

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: 20th July 2019

To,

- 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 19.07.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 19-जुलाई-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 19th July 2019, is available at the NLDC website.

धन्यवाद,

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

20-Jul-19

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 2000 hrs; from RLDCs) | 53172 | 48644 | 38792 | 21489 | 2747 | 164844 |
| Peak Shortage (MW) | 2481 | 0 | 0 | 0 | 184 | 2665 |
| Energy Met (MU) | 1239 | 1201 | 924 | 486 | 53 | 3903 |
| Hydro Gen (MU) | 334 | 40 | 44 | 101 | 30 | 549 |
| Wind Gen (MU) | 14 | 31 | 152 | | | 197 |
| Solar Gen (MU)* | 20.33 | 21.71 | 61.26 | 2.12 | 0.04 | 105 |
| Energy Shortage (MU) | 18.6 | 0.0 | 0.0 | 0.0 | 1.1 | 19.7 |
| Maximum Demand Met during the day | 57445 | 52862 | 41311 | 23067 | 2782 | 169780 |
| (MW) & time (from NLDC SCADA) | 22:35 | 10:47 | 07:27 | 00:01 | 20:04 | 22:20 |

B. Frequency Profile (%) Region All India FVI <49.7 49.7-49.8 49.8-49.9 49.9-50.05 0.035

| 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 | 8816 | 0 | 192.9 | 123.8 | -1.7 | 97 | 0.0 |
| | Haryana | 8309 | 270 | 171.8 | 140.3 | 0.6 | 390 | 0.8 |
| | Rajasthan | 10966 | 0 | 240.0 | 59.6 | 2.3 | 820 | 0.0 |
| | Delhi | 5699 | 0 | 108.6 | 92.1 | 0.3 | 177 | 0.1 |
| NR | UP | 18989 | 410 | 407.1 | 174.1 | 1.9 | 868 | 6.6 |
| | Uttarakhand | 1958 | 0 | 42.4 | 16.5 | 1.3 | 195 | 1.3 |
| | HP | 1399 | 0 | 29.5 | -1.9 | -0.3 | 51 | 0.0 |
| | J&K | 1974 | 494 | 41.5 | 21.3 | -0.6 | 376 | 9.8 |
| | Chandigarh | 260 | 0 | 5.3 | 5.6 | -0.3 | 19 | 0.0 |
| | Chhattisgarh | 4158 | 0 | 98.7 | 38.6 | -1.3 | 257 | 0.0 |
| | Gujarat | 17558 | 0 | 390.7 | 103.8 | 9.4 | 1162 | 0.0 |
| | MP | 10097 | 0 | 218.6 | 106.4 | 0.0 | 973 | 0.0 |
| WR | Maharashtra | 19948 | 0 | 449.2 | 125.4 | 0.8 | 902 | 0.0 |
| WIN | Goa | 541 | 0 | 11.4 | 10.7 | 0.1 | 71 | 0.0 |
| | DD | 350 | 0 | 7.8 | 7.1 | 0.7 | 55 | 0.0 |
| | DNH | 799 | 0 | 18.8 | 19.0 | -0.2 | 51 | 0.0 |
| | Essar steel | 320 | 0 | 5.6 | 5.2 | 0.3 | 339 | 0.0 |
| | Andhra Pradesh | 7647 | 0 | 169.0 | 39.5 | 2.1 | 785 | 0.0 |
| | Telangana | 8487 | 0 | 182.0 | 107.3 | 0.8 | 939 | 0.0 |
| SR | Karnataka | 10244 | 0 | 195.4 | 72.0 | 2.7 | 889 | 0.0 |
| JI. | Kerala | 2948 | 0 | 61.3 | 46.1 | 1.3 | 246 | 0.0 |
| | Tamil Nadu | 13750 | 0 | 308.9 | 114.7 | -1.1 | 484 | 0.0 |
| | Pondy | 372 | 0 | 7.8 | 8.2 | -0.4 | 49 | 0.0 |
| | Bihar | 5304 | 0 | 106.1 | 101.7 | -0.4 | 100 | 0.0 |
| | DVC | 3018 | 0 | 67.1 | -45.3 | 0.2 | 30 | 0.0 |
| ER | Jharkhand | 1287 | 0 | 26.1 | 17.1 | -0.2 | 180 | 0.0 |
| Lit | Odisha | 4576 | 0 | 96.0 | 34.4 | 3.4 | 500 | 0.0 |
| | West Bengal | 9188 | 0 | 188.9 | 88.4 | 1.1 | 450 | 0.0 |
| | Sikkim | 100 | 0 | 1.5 | 1.2 | 0.2 | 40 | 0.0 |
| | Arunachal Pradesh | 126 | 2 | 2.1 | 2.5 | -0.3 | 31 | 0.0 |
| | Assam | 1760 | 154 | 33.6 | 26.8 | 1.0 | 120 | 1.1 |
| | Manipur | 191 | 1 | 2.6 | 2.3 | 0.3 | 55 | 0.0 |
| NER | Meghalaya | 317 | 0 | 5.6 | -0.8 | 0.0 | 30 | 0.0 |
| | Mizoram | 89 | 3 | 1.6 | 1.2 | 0.1 | 35 | 0.0 |
| | Nagaland | 125 | 2 | 2.5 | 2.4 | -0.2 | 30 | 0.0 |
| | Tripura | 267 | 6 | 4.7 | 4.8 | -0.4 | 49 | 0.0 |

