

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
STARRED QUESTION NO.63
ANSWERED ON 07.02.2019**

SAUBHAGYA

***63. SHRI C.N. JAYADEVAN:**

**Will the Minister of POWER
be pleased to state:**

- (a) whether any assessment has been made regarding the progress in the implementation of the Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya) which was launched in September, 2017 with the aim to provide access to electricity to all remaining households in the country; and**
- (b) if so, the details thereof?**

A N S W E R

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND
NEW & RENEWABLE ENERGY**

(SHRI R.K. SINGH)

(a) & (b) : A Statement is laid on the Table of the House.

STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) & (b) OF STARRED QUESTION NO.63 ANSWERED IN THE LOK SABHA ON 07.02.2019 REGARDING SAUBHAGYA.

(a) & (b) : As reported by the States more than 2.47 crore households have been electrified up to 27.01.2019, since launch of Saubhagya scheme. The scheme envisages electrifying the remaining un-electrified households by 31st March, 2019.

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
STARRED QUESTION NO.73
ANSWERED ON 07.02.2019**

ELECTRIFICATION OF VILLAGES

***73. SHRI MALLIKARJUN KHARGE:**

**Will the Minister of POWER
be pleased to state:**

- (a) whether an estimated 3.14 crore rural households are still without electricity and majority of such villages are in Bihar, Uttar Pradesh, Assam, Jharkhand, Odisha, etc.;**
- (b) whether the Ministry has decided to electrify each household by April this year; and**
- (c) if so, the details of roadmap prepared for execution of this project and the details of expenditure to be incurred for this purpose?**

A N S W E R

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND
NEW & RENEWABLE ENERGY**

(SHRI R.K. SINGH)

(a) to (c) : A Statement is laid on the Table of the House.

STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) OF STARRED QUESTION NO.73 ANSWERED IN THE LOK SABHA ON 07.02.2019 REGARDING ELECTRIFICATION OF VILLAGES.

(a) to (c) : As informed by the States, there are 21.30 crore households in the country; of these 21.29 crore households have been electrified up to 27.01.2019. Remaining 83,015 un-electrified households are in Chhattisgarh and Rajasthan which are aimed for electrification by March, 2019.

Government of India launched Pradhan Mantri Sahaj Bijli Har Ghar Yojana – “Saubhagya” with an allocation of Rs. 16,320 crore in order to achieve universal household electrification by providing electricity connections to all remaining un-electrified households in rural and all poor households in urban areas by March, 2019. Under Saubhagya, Government of India gives funds to the States to the extent of 60% (85% for special category States) as grant and additional grant of 15% (5% for special category States) if milestones are met.

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
STARRED QUESTION NO.77
ANSWERED ON 07.02.2019**

HYDRO-ELECTRIC PROJECTS

***77. SHRI DEVUSINH CHAUHAN:**

**Will the Minister of POWER
be pleased to state:**

- (a) the details of the hydro-electric projects in operation and the quantum of hydro-power generated by each of the projects during the last three years, State-wise;**
- (b) whether the Government has assessed the potential of the North-Eastern States for generation of hydro-power;**
- (c) if so, the details thereof along with the steps being taken by the Government to harness the potential;**
- (d) whether the Central Electricity Authority has assessed the potential of Arunachal Pradesh for generation of hydro energy; and**
- (e) if so, the details thereof including the projects proposed to tap the hydro-electric potential of the North- Eastern States along with the time by which these projects are likely to be operationalised?**

A N S W E R

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND
NEW & RENEWABLE ENERGY**

(SHRI R.K. SINGH)

(a) to (e) : A Statement is laid on the Table of the House.

STATEMENT**STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION NO.77 ANSWERED IN THE LOK SABHA ON 07.02.2019 REGARDING HYDRO-ELECTRIC PROJECTS.**

(a) : At present, 204 nos. of Hydro Electric Stations (above 25 MW) with total installed capacity of 45399.22 MW are in operation in the country. The state-wise details of Hydro Electric Stations (above 25 MW) in operation and the quantum of hydro power generated in the last three years and current year up to December, 2018 is enclosed at Annex-I.

(b) & (c) : Yes, Madam.

As per the re-assessment study completed by Central Electricity Authority in 1987, the identified hydropower potential in the country was assessed as 1,48,701 MW [1,45,320 MW from Hydro Electric Projects (HEPs) above 25 MW capacity] which included 62604 MW of hydro potential in NE Region including 4248 MW in the state of Sikkim. The State-wise details of the identified potential in NE Region including Sikkim is given below:

| Region/ State | Identified Capacity (MW) | | Capacity Developed (in operation) | |
|-----------------------------------|--------------------------|--------------|-----------------------------------|--------------|
| | Total | Above 25 MW | (MW) | % |
| Sikkim | 4286 | 4248 | 2169 | 51.06 |
| NORTH EASTERN REGION (NER) | | | | |
| Meghalaya | 2394 | 2298 | 322 | 14.01 |
| Tripura | 15 | 0 | 0 | 0.00 |
| Manipur | 1784 | 1761 | 105 | 5.96 |
| Assam | 680 | 650 | 350 | 53.84 |
| Nagaland | 1574 | 1452 | 75 | 5.17 |
| Arunachal Pradesh | 50328 | 50064 | 515 | 1.03 |
| Mizoram | 2196 | 2131 | 60 | 2.82 |
| Sub Total (NER) | 58971 | 58356 | 1427 | 2.45 |
| NER + Sikkim | 63257 | 62604 | 3596 | 5.74 |

Out of the identified hydro potential, 3596 MW have been developed and 9 H.E. Projects with aggregate capacity of 3877 MW are presently under construction in NE Region and Sikkim (Annex-II). Remaining HEPs are at various stages of allotment by State Governments, clearance and survey & investigation.

Steps taken by Govt. to harness the potential include the following:

I) Hydro Power Policy- 2008 (including subsequent changes):

- **Transparent selection procedure/ criteria to be followed by the States for awarding sites to private developers.**
- **12 % free power given to the host State to ensure the support of State Government in execution of the project, viz, land acquisition, Rehabilitation & Resettlement, maintenance of law & order.**
- **To enable the project developer (public as well as private sector hydro developers) to recover the costs incurred by him in obtaining the project site, the policy allows a special incentive to the developer by way of merchant sale of upto a maximum of 40% of the saleable energy.**
- **An additional 1% free power from the project (over and above 12% free power earmarked for the host State) would be provided and earmarked for a Local Area Development Fund, aimed at providing a regular stream of revenue for income generation and welfare schemes, creation of additional infrastructure and common facilities etc. on a sustained and continued basis over the life of the project.**
- **Developer to provide 100 units of electricity per month to each Project Affected Family - in cash or kind or a combination of both for 10 years from the COD.**

II) Tariff Policy, 2016 (Portions relevant to Hydropower)

Intent of Government for promotion of HEP emphasized in the objective of the Policy - "To promote HEP generation including PSP to provide adequate peaking reserves, reliable grid operation and integration of variable Renewable Energy (RE) sources".

