 18.2 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 26.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | -18.2 -16.6 -1 |
| 32 32 33 34 35 36 37 38 39 40 41 42 43 44 44 45 46 47 48 49 **Poport/I 50 51 51 52 53 54 55 | Export of HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK 765 kV | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI | D/C D/C D/C D/C S/C S/C | 0 240 0 51 44 292 367 0 492 398 488 455 107 104 126 89 0 0 0 0 0 0 0 0 0 0 0 0 0 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 0 0 0 0 WR-NR 995 0 841 1926 0 0 0 0 0 0 67 | 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | 18.2 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 26.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | -18.2 -16.6 -1 |
| 32 port/I 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 port/I 50 51 52 53 54 | Export of HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK 765 kV | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI | D/C D/C D/C D/C D/C D/C D/C D/C S/C S/C | 0 240 0 240 0 51 44 292 367 0 492 398 488 455 107 104 126 89 0 0 0 0 624 0 869 0 1 0 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 0 0 0 0 0 0 WR-NR 995 0 841 1926 0 0 0 0 WR-SR | 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | 18.2 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 26.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | -18.2 -16.6 -16.6 -16.6 -16.6 -10.6 -1 |
| 32 port/I 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 port/I 50 51 52 53 54 | Export of HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK 765 kV | NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI | D/C D/C D/C D/C D/C D/C D/C D/C S/C S/C | 0 240 0 240 0 51 44 292 367 0 492 398 488 455 107 104 126 89 0 0 0 624 0 869 0 1 | 702 NER-NR 703 0 1266 474 500 54 0 1280 0 0 0 0 0 0 0 WR-NR 995 0 841 1926 0 0 0 0 WR-SR | 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | 18.2 16.6 16.6 0.0 22.9 9.0 4.9 5.4 0.0 26.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 | -18.2 -16.6 -1 |