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

| | Bhutan | Nepal | Bangladesh |
|---------------|--------|--------|------------|
| Actual(MU) | 36.0 | -5.8 | -25.4 |
| Day peak (MW) | 1836.0 | -379.3 | -1116.0 |

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

| | NR | WR | SR | ER | NER | TOTAL |
|--------------|-------|--------|------|-------|-------|-------|
| Schedule(MU) | 238.5 | -242.5 | 49.4 | -30.9 | -14.1 | 0.3 |
| Actual(MU) | 226.8 | -236.5 | 61.7 | -30.2 | -16.5 | 5.3 |
| O/D/U/D(MU) | -11.6 | 6.0 | 12.4 | 0.7 | -2.4 | 5.0 |

F. Generation Outage(MW)

| | NR | WR | SR | ER | NER | Total |
|----------------|-------|-------|-------|------|-----|-------|
| Central Sector | 3968 | 15520 | 7572 | 2550 | 82 | 29692 |
| State Sector | 8485 | 12575 | 8170 | 4460 | 50 | 33740 |
| Total | 12453 | 28095 | 15742 | 7010 | 131 | 63431 |
| | | | | | | |

G. Sourcewise generation (MU)

| | NR | WR | SR | ER | NER | All India |
|-------------------------------------|------|------|-----|-----|-----|-----------|
| Coal | 564 | 1203 | 463 | 450 | 16 | 2697 |
| Lignite | 23 | 14 | 46 | 0 | 0 | 83 |
| Hydro | 334 | 40 | 44 | 101 | 30 | 549 |
| Nuclear | 27 | 31 | 60 | 0 | 0 | 118 |
| Gas, Naptha & Diesel | 29 | 102 | 11 | 0 | 29 | 172 |
| RES (Wind, Solar, Biomass & Others) | 49 | 57 | 250 | 2 | 0 | 357 |
| Total | 1026 | 1447 | 874 | 553 | 75 | 3976 |

| Share of RES in total generation (%) | 4.73 | 3.92 | 28.58 | 0.39 | 0.05 | 8.99 |
|--|-------|------|-------|-------|-------|-------|
| Share of Non-fossil fuel (Hydro, Nuclear and | 39.93 | 0.02 | 40.48 | 18.67 | 30 77 | 25 77 |
| RES) in total generation (%) | 37.93 | 8.83 | 40.40 | 10.07 | 39.11 | 25.77 |