- **Hydropower to be excluded for estimating Solar Purchase Obligation.**
- **Enabling provision for suitable regulatory framework incentivizing the developers of HEPs for using long term financial instruments - in order to reduce tariff burden in the initial years.**
- **Exemption from competitive bidding extended up to 2022.**

III) Time bound appraisal and monitoring :

- **Time bound appraisal norms have been evolved for examination of DPRs in Central Electricity Authority (CEA). Appraisal of DPRs by respective appraising groups including convening of Concurrence/ Appraisal meeting by Secretary, CEA shall be completed in a period of 150 working days**
- **CEA is monitoring the progress of the under construction hydro projects regularly through frequent site visits, interaction with the developers and critical study of monthly progress reports.**
- **Regular review meetings are taken by Ministry of Power/ CEA with equipment manufacturers, State Utilities/ CPSUs/ Project developers, etc. to sort out the critical issues on Quarterly Basis.**

(d) & (e) : Yes, Madam. The hydro-electric potential of Arunachal Pradesh is 50328 MW (50064 MW in respect of HE Scheme above 25MW). Out of the identified capacity, 2 HE projects, namely, Ranganadi (405 MW) and Pare (110 MW) aggregating to 515 MW are in operation in the State. Three HE projects, namely, Kameng (660 MW), Lower Subansiri (2000 MW) and Gongri (144 MW) are presently under construction in Arunachal Pradesh. The State Government has allotted 107 HEPs with aggregate capacity of 49386.5 MW, out of which 17 HEPs of 16952 MW have been cleared by CEA but yet to be taken up for implementation and 7 HEPs of 397 MW have been cleared by the State Government. These HEPs will take about 36 to 114 months' time for completion from the date of start of construction. Further 20 HEPs of capacity 12340.5 MW have been terminated /dropped by the State Government as per Basin study recommendations.

ANNEX REFERRED TO IN PART (a) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 77 ANSWERED IN THE LOK SABHA ON 07.02.2019 REGARDING HYDRO-ELECTRIC PROJECTS.

STATE-WISE HYDRO GENERATION (I.C. ABOVE 25 MW) IN THE COUNTRY FROM 2015-16 TO 2018-19 (UP TO 31.12.2018)

| SL. NO. | REGION/ STATE/ UTILITY/STATION | Developer | INSTALLED CAPACITY (AS ON 31.12.2018) (MW) | ACTUAL GENERATION (MU) | | | |
|----------------------------|--------------------------------|----------------------------------|--|------------------------|--------------|--------------|----------------------------|
| | | | | 2015-16 | 2016-17 | 2017-18 | 2018-19 (UP TO 31.12.2018) |
| HIMACHAL PRADESH | | | | | | | |
| 1 | Bhakra L | BBMB | 594 | 5893 | 5168 | 5134 | 3132 |
| 2 | Bhakra R | BBMB | 785 | | | | |
| 3 | Dehar | BBMB | 990 | 3339 | 3185 | 3086 | 2734 |
| 4 | Pong | BBMB | 396 | 1735 | 1370 | 1642 | 1069 |
| 5 | BairaSiul | NHPC | 180 | 746 | 669 | 642 | 367 |
| 6 | Chamera-I | NHPC | 540 | 2624 | 2224 | 2344 | 2042 |
| 7 | Chamera-II | NHPC | 300 | 1524 | 1444 | 1487 | 1317 |
| 8 | Chamera-III | NHPC | 231 | 1044 | 917 | 1068 | 941 |
| 9 | Parbati III | NHPC | 520 | 643 | 682 | 711 | 608 |
| 10 | NapthaJhakri | SJVN | 1500 | 7314 | 7051 | 7208 | 5914 |
| 11 | Rampur | SJVN | 412 | 1983 | 1960 | 2015 | 1662 |
| 12 | Kol Dam | NTPC | 800 | 2309 | 3225 | 3314 | 2737 |
| 13 | Integrated Kashang I | HPPCL | 195 | | 56 | 197 | 107 |
| 14 | Sainj | HPPCL | 100 | | | 135 | 379 |
| 15 | Bassi | HPSEB LTD | 66 | 316 | 298 | 315 | 212 |
| 16 | Giri Bata | HPSEB LTD | 60 | 189 | 141 | 170 | 169 |
| 17 | Larji | HPSEB LTD | 126 | 657 | 612 | 612 | 503 |
| 18 | Sanjay | HPSEB LTD | 120 | 0 | 187 | 493 | 529 |
| 19 | Shanan | PSPCL | 110 | 533 | 473 | 509 | 411 |
| 20 | AllainDuhangan | Allain Duhangan Power Power Ltd. | 192 | 725 | 679 | 683 | 548 |
| 21 | Malana-II | Everest Power Private Ltd. | 100 | 354 | 367 | 369 | 328 |
| 22 | Baspa-II | JSW ENERGY | 300 | 1305 | 1343 | 1337 | 1187 |
| 23 | KarchamWangtoo | JSW ENERGY | 1000 | 4726 | 4372 | 4570 | 3657 |
| 24 | Budhil | GBHPPL | 70 | 288 | 261 | 318 | 268 |
| 25 | Chanju I | IA Energy Pvt. Ltd.(IAEPL) | 36 | | 11 | 79 | 124 |
| 26 | Malana | Malana Power Company Ltd.(MPCL) | 86 | 342 | 354 | 346 | 297 |
| | Total H.P. | | 9809 | 38587 | 37050 | 38783 | 31243 |
| JAMMU & KASHMIR | | | | | | | |
| 27 | Chutak | NHPC | 44 | 37 | 44 | 46 | 38 |
| 28 | Dulhasti | NHPC | 390 | 2361 | 2280 | 2344 | 1999 |
| 29 | NimooBazgo | NHPC | 45 | 91 | 95 | 99 | 74 |
| 30 | Salal-I & II | NHPC | 690 | 3591 | 3423 | 3247 | 2899 |

| | | | | | | | |
|----|----------------------------------|-------------------------------|-------------|--------------|--------------|--------------|--------------|
| 31 | Sewa-II | NHPC | 120 | 597 | 471 | 506 | 314 |
| 32 | Uri -I | NHPC | 480 | 3283 | 2803 | 2350 | 2305 |
| 33 | Uri -II | NHPC | 240 | 1196 | 1472 | 1207 | 1190 |
| 34 | Kishenganga | NHPC | 330 | | | 2 | 438 |
| 35 | Baglihar | JKSPDC | 450 | 3000 | 2185 | 2507 | 1909 |
| 36 | Baglihar II | JKSPDC | 450 | 56 | 1759 | 1822 | 1790 |
| 37 | Lower Jhelum | JKSPDC | 105 | 666 | 483 | 481 | 462 |
| 38 | Upper Sindh II | JKSPDC | 105 | 258 | 363 | 327 | 276 |
| | Total Jammu & Kashmir | | 3449 | 15136 | 15378 | 14938 | 13694 |
| | PUNJAB | | | | | | |
| 39 | Ganguwal | BBMB | 78 | 852 | 847 | 494 | 445 |
| 40 | Kotla | BBMB | 78 | | | 508 | 452 |
| 41 | A.P.Sahib I | PSPCL | 67 | 669 | 674 | 648 | 344 |
| 42 | A.P.Sahib II | PSPCL | 67 | | | | |
| 43 | Mukerian I | PSPCL | 45 | 1169 | 1084 | 1271 | 874 |
| 44 | Mukerian II | PSPCL | 45 | | | | |
| 45 | Mukerian III | PSPCL | 58.50 | | | | |
| 46 | Mukerian IV | PSPCL | 58.50 | | | | |
| 47 | RanjitSagar | PSPCL | 600 | 1957 | 1306 | 1803 | 1173 |
| | Total Punjab | | 1096 | 4648 | 3911 | 4724 | 3287 |
| | RAJASTHAN | | | | | | |
| 48 | JawaharSagar | RRVUNL | 99 | 349 | 308 | 261 | 132 |
| 49 | Mahi Bajaj I | RRVUNL | 50 | 166 | 210 | 180 | 47 |
| 50 | Mahi Bajaj II | RRVUNL | 90 | | | | |
| 51 | R.P. Sagar | RRVUNL | 172 | 518 | 449 | 378 | 166 |
| | Total - Rajasthan | | 411 | 1034 | 966 | 820 | 345 |
| | UTTAR PRADESH | | | | | | |
| 52 | Khara | UPJVNL | 72 | 321 | 269 | 259 | 221 |
| 53 | Matatilla | UPJVNL | 31 | 79 | 123 | 94 | 70 |
| 54 | Obra | UPJVNL | 99 | 160 | 217 | 300 | 152 |
| 55 | Rihand | UPJVNL | 300 | 375 | 567 | 834 | 371 |
| | Total -UP | | 502 | 935 | 1176 | 1487 | 813 |
| | UTTARAKHAND | | | | | | |
| 56 | Dhauliganga | NHPC | 280 | 1090 | 956 | 1153 | 1008 |
| 57 | Tanakpur | NHPC | 94 | 452 | 430 | 460 | 385 |
| 58 | Tehri | THDC LTD | 1000 | 3101 | 3146 | 3081 | 2411 |
| 59 | Koteshwar | THDC LTD | 400 | 1248 | 1225 | 1220 | 930 |
| 60 | Chibro (Y.St.II) | UJVNL | 240 | 814 | 714 | 784 | 669 |
| 61 | Chilla | UJVNL | 144 | 754 | 769 | 812 | 480 |
| 62 | Dhakrani(Y.St.I) | UJVNL | 34 | 137 | 120 | 130 | 119 |
| 63 | Dhalipur (Y.St.I) | UJVNL | 51 | 205 | 180 | 187 | 178 |
| 64 | Khatima | UJVNL | 41 | 120 | 180 | 213 | 188 |
| 65 | Khodri (Y.St.II) | UJVNL | 120 | 376 | 333 | 356 | 302 |
| 66 | Kulhal (Y.St.IV) | UJVNL | 30 | 139 | 122 | 124 | 117 |
| 67 | ManeriBhali-I | UJVNL | 90 | 487 | 349 | 395 | 372 |
| 68 | ManeriBhali-II | UJVNL | 304 | 1229 | 1252 | 1277 | 1166 |
| 69 | Ram Ganga | UJVNL | 198 | 503 | 181 | 251 | 84 |
| 70 | Srinagar | AHPC LTD | 330 | 901 | 1281 | 1383 | 1238 |
| 71 | Vishnu Prayag | Jaiprakash Power Venture Ltd. | 400 | 1211 | 2042 | 2161 | 1779 |
| | Total Uttarakhand | | 3756 | 12766 | 13282 | 13984 | 11425 |

| | | | | | | | |
|-----|-----------------------|-------------------------|------|------|------|------|------|
| | CHHATISGARH | | | | | | |
| 72 | Hasdeo Bango | CSPGC | 120 | 323 | 154 | 178 | 219 |
| | Total Chhattisgarh | | 120 | 323 | 154 | 178 | 219 |
| | GUJARAT | | | | | | |
| 73 | Kadana PSS | GSECL | 240 | 290 | 339 | 309 | 179 |
| 74 | Ukai | GSECL | 300 | 492 | 396 | 304 | 168 |
| 75 | Sardar Sarovar CHPH | SSNNL | 250 | 705 | 876 | 563 | 410 |
| 76 | Sardar Sarovar RBPH | SSNNL | 1200 | 1466 | 2333 | 377 | 0 |
| | Total Gujarat | | 1990 | 2952 | 3944 | 1552 | 757 |
| | MADHYA PRADESH | | | | | | |
| 77 | Indira Sagar | NHDC | 1000 | 1974 | 3321 | 882 | 958 |
| 78 | Omkareshwar | NHDC | 520 | 955 | 1428 | 444 | 452 |
| 79 | Bansagar Tons-I | MPPGCL | 315 | 574 | 1239 | 545 | 484 |
| 80 | Bansagar Tons-II | MPPGCL | 30 | 107 | 110 | 56 | 24 |
| 81 | Bansagar Tons-III | MPPGCL | 60 | 40 | 53 | 69 | 85 |
| 82 | Bargi | MPPGCL | 90 | 328 | 445 | 159 | 305 |
| 83 | Gandhi Sagar | MPPGCL | 115 | 383 | 351 | 351 | 104 |
| 84 | Madhikheda | MPPGCL | 60 | 92 | 147 | 23 | 59 |
| 85 | Rajghat | MPPGCL | 45 | 37 | 62 | 58 | 58 |
| | Total M.P. | | 2235 | 4491 | 7157 | 2587 | 2529 |
| | MAHARASHTRA | | | | | | |
| 86 | Bhira Tail Race | MAHAGENCO | 80 | 74 | 102 | 97 | 75 |
| 87 | Ghatghar PSS | MAHAGENCO | 250 | 302 | 384 | 153 | 89 |
| 88 | Koyna DPH | MAHAGENCO | 36 | 136 | 156 | 135 | 147 |
| 89 | KoynaSt.I&II | MAHAGENCO | 600 | 2840 | 3150 | 1051 | 796 |
| 90 | KoynaSt.III | MAHAGENCO | 320 | | | 499 | 411 |
| 91 | Koyna IV | MAHAGENCO | 1000 | | | 945 | 984 |
| 92 | Tillari | MAHAGENCO | 60 | 44 | 106 | 58 | 78 |
| 93 | Vaitarna | MAHAGENCO | 60 | 123 | 154 | 205 | 90 |
| 94 | Pench | MPPGPCL | 160 | 379 | 360 | 160 | 118 |
| 95 | Bhandardhara- II | (DLHPPL) | 34 | 83 | 47 | 43 | 44 |
| 96 | Bhira | Tata Power Company Ltd. | 150 | 640 | 952 | 341 | 277 |
| 97 | Bhira PSS | Tata Power Company Ltd. | 150 | | | 551 | 437 |
| 98 | Bhivpuri | Tata Power Company Ltd. | 75 | 197 | 207 | 307 | 218 |
| 99 | Khopoli | Tata Power Company Ltd. | 72 | 261 | 307 | 316 | 269 |
| | Total Maharashtra | | 3047 | 5079 | 5924 | 4861 | 4032 |
| | ANDHRA PRADESH | | | | | | |
| 100 | N.J.Sagar TPD | APGENCO | 50 | | 7 | 42 | 42 |
| 101 | N.J.Sagar RBC | APGENCO | 90 | 0 | 4 | 60 | 91 |
| 102 | Srisaillam RB | APGENCO | 770 | 206 | 641 | 575 | 550 |
| 103 | Upper sileru I & II | APGENCO | 240 | 465 | 340 | 482 | 306 |
| 104 | Lower Sileru | APGENCO | 460 | 1233 | 832 | 1110 | 739 |
| | Total Andhra Pradesh | | 1610 | 1904 | 1824 | 2269 | 1728 |