H. Diversity Factor
All India Demand Diversity Factor

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

| Sl No Import/E 1 2 3 4 | | <u>IN 1</u> | ER-REGI | ONAL EXCH | ANGES | Date of I | Reporting : | 20-Jul-19 |
|---|--|---|---|---|--|--|--|--|
| 1 2 3 | | | | | | | | Import=(+ve) /Export =(-ve) for NET (MU) |
| 1 2 3 | Voltage Level | Line Details | Circuit | Max Import (MW) | Max Export (MW) | Import (MU) | Export (MU) | NET (MU) |
| 2 3 | export of | ER (With NR) | 1 | | 1 | | | |
| 3 | 765kV | GAYA-VARANASI SASARAM-FATEHPUR | D/C S/C | 223 | 352 38 | 0.0 2.7 | 0.0 | -4.2 2.7 |
| А | 7058 1 | GAYA-BALIA | S/C | 0 | 369 | 0.0 | 6.3 | -6.3 |
| | HVDC | ALIPURDUAR-AGRA | - | 0 | 1802 | 0.0 | 31.3 | -31.3 |
| 5 | пове | PUSAULI B/B | S/C | 0 | 249 | 0.0 | 6.1 | -6.1 |
| 6 | | PUSAULI-VARANASI | S/C | 0 | 219 | 0.0 | 4.7 | -4.7 |
| 7 8 | | PUSAULI -ALLAHABAD MUZAFFARPUR-GORAKHPUR | S/C D/C | 0 | 84 456 | 0.0 | 1.3 5.9 | -1.3 -5.9 |
| 9 | 400 kV | PATNA-BALIA | Q/C | 0 | 620 | 0.0 | 11.3 | -11.3 |
| 10 | | BIHARSHARIFF-BALIA | D/C | 0 | 228 | 0.0 | 3.7 | -3.7 |
| 11 | | MOTIHARI-GORAKHPUR | D/C | 0 | 303 | 0.0 | 6.1 | -6.1 |
| 12 | | BIHARSHARIFF-VARANASI | D/C | 106 | 84 | 0.5 | 0.0 | 0.5 |
| 13 | 220 kV | PUSAULI-SAHUPURI | S/C | 0 | 170 | 0.0 | 3.3 | -3.3 |
| 14 | | SONE NAGAR-RIHAND | S/C | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 15 | 132 kV | GARWAH-RIHAND | S/C | 30 | 0 | 0.6 | 0.0 | 0.6 |
| 16 | | KARMANASA-SAHUPURI | S/C | 53 | 0 | 0.0 | 0.0 | 0.0 |
| 17 | | KARMANASA-CHANDAULI | S/C | 0 | 0 ER-NR | 0.0 | 0.0 | 0.0 |
| Import/F | Export of | ER (With WR) | | | ER-NK | 3.7 | 84.1 | -80.4 |
| | .aport 01 | T , | 0/2 | 0.45 | | 10.1 | 0.0 | 10.1 |
| 18 | 765 kV | JHARSUGUDA-DHARAMJAIGARH | Q/C | 845 | 0 | 12.1 | 0.0 | 12.1 |
| 19 20 | . 50 R Y | NEW RANCHI-DHARAMJAIGARH | D/C | 1250 | 0 | 22.4 | 0.0 | 22.4 |
| 20 | | JHARSUGUDA-DURG JHARSUGUDA-RAIGARH | D/C Q/C | 190 1005 | 16 0 | 2.8 20.4 | 0.0 | 2.8 |
| 22 | 400 kV | RANCHI-SIPAT | D/C | 416 | 0 | 7.6 | 0.0 | 7.6 |
| 23 | 220 kV | BUDHIPADAR-RAIGARH | S/C | 40 | 57 | 0.0 | 0.3 | -0.3 |
| 24 | 220 K V | BUDHIPADAR-KORBA | D/C | 137 | 0 | 2.0 | 0.0 | 2.0 |
| | | | | | ER-WR | 67.3 | 0.3 | 67.0 |
| | | ER (With SR) | 1 1 | | 1 1 | | | |
| 25 | 765 kV | ANGUL-SRIKAKULAM | D/C | 0.0 | 1563.0 | 0.0 | 21.9 | -21.9 |
| 26 | HVDC LINK | JEYPORE-GAZUWAKA B/B | D/C | 0.0 | 325.0 | 0.0 | 7.5 | -7.5 |
| 27 28 | | TALCHER-KOLAR BIPOLE TALCHER-I/C | D/C D/C | 0.0 677.0 | 1977.0 209.0 | 0.0 7.7 | 35.2 0.0 | -35.2 7.7 |
| 29 | 400 kV 220 kV | BALIMELA-UPPER-SILERRU | S/C | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 220 K (| BALIMELA OTTEK SILEKKO | 5/-C | 1.0 | ER-SR | 0.0 | 64.7 | -64.7 |
| Import/E | Export of | ER (With NER) | | | | | | |
| 30 | | BINAGURI-BONGAIGAON | D/C | 19 | 520 | 0.0 | 5.8 | -6 |