| KARNATAKA | | | | | | | |
|-------------------|---------------------------|-----------|-------------|-------------|-------------|-------------|-------------|
| 105 | Almatti Dam | KPCL | 290 | 145 | 404 | 442 | 399 |
| 106 | Bhadra | KPCL | 26 | 40 | 27 | 16 | 37 |
| 107 | Gerusoppa | KPCL | 240 | 303 | 277 | 281 | 386 |
| 108 | Ghatprabha | KPCL | 32 | 32 | 49 | 48 | 59 |
| 109 | Jog | KPCL | 139 | 318 | 288 | 191 | 149 |
| 110 | Kadra | KPCL | 150 | 220 | 176 | 193 | 299 |
| 111 | Kalinadi | KPCL | 855 | 1948 | 1345 | 1537 | 1879 |
| 112 | Supa DPH | KPCL | 100 | 325 | 239 | 291 | 396 |
| 113 | Kodasali | KPCL | 120 | 203 | 154 | 171 | 252 |
| 114 | Lingnamakki | KPCL | 55 | 119 | 106 | 126 | 171 |
| 115 | Munirabad | KPCL | 28 | 62 | 31 | 51 | 85 |
| 116 | Sharavathy | KPCL | 1035 | 2665 | 2709 | 2722 | 3328 |
| 117 | Shivasamudram | KPCL | 42 | 216 | 145 | 177 | 254 |
| 118 | Varahi | KPCL | 460 | 752 | 741 | 762 | 889 |
| 119 | T.B.Dam | APGENCO | 36 | 129 | 81 | 134 | 123 |
| 120 | Hampi | APGENCO | 36 | | | | 13 |
| | Total Karnataka | | 3644 | 7479 | 6772 | 7143 | 8718 |
| KERALA | | | | | | | |
| 121 | Idamalayar | KSEB Ltd. | 75 | 273 | 172 | 256 | 264 |
| 122 | Idukki | KSEB Ltd. | 780 | 2372 | 1380 | 1611 | 2252 |
| 123 | Kakkad | KSEB Ltd. | 50 | 184 | 132 | 160 | 192 |
| 124 | Kuttiadi | KSEB Ltd. | 75 | 578 | 479 | 601 | 610 |
| 125 | KuttiadiExtn. | KSEB Ltd. | 50 | | | | |
| 126 | Kuttiady Additional Extn. | KSEB Ltd. | 100 | | | | |
| 127 | Lower Periyar | KSEB Ltd. | 180 | 511 | 307 | 508 | 478 |
| 128 | Neriamangalam | KSEB Ltd. | 45 | 351 | 197 | 311 | 333 |
| 129 | Pallivasal | KSEB Ltd. | 38 | 219 | 166 | 188 | 151 |
| 130 | Panniar | KSEB Ltd. | 30 | 174 | 62 | 129 | 87 |
| 131 | Poringalkuthu | KSEB Ltd. | 32 | 160 | 91 | 117 | 86 |
| 132 | Sabarigiri | KSEB Ltd. | 300 | 1171 | 799 | 968 | 1296 |
| 133 | Sengulam | KSEB Ltd. | 48 | 161 | 116 | 145 | 94 |
| 134 | Sholayar | KSEB Ltd. | 54 | 210 | 167 | 205 | 143 |
| | Total -Kerala | | 1857 | 6364 | 4067 | 5199 | 5986 |
| TAMIL NADU | | | | | | | |
| 135 | Aliyar | TANGEDCO | 60 | 153 | 62 | 90 | 16.11 |
| 136 | Bhawani K Barrage-III | TANGEDCO | 30 | 157 | 21 | 0 | 27.68 |
| 137 | Bhawani K Barrage-II | TANGEDCO | 30 | 7 | 20 | 38 | 69.13 |
| 138 | Bhawani K Barrage-I | TANGEDCO | 30 | 6 | 17 | 17 | 62.22 |
| 139 | Kadamparai PSS | TANGEDCO | 400 | 413 | 289 | 384 | 359.95 |
| 140 | Kodayar I | TANGEDCO | 60 | 279 | 169 | 124 | 159 |
| 141 | Kodayar II | TANGEDCO | 40 | | | | |
| 142 | Kundah I | TANGEDCO | 60 | 1372 | 816 | 806 | 1306 |
| 143 | Kundah II | TANGEDCO | 175 | | | | |
| 144 | Kundah III | TANGEDCO | 180 | | | | |
| 145 | Kundah IV | TANGEDCO | 100 | | | | |
| 146 | Kundah V | TANGEDCO | 40 | | | | |
| 147 | Lower Mettur I | TANGEDCO | 30 | 223 | 92 | 132 | 189 |
| 148 | Lower Mettur II | TANGEDCO | 30 | | | | |

| | | | | | | | |
|-----|------------------------|--------------------------------------|-------------|-------------|-------------|-------------|-------------|
| 149 | Lower Mettur III | TANGEDCO | 30 | | | | |
| 150 | Lower Mettur IV | TANGEDCO | 30 | | | | |
| 151 | Mettur Dam | TANGEDCO | 50 | 341 | 125 | 52 | 129 |
| 152 | Mettur Tunnel | TANGEDCO | 200 | | | 163 | 416 |
| 153 | Moyar | TANGEDCO | 36 | 104 | 62 | 94 | 134 |
| 154 | Papanasam | TANGEDCO | 32 | 117 | 67 | 115 | 87 |
| 155 | Parson's Valley | TANGEDCO | 30 | 26 | 24 | 27 | 44 |
| 156 | Periyar | TANGEDCO | 161 | 505 | 94 | 287 | 648 |
| 157 | Pykara | TANGEDCO | 59 | 57 | 13 | 1 | 22 |
| 158 | Pykara Ultimate | TANGEDCO | 150 | 281 | 193 | 274 | 427 |
| 159 | Sarkarpathy | TANGEDCO | 30 | 79 | 63 | 85 | 81 |
| 160 | Sholayar I | TANGEDCO | 70 | 264 | 228 | 158 | 165 |
| 161 | Suruliyar | TANGEDCO | 35 | 93 | 43 | 71 | 85 |
| | Total Tamilnadu | | 2178 | 4474 | 2397 | 2920 | 4428 |
| | TELANGANA | | | | | | |
| 162 | Lower Jurala | TSGENCO | 240 | 9 | 176 | 206 | 153.1 |
| 163 | N.J.Sagar PSS | TSGENCO | 816 | 88 | 186 | 184 | 241.8 |
| 164 | N.J.Sagar LBC | TSGENCO | 60 | 0 | 0 | 13 | 51.7 |
| 165 | Pochampad | TSGENCO | 36 | 0 | 75 | 36 | 25.9 |
| 166 | PriyadarshniJurala | TSGENCO | 234 | 30 | 212 | 217 | 165.0 |
| 167 | Pulichinthala | TSGENCO | 120 | 0 | 13 | 7 | 17.3 |
| 168 | Srisailam LB | TSGENCO | 900 | 155 | 617 | 829 | 947.5 |
| | Total Telangana | | 2406 | 282 | 1280 | 1492 | 1602 |
| | JHARKHAND | | | | | | |
| 169 | Panchet | DVC | 80 | 69 | 134 | 142 | 76 |
| 170 | Subernarekha I | JUUNL | 65 | 51 | 30 | 190 | 95 |
| 171 | Subernarekha II | JUUNL | 65 | | | | |
| | Total Jharkhand | | 210 | 120 | 164 | 332 | 171 |
| | ODISHA | | | | | | |
| 172 | Balimela | OHPC | 510 | 622 | 1001 | 1477 | 1463 |
| 173 | Hirakud I | OHPC | 348 | 684 | 717 | 863 | 475 |
| 174 | Hirakud II | OHPC | | | | | |
| 175 | Rengali | OHPC | 250 | 599 | 554 | 763 | 783 |
| 176 | Upper Indravati | OHPC | 600 | 1760 | 1522 | 1746 | 1667 |
| 177 | Upper Kolab | OHPC | 320 | 767 | 619 | 707 | 716 |
| 178 | Machkund | APGENCO | 115 | 477 | 700 | 468 | 424 |
| | Total -Odisha | | 2142 | 4910 | 5113 | 6023 | 5528 |
| | SIKKIM | | | | | | |
| 179 | Rangit | NHPC | 60 | 345 | 347 | 346 | 309 |
| 180 | Teesta-V | NHPC | 510 | 2710 | 2773 | 2819 | 2411 |
| 181 | Teesta III | TeestaUrja Ltd. (TUL) | 1200 | | 309 | 4429 | 3785 |
| 182 | Jorethang Loop | DANS Energy Pvt. Ltd. (DEPL) | 96 | 75 | 406 | 406 | 382 |
| 183 | Tashiding | Shiga Energy Pvt. Ltd.(SEPL) | 97 | | | 73 | 390 |
| 184 | Chuzachen HEP | Gati Infrastructure Pvt. Ltd. (GIPL) | 110 | 421 | 495 | 445 | 395 |
| 185 | Dikchu | Sneha Kinetic | 96 | | | 370 | 439 |
| | Total Sikkim | | 2169 | 3552 | 4330 | 8888 | 8112 |

| WEST BENGAL | | | | | | | |
|--------------------------|--------------------------|---------|--------------|---------------|---------------|---------------|---------------|
| 186 | Teesta Low Dam-III | NHPC | 132 | 515 | 554 | 387 | 527 |
| 187 | Teesta Low Dam-IV | NHPC | 160 | 19 | 603 | 495 | 650 |
| 188 | Maithon | DVC | 63 | 108 | 122 | 114 | 93 |
| 189 | Jaldhaka I | WBSEDCL | 36 | 173 | 205 | 145 | 182 |
| 190 | Purulia PSS | WBSEDCL | 900 | 1065 | 1107 | 1014 | 822 |
| 191 | Rammam II | WBSEDCL | 50 | 254 | 248 | 122 | 210 |
| | Total West Bengal | | 1341 | 2133 | 2839 | 2278 | 2484 |
| ARUNACHAL PRADESH | | | | | | | |
| 192 | Ranganadi | NEEPCO | 405 | 1280 | 1249 | 1417 | 1011 |
| 193 | Pare | NEEPCO | 110 | | | | 329 |
| | Total Arunachal | | 515 | 1280 | 1249 | 1417 | 1340 |
| ASSAM | | | | | | | |
| 194 | Kopili | NEEPCO | 200 | 782 | 1088 | 1173 | 986 |
| 195 | Khandong | NEEPCO | 50 | 175 | 197 | 261 | 186 |
| 196 | KarbiLangpi | APGCL | 100 | 409 | 397 | 485 | 341 |
| | Total Assam | | 350 | 1366 | 1682 | 1919 | 1513 |
| NAGALAND | | | | | | | |
| 197 | Doyang | NEEPCO | 75 | 163 | 259 | 274 | 222 |
| | Total Nagaland | | 75 | 163 | 259 | 274 | 222 |
| MANIPUR | | | | | | | |
| 198 | Loktak (Manipur) | NHPC | 105 | 537 | 741 | 838 | 544 |
| | Total Manipur | | 105 | 537 | 741 | 838 | 544 |
| MEGHALAYA | | | | | | | |
| 199 | Kyrdemkulai | MePGCL | 60 | 118 | 65 | 132 | 113 |
| 200 | Myntdu | MePGCL | 126 | 444 | 392 | 502 | 354 |
| 201 | New Umtru | MePGCL | 40 | | | 160 | 161 |
| 202 | UmiumSt.I | MePGCL | 36 | 114 | 97 | 129 | 69 |
| 203 | UmiumSt.IV | MePGCL | 60 | 185 | 166 | 217 | 143 |
| | Total Meghalaya | | 322 | 861 | 720 | 1140 | 840 |
| MIZORAM | | | | | | | |
| 204 | Tuirial | NEEPCO | 60 | | | 78 | 156 |
| | Total -Mizoram | | 60 | 0 | 0 | 78 | 156 |
| | ALL INDIA | | 45399 | 121377 | 122378 | 126123 | 111719 |

ANNEX-II

ANNEX REFERRED TO IN PARTS (b) & (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 77 ANSWERED IN THE LOK SABHA ON 07.02.2019 REGARDING HYDRO-ELECTRIC PROJECTS.