| 31 | 400 kV | ALIPURDUAR-BONGAIGAON | D/C | 487 | 0 | 7.1 | 0.0 | 7 |
| 32 | 220 kV | ALIPURDUAR-SALAKATI | D/C | 20 | 50 | 0.0 | 0.3 | 0 |
| | | | | | ER-NER | 7.1 | 6.2 | 1.0 |
| | | NER (With NR) | 1 1 | | 1 000 | | 15.1 | 15.4 |
| 33 | HVDC | BISWANATH CHARIALI-AGRA | - | 0 | 802 NER-NR | 0.0 0.0 | 17.4 17.4 | -17.4 -17.4 |
| Import/F | export of | WR (With NR) | | | NEX-NX | 0.0 | 17.4 | -17.4 |
| 34 | Aport or | CHAMPA-KURUKSHETRA | D/C | 0 | 1503 | 0.0 | 25.6 | -25.6 |
| 35 | HVDC | | D/C | 450 | 0 | 12.2 | 0.0 | 12.2 |
| 36 | | APL -MHG | D/C | 0 | 981 | 0.0 | 24.3 | -24.3 |
| 37 | | GWALIOR-AGRA | D/C | 0 | 2371 | 0.0 | 43.4 | -43.4 |
| 38 |] | PHAGI-GWALIOR | D/C | 0 | 1267 | 0.0 | 21.4 | -21.4 |
| 39 | 765 kV | JABALPUR-ORAI | D/C | 0 | 936 | 0.0 | 35.5 | -35.5 |
| | R 7 | GWALIOR-ORAI | S/C | 537 | 0 | 10.0 | 0.0 | 10.0 |
| 40 | | SATNA-ORAI | S/C | 0 | 1303 | 0.0 | 27.5 | -27.5 |
| 41 | | CHITTORGARH-BANASKANTHA ZERDA-KANKROLI | D/C | 374 | | 1.0 | 1.9 | 0.8 |
| 41 42 | | | 6/6 | 1.42 | 374 55 | 1.2 | 0.1 | |
| 41 42 43 | | | S/C | 143 156 | 55 | 1.3 | 0.1 | |
| 41 42 43 44 | 400 kV | ZERDA -BHINMAL | S/C | 156 | 55 133 | 1.3 | 0.3 | 1.0 |
| 41 42 43 44 45 | 400 kV | ZERDA -BHINMAL V'CHAL -RIHAND | S/C S/C | 156 965 | 55 133 0 | 1.3 22.2 | 0.3 | 1.0 22.2 |
| 41 42 43 44 45 46 | 400 kV | ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR | S/C S/C D/C | 156 965 0 | 55 133 0 411 | 1.3 22.2 0 | 0.3 0.0 2 | 1.0 22.2 -2 |
| 41 42 43 44 45 | | ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR | S/C S/C | 156 965 | 55 133 0 | 1.3 22.2 | 0.3 | 1.0 22.2 |
| 41 42 43 44 45 46 47 | 400 kV | ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR | S/C S/C D/C S/C | 156 965 0 5 | 55 133 0 411 72 | 1.3 22.2 0 0.0 | 0.3 0.0 2 0.7 | 1.0 22.2 -2 -0.7 |
| 41 42 43 44 45 46 47 48 | | ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK | S/C S/C D/C S/C S/C | 156 965 0 5 0 | 55 133 0 411 72 110 | 1.3 22.2 0 0.0 0.0 | 0.3 0.0 2 0.7 1.7 | 1.0 22.2 -2 -0.7 -1.7 |
| 41 42 43 44 45 46 47 48 49 | | ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA | S/C S/C D/C S/C S/C S/C | 156 965 0 5 0 86 | 55 133 0 411 72 110 | 1.3 22.2 0 0.0 0.0 0.0 | 0.3 0.0 2 0.7 1.7 0.0 | 1.0 22.2 -2 -0.7 -1.7 0.8 |
| 41 42 43 44 45 46 47 48 49 50 51 | 220 kV | ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR | S/C S/C D/C S/C S/C S/C S/C | 156 965 0 5 0 86 45 | 55 133 0 411 72 110 0 25 | 1.3 22.2 0 0.0 0.0 0.0 0.8 0.1 | 0.3 0.0 2 0.7 1.7 0.0 0.1 | 1.0 22.2 -2 -0.7 -1.7 0.8 0.0 |
| 41 42 43 44 45 46 47 48 49 50 51 | 220 kV 132kV Export of | ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) | S/C S/C D/C S/C S/C S/C S/C S/C | 156 965 0 5 0 86 45 | 55 133 0 411 72 110 0 25 0 WR-NR | 1.3 22.2 0 0.0 0.0 0.8 0.1 0.0 48.8 | 0.3 0.0 2 0.7 1.7 0.0 0.1 0.0 184.7 | 1.0 22.2 -2 -0.7 -1.7 0.8 0.0 0.0 -134.2 |