**Hydro Electric Projects (above 25 MW) - Under Construction
in the North Eastern States**

| Sl.No. | Name of Scheme (Executing Agency) | Sector | I.C. (No. x MW) | Cap. Under Execution (MW) | Latest Commissioning |
|--------|---|----------------|-----------------|---------------------------|----------------------|
| | Arunachal Pradesh | | | | |
| 1 | Kameng (NEEPCO) | Central | 4x150 | 300.00 | 2018-19 |
| | | | | 300.00 | 2019-20 |
| 2 | Subansiri Lower (NHPC) | Central | 8x250 | 2000.00 | 2022-23 * |
| 3 | Gongri(Dirang Energy)# | Private | 2x72 | 144.00 | 2022-23 * |
| | Sub-total: Arunachal Pradesh | | | 2744.00 | |
| | Sikkim | | | | |
| 4 | Bhasmey (Gati Infrastructure) | Private | 3x17 | 51.00 | 2021-22* |
| 5 | Rangit-IV (JAL Power) | Private | 3x40 | 120.00 | 2021-22 * |
| 6 | Rangit-II (Sikkim Hydro) | Private | 2x33 | 66.00 | 2020-21* |
| 7 | Rongnichu (Madhya Bharat) | Private | 2x48 | 96.00 | 2019-20 |
| 8 | Teesta St. VI (LANCO) | Private | 4x125 | 500.00 | 2021-22 * |
| 9 | Panan (Himagiri) | Private | 4x75 | 300.00 | 2022-23* |
| | Sub-total: Sikkim | | | 1133.00 | |
| | Total: | | | 3877.00 | |
| * | Stalled Projects. Commissioning date is subject to restart of works | | | | |
| # | Govt. of Arunachal Pradesh has terminated the MOU with the developer | | | | |

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.701
ANSWERED ON 07.02.2019**

POWER PRODUCTION

†701. SHRI RAHUL KASWAN:

**Will the Minister of POWER
be pleased to state:**

- (a) whether the Government has made progress in area of power production in the country;**
- (b) if so, the details thereof, State-wise including Rajasthan during the last three years;**
- (c) whether the Government has formulated any special scheme to increase more power production; and**
- (d) if so, the areas and States in which action plan of power production has been decided?**

A N S W E R

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER
AND NEW & RENEWABLE ENERGY**

(SHRI R. K. SINGH)

(a) & (b): Yes, Madam. The details of power generation from conventional fuel sources (Thermal, Hydro & Nuclear) from 25 MW & above capacity and renewable sources in the country, State-wise, including Rajasthan during the last three years & the current year 2018-19 (up to December 2018) are given at Annex-I & Annex-II respectively.

(c) & (d): As on 31.12.2018, the installed generation capacity is about 349 Giga Watt (GW) which is more than sufficient to meet the peak power demand of the country of around 177 GW which occurred during the current year 2018-19 (upto December, 2018). Taking into account the future demand projections, generation capacity addition of 47,855 MW coal, 406 MW Gas, 6,823 MW Hydro and 3,300 MW Nuclear is projected to be commissioned during 2017-2022. The renewable energy capacity is also targeted to be 175 GW by 2021-22 on All India basis.

With these generation capacity additions, the electricity peak demand of 225 GW and energy requirement of 1566 BU projected for the year 2021-22 as per the 19th Electric Power Survey, will be fully met on All India basis.

ANNEX-I**ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 701 ANSWERED IN THE LOK SABHA ON 07.02.2019.**

State-wise Generation for conventional sources for Last 3 years and current year (upto December, 2018)

| State | Generation (in MUs) | | | |
|-------------------|------------------------|------------|------------|------------|
| | 2018-19 (upto-Dec. 18) | 2017-18 | 2016-17 | 2015-16 |
| ANDAMAN & NICOBAR | 99.98 | 258.79 | 215.56 | 182.85 |
| ANDHRA PRADESH | 47281.46 | 61851.80 | 65248.16 | 58230.59 |
| ARUNACHAL PRADESH | 1339.98 | 1416.74 | 1249.01 | 1280.25 |
| ASSAM | 5381.26 | 5972.12 | 5981.37 | 4522.12 |
| BBMB | 7831.01 | 10864.14 | 10570.00 | 11818.9 |
| Bhutan (IMP) | 4322.12 | 4778.33 | 5617.34 | 5244.21 |
| BIHAR | 23730.92 | 28440.03 | 24514.85 | 20827.01 |
| CHHATTISGARH | 88645.95 | 110041.76 | 105686.18 | 89513.29 |
| DELHI | 6155.66 | 7048.70 | 6253.26 | 6206.1 |
| DVC | 26659.15 | 35950.56 | 33566.47 | 28029.93 |
| GOA | 0.00 | 0.00 | 0.00 | 0 |
| GUJARAT | 70320.77 | 96519.87 | 99748.61 | 104917.3 |
| HARYANA | 19520.77 | 26605.97 | 18890.44 | 22247.14 |
| HIMACHAL PRADESH | 23898.03 | 28412.65 | 26853.98 | 27087.49 |
| JAMMU AND KASHMIR | 13693.58 | 14937.56 | 15377.69 | 15136.15 |
| JHARKHAND | 10349.60 | 13997.33 | 14727.43 | 15933.67 |
| KARNATAKA | 35825.53 | 44668.81 | 43766.67 | 47553.25 |
| KERALA | 5987.57 | 5248.02 | 4130.61 | 6653.34 |
| MADHYA PRADESH | 90804.72 | 111333.00 | 98599.98 | 95740.5 |
| MAHARASHTRA | 103663.10 | 124308.77 | 118091.71 | 117244.4 |
| MANIPUR | 544.38 | 837.74 | 741.07 | 536.64 |
| MEGHALAYA | 1026.02 | 1401.03 | 916.70 | 1035.99 |
| MIZORAM | 156.14 | 78.37 | 0 | 0 |
| NAGALAND | 221.93 | 274.39 | 258.94 | 163.14 |
| ODISHA | 35151.63 | 46512.83 | 55841.18 | 57221.8 |
| PUDUCHERRY | 181.45 | 226.45 | 246.84 | 227.59 |
| PUNJAB | 23733.57 | 28958.56 | 26492.18 | 23342.89 |
| RAJASTHAN | 42092.22 | 51643.61 | 51792.17 | 53947.35 |
| SIKKIM | 8112.00 | 8887.99 | 4330.40 | 3551.92 |
| TAMIL NADU | 62711.84 | 82386.30 | 84581.68 | 76406.83 |
| TELANGANA | 37660.83 | 49913.97 | 43391.23 | 36868.2 |
| TRIPURA | 4873.95 | 5999.27 | 5873.89 | 5109.38 |
| UTTAR PRADESH | 94872.39 | 128542.28 | 120142.11 | 111329.5 |
| UTTARAKHAND | 12306.01 | 15606.60 | 14250.54 | 12765.92 |
| WEST BENGAL | 40777.11 | 52381.91 | 52192.69 | 46946.62 |
| GRAND TOTAL | 949932.63 | 1206306.25 | 1160140.94 | 1107822.26 |

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 701 ANSWERED IN THE LOK SABHA ON 07.02.2019.

State-wise generation from Renewable sources including Rajasthan during last three years and current year 2018-19 (upto December 2018)

| Sl. No. | State/Utility | 2018-19 (Upto December 2018) | 2017-18 | 2016-17 | 2015-16 |
|---------|--|------------------------------|------------------|-----------------|-----------------|
| 1 | Andaman & Nicobar | 18.12 | 19.65 | 20.03 | 18.72 |
| 2 | Andhra Pradesh | 11380.14 | 10597.47 | 5483.26 | 3106.61 |
| 3 | Arunachal Pradesh | 1.28 | 0.70 | 27.43 | 18.44 |
| 4 | Assam | 16.57 | 24.49 | 14.15 | 90.94 |
| 5 | Bihar | 246.42 | 309.06 | 292.53 | 165.11 |
| 6 | Chandigarh | 11.56 | 7.87 | 13.16 | 3.40 |
| 7 | Chhattisgarh | 744.38 | 1069.21 | 1446.22 | 1202.42 |
| 8 | Dadra and Nagar Haveli | 3.89 | 5.23 | 1.31 | 0.50 |
| 9 | Daman & Diu | 13.09 | 18.53 | 14.43 | 4.25 |
| 10 | Delhi | 221.25 | 241.09 | 144.73 | 128.97 |
| 11 | DVC | 1.81 | 9.54 | 14.09 | 118.26 |
| 12 | Gujarat | 10666.47 | 11759.63 | 9497.99 | 8003.73 |
| 13 | Haryana | 479.62 | 560.70 | 449.54 | 1343.15 |
| 14 | HP | 2074.25 | 1903.05 | 2015.58 | 1921.77 |
| 15 | J & K | 260.89 | 324.37 | 326.12 | 304.79 |
| 16 | Jharkhand | 13.92 | 19.47 | 38.47 | 19.77 |
| 17 | Karnataka | 16479.89 | 13463.98 | 9585.68 | 10061.03 |
| 18 | Kerala | 618.85 | 774.32 | 562.72 | 618.78 |
| 19 | Lakshadweep | 0.94 | 1.79 | 1.59 | 1.02 |
| 20 | Madhya Pradesh | 5914.53 | 6292.90 | 5268.67 | 2910.42 |
| 21 | Maharashtra | 11186.39 | 12036.98 | 11292.70 | 10756.58 |
| 22 | Manipur | 0.89 | 0.15 | 0.01 | 0.00 |
| 23 | Meghalaya | 40.41 | 70.56 | 59.10 | 65.96 |
| 24 | Mizoram | 27.74 | 54.67 | 49.62 | 27.62 |
| 25 | Nagaland | 78.86 | 91.00 | 92.73 | 88.73 |
| 26 | NEEPCO | 36.97 | 6.71 | 6.89 | 6.15 |
| 27 | NTPC Andaman/ Talcher | 14.15 | 20.43 | 20.00 | 18.91 |
| 28 | NTPC Dadri/FBD/Unchahar/ Singrauli/ Bhadla | 388.07 | 480.99 | 74.90 | 42.41 |
| 29 | NTPC Rajgarh/Raojmal/Mandsaur | 414.18 | 381.99 | 82.21 | 81.00 |
| 30 | NTPC Ramagundam/Anantapuram | 314.89 | 426.37 | 350.53 | 16.02 |
| 31 | Odisha | 475.43 | 517.56 | 507.71 | 434.45 |
| 32 | Oil India Ltd (Madhya Pradesh &Gujrat) | 191.97 | | | |
| 33 | Oil India Ltd (Rajasthan) | 89.08 | 251.25 | 227.20 | 193.67 |
| 34 | Puducherry | 1.71 | 1.17 | 0.34 | 0.00 |
| 35 | Punjab | 1755.52 | 2343.87 | 2149.49 | 1474.20 |
| 36 | Rajasthan | 8544.53 | 9484.23 | 7973.85 | 6600.24 |
| 37 | Sikkim | 23.53 | 30.54 | 35.78 | 41.93 |
| 38 | Tamil Nadu | 14705.30 | 16179.86 | 15153.87 | 9331.47 |
| 39 | Telangana | 5045.80 | 4632.28 | 1999.89 | 1027.90 |
| 40 | Tripura | 30.52 | 44.48 | 46.47 | 18.47 |
| 41 | Uttar Pradesh | 3347.57 | 4606.29 | 3638.26 | 3201.49 |
| 42 | Uttarakhand . | 833.09 | 1184.50 | 999.19 | 703.42 |
| 43 | West Bengal | 1209.24 | 1590.54 | 1569.77 | 1608.15 |
| | Total | 97923.70 | 101839.48 | 81548.21 | 65780.85 |

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.728
ANSWERED ON 07.02.2019**

GAS BASED POWER PLANTS

728. SHRI B.V. NAIK:

**Will the Minister of POWER
be pleased to state:**

- (a) whether the Government is aware that several gas based power plants have been stranded;**
- (b) if so, the details thereof and the reasons therefor, along with the action taken thereto;**
- (c) whether any subsidies and tax concessions are being offered to those plants and if so, the details thereof;**
- (d) whether the Government is now planning to revive 25 GW stranded gas based capacity to push consumption of the fuel and transform the nation into a gas based economy; and**
- (e) the time by when a decision in the matter will be taken?**

A N S W E R

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER
AND NEW & RENEWABLE ENERGY**

(SHRI R. K. SINGH)

(a) & (b) : A total of 14305 MW gas based power generation capacity is stranded in the country due to non-availability of domestic gas. The details of these gas-based power plants are furnished at Annexure.

(c) : There is no Customs duty on import of Liquefied Natural Gas (LNG) and Natural Gas (NG), if it is used for generation of electrical energy by a generating company as defined in section 2(28) of the Electricity Act, 2003 (36 of 2003) to supply electrical energy or to engage in the business of supplying electrical energy to the grid.