| 41 42 43 44 45 46 47 48 49 50 51 Import/E | 220 kV 132kV Export of HVDC | ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B | S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C - | 156 965 0 5 0 86 45 0 | 55 133 0 411 72 110 0 25 0 WR-NR | 1.3 22.2 0 0.0 0.0 0.8 0.1 0.0 48.8 | 0.3 0.0 2 0.7 1.7 0.0 0.1 0.0 184.7 | 1.0 22.2 -2 -0.7 -1.7 0.8 0.0 0.0 -134.2 |
| 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 | 220 kV 132kV Export of | ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU | S/C S/C D/C S/C S/C S/C S/C S/C S/C | 156 965 0 5 0 86 45 0 | 55 133 0 411 72 110 0 25 0 WR-NR | 1.3 22.2 0 0.0 0.0 0.8 0.1 0.0 48.8 | 0.3 0.0 2 0.7 1.7 0.0 0.1 0.0 184.7 | 1.0 22.2 -2 -0.7 -1.7 0.8 0.0 0.0 -134.2 |
| 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 | 220 kV 132kV Export of HVDC | ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR | S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C D/C S/C S/C S/C S/C | 156 965 0 5 0 86 45 0 0 0 670 | 55 133 0 411 72 110 0 25 0 WR-NR | 1.3 22.2 0 0.0 0.0 0.8 0.1 0.0 48.8 | 0.3 0.0 2 0.7 1.7 0.0 0.1 0.0 184.7 16.0 0.0 4.8 | 1.0 22.2 -2 -0.7 -1.7 0.8 0.0 0.0 -134.2 -16.0 0.0 |
| 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 | 220 kV 132kV Export of HVDC LINK 765 kV | ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD | S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C D/C S/C S/C S/C S/C | 156 965 0 5 0 86 45 0 0 0 670 0 | 55 133 0 411 72 110 0 25 0 WR-NR | 1.3 22.2 0 0.0 0.0 0.8 0.1 0.0 48.8 0.0 0.0 0.0 | 0.3 0.0 2 0.7 1.7 0.0 0.1 0.0 184.7 16.0 0.0 4.8 27.6 | 1.0 22.2 -2 -0.7 -1.7 0.8 0.0 0.0 -134.2 -16.0 0.0 -2.2 -27.6 |
| 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 | 220 kV 132kV Export of HVDC LINK | ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI | S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C D/C D/C D/C D/C | 156 965 0 5 0 86 45 0 0 0 670 0 804 | 55 133 0 411 72 110 0 25 0 WR-NR | 1.3 22.2 0 0.0 0.0 0.8 0.1 0.0 48.8 0.0 0.0 0.0 12.5 | 0.3 0.0 2 0.7 1.7 0.0 0.1 0.0 184.7 16.0 0.0 4.8 27.6 0.0 | 1.0 22.2 -2 -0.7 -1.7 0.8 0.0 0.0 -134.2 -16.0 0.0 -2.2 -27.6 12.5 |
| 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 | 220 kV 132kV Export of HVDC LINK 765 kV | ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI | S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C D/C D/C D/C D/C D/C D/C | 156 965 0 5 0 86 45 0 0 670 0 804 | 55 133 0 411 72 110 0 25 0 WR-NR 985 0 1037 2159 0 | 1.3 22.2 0 0.0 0.0 0.8 0.1 0.0 48.8 0.0 0.0 2.6 0.0 12.5 0.0 | 0.3 0.0 2 0.7 1.7 0.0 0.1 0.0 184.7 16.0 0.0 4.8 27.6 0.0 0.0 | 1.0 22.2 -2 -0.7 -1.7 0.8 0.0 0.0 -134.2 -16.0 0.0 -2.2 -27.6 12.5 0.0 |
| 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 | 220 kV 132kV Export of HVDC LINK 765 kV | ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-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 | S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S | 156 965 0 5 0 86 45 0 0 0 670 0 804 0 | 55 133 0 411 72 110 0 25 0 WR-NR 985 0 1037 2159 0 0 64 | 1.3 22.2 0 0.0 0.0 0.8 0.1 0.0 48.8 0.0 0.0 2.6 0.0 12.5 0.0 0.0 | 0.3 0.0 2 0.7 1.7 0.0 0.1 0.0 184.7 16.0 0.0 4.8 27.6 0.0 0.0 1.3 | 1.0 22.2 -2 -0.7 -1.7 0.8 0.0 0.0 -134.2 -16.0 0.0 -2.2 -27.6 12.5 0.0 -1.3 |
| 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58 | 220 kV 132kV Export of HVDC LINK 765 kV | ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI | S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C D/C D/C D/C D/C D/C D/C | 156 965 0 5 0 86 45 0 0 670 0 804 | 55 133 0 411 72 110 0 25 0 WR-NR 985 0 1037 2159 0 0 64 37 | 1.3 22.2 0 0.0 0.0 0.8 0.1 0.0 48.8 0.0 0.0 2.6 0.0 12.5 0.0 0.0 0.8 | 0.3 0.0 2 0.7 1.7 0.0 0.1 0.0 184.7 16.0 0.0 4.8 27.6 0.0 0.0 1.3 | 1.0 22.2 -2 -0.7 -1.7 0.8 0.0 0.0 -134.2 -16.0 0.0 -2.2 -27.6 12.5 0.0 -1.3 0.8 |
| 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58 | 220 kV 132kV Export of HVDC LINK 765 kV | ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-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 XELDEM-AMBEWADI | S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S | 156 965 0 5 0 86 45 0 0 0 670 0 804 0 0 | 55 133 0 411 72 110 0 25 0 WR-NR 985 0 1037 2159 0 0 64 37 WR-SR | 1.3 22.2 0 0.0 0.0 0.8 0.1 0.0 48.8 0.0 0.0 2.6 0.0 12.5 0.0 0.0 | 0.3 0.0 2 0.7 1.7 0.0 0.1 0.0 184.7 16.0 0.0 4.8 27.6 0.0 0.0 1.3 | 1.0 22.2 -2 -0.7 -1.7 0.8 0.0 0.0 -134.2 -16.0 0.0 -2.2 -27.6 12.5 0.0 -1.3 |
| 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58 59 | 220 kV 132kV Export of HVDC LINK 765 kV | ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-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 XELDEM-AMBEWADI | S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S | 156 965 0 5 0 86 45 0 0 0 670 0 804 0 | 55 133 0 411 72 110 0 25 0 WR-NR 985 0 1037 2159 0 0 64 37 WR-SR | 1.3 22.2 0 0.0 0.0 0.8 0.1 0.0 48.8 0.0 0.0 2.6 0.0 12.5 0.0 0.0 0.8 | 0.3 0.0 2 0.7 1.7 0.0 0.1 0.0 184.7 16.0 0.0 4.8 27.6 0.0 0.0 1.3 | 1.0 22.2 -2 -0.7 -1.7 0.8 0.0 0.0 -134.2 -16.0 0.0 -2.7.6 12.5 0.0 -1.3 0.8 -33.8 |
| 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58 | 220 kV 132kV Export of HVDC LINK 765 kV | ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-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 XELDEM-AMBEWADI | S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S | 156 965 0 5 0 86 45 0 0 0 670 0 804 0 0 | 55 133 0 411 72 110 0 25 0 WR-NR 985 0 1037 2159 0 0 64 37 WR-SR | 1.3 22.2 0 0.0 0.0 0.8 0.1 0.0 48.8 0.0 0.0 2.6 0.0 12.5 0.0 0.0 0.8 | 0.3 0.0 2 0.7 1.7 0.0 0.1 0.0 184.7 16.0 0.0 4.8 27.6 0.0 0.0 1.3 | 1.0 22.2 -2 -0.7 -1.7 0.8 0.0 0.0 -134.2 -16.0 0.0 -2.2 -27.6 12.5 0.0 -1.3 0.8 |