(d) & (e) : Gas based power plants are free to import the Liquefied Natural Gas (LNG), generate power and sell it to the consumers. Ministry of Petroleum and Natural Gas (MoP&NG) have stated that domestic gas is being supplied to the power sector as per current production level and domestic natural gas supply to power sector can improve only in case production levels increase in the future and as per prevailing MoP&NG' s guidelines.

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 728 ANSWERED IN THE LOK SABHA ON 07.02.2019.

STRANDED GAS BASED CAPACITY (ALL INDIA)

| Sl. No | Name of Project | Sector | Developer | Installed Capacity (MW) | State |
|--------|-------------------------------|--------|---|-------------------------|----------------|
| 1 | GAUTAMI CCPP | P | GVK Gautami Power Ltd | 464 | ANDHRA PRADESH |
| 2 | GMR - KAKINADA (Tanirvavi) | P | GMR Energy | 220 | ANDHRA PRADESH |
| 3 | JEGURUPADU CCPP | P | GVK Industries Ltd | 220.5 | ANDHRA PRADESH |
| 4 | KONASEEMA CCPP | P | Konaseema Power | 445 | ANDHRA PRADESH |
| 5 | KONDAPALLI EXTN CCPP | P | Lanco Power | 366 | ANDHRA PRADESH |
| 6 | VEMAGIRI CCPP | P | GMR Energy | 370 | ANDHRA PRADESH |
| 7 | SRIBA INDUSTRIES | P | PCIL Power & Holdings Limited | 30 | ANDHRA PRADESH |
| 8 | RVK ENERGY | P | RVK Energy | 28 | ANDHRA PRADESH |
| 9 | SILK ROAD SUGAR | P | SILK ROAD SUGAR | 35 | ANDHRA PRADESH |
| 10 | LVS POWER | P | LVS Power | 55 | ANDHRA PRADESH |
| 11 | GMR VEMAGIRI EXP | P | GMR Energy | 768 | ANDHRA PRADESH |
| 12 | KONDAPALLI EXP ST-III | P | Lanco Power | 742 | ANDHRA PRADESH |
| 13 | SAMALKOT EXP | P | Reliance Infra | 2400 | ANDHRA PRADESH |
| 14 | CCGT BY PANDURANGA | P | Panduranga Energy | 116 | ANDHRA PRADESH |
| 15 | PRAGATI CCGT-III | S | Pragati Power Corporation Ltd | 750 | DELHI |
| 16 | RITHALA CCPP | P | NDPL | 108 | DELHI |
| 17 | DHUVRAN CCPP(GSECL) | S | Gujarat State Electricity Corporation Ltd | 112 | GUJARAT |
| 18 | UTRAN CCPP(GSECL) | S | Gujarat State Electricity Corporation Ltd | 374 | GUJARAT |
| 19 | PIPAVAV CCPP | S | GSPC Pipavav Power Company Ltd | 702 | GUJARAT |
| 20 | DHUVRAN CCPP | S | Gujarat State Electricity Corporation Ltd | 376.3 | GUJARAT |
| 21 | HAZIRA CCPP EXT | S | Gujarat State Energy Generation Ltd | 351 | GUJARAT |
| 22 | VATWA CCPP* | P | Torrent Power | 100 | GUJARAT |
| 23 | ESSAR CCPP | P | Essar Power | 300 | GUJARAT |
| 24 | UNOSUGEN CCPP | P | Torrent Power | 382.5 | GUJARAT |
| 25 | DGEN Mega CCPP | P | Torrent Power | 1200 | GUJARAT |
| 26 | RATNAGIRI (RGPPL-DHABHOL) | C | NTPC | 1967 | MAHARASHTRA |
| 27 | CCGT BY PIONEER GAS POWER LTD | P | Pioneer Gas Power Ltd | 388 | MAHARASHTRA |
| 28 | GAS ENGINE BY ASTHA | P | Astha Power | 35 | TELENGANA |
| 29 | KASHIPUR SRAVANTHI ST-I&II | P | Sravanthi Energy | 450 | UTTARKHAND |
| 30 | BETA INFRATECH CCGT | P | Beta Infratech | 225 | UTTARKHAND |
| 31 | GAMA INFRAPROP CCGT | P | Gama Infraprop | 225 | UTTARKHAND |
| | TOTAL | | | 14305 | |

C: Central Sector; S: State Sector; P: Private Sector;

*** Vatwa CCPP was retired in 2015-16**

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.729
ANSWERED ON 07.02.2019**

AVERAGE CONSUMPTION OF COAL

729. SHRI M. CHANDRAKASI:

**Will the Minister of POWER
be pleased to state:**

- (a) the total number of coal based thermal power plants in the country as on date and their average per day consumption/ requirement of coal for their operations;**
- (b) the average coal stock availability for these plants in terms of coal availability for number of operative days at present ; and**
- (c) the steps being taken to increase coal and coal stock availability for thermal power plants?**

A N S W E R

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER
AND NEW & RENEWABLE ENERGY**

(SHRI R. K. SINGH)

(a) : The total number of coal based thermal power plants in the country as on 31.12.2018 is 175. Based on the generation target for the year 2018-19, the daily average coal requirement of these power plants is 1.79 Million Tonnes (MT)/day. During April-December, 2018, the average consumption by these power plants was 1.72 MT/day.

(b) : As on 31st December, 2018, the total coal stock available with these power plants was 21.66 MT. Based on their average consumption of 1.72 MT/day, the average coal stock availability in terms of number of days is about 13 days.

.....2.

(c) : Government have taken the following steps to increase coal and coal stock availability for thermal power plants:

- i. The availability of coal is being regularly monitored closely to ensure that generation of power plant is not affected due to shortage of coal.**
- ii. Coal Blocks have been allotted to central/state power utilities to improve domestic coal availability.**
- iii. The Government has introduced a scheme SHAKTI (Scheme for Harnessing and Allocating Koyala (Coal) Transparently in India)-2017, to provide coal linkages to the power plants which do not have any linkage.**
- iv. The Government has introduced flexibility in utilization of domestic coal amongst power generating stations to reduce the cost of power generation. The State/Central Gencos would have flexibility to utilize their coal in optimum and cost effective manner in their own power plants as well as by transferring coal to other State/Central/IPPs Power plants for generation of cheaper power. This ensures availability of coal to efficient plants.**

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.770
ANSWERED ON 07.02.2019**

DEMAND AND SUPPLY

770. SHRI RAJESHBHAI CHUDASAMA:

**Will the Minister of POWER
be pleased to state:**

- (a) the status of power generation and demand supply in the country and the details of the sources and their capacity in total power production in the country at present; and**
- (b) the sources from which carbon- free power would be generated in the next ten years and the quantum of power production fixed for these sources and the details of measures taken in this regard?**

A N S W E R

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER
AND NEW & RENEWABLE ENERGY**

(SHRI R. K. SINGH)

(a) : The details of source wise power generation and their capacity in total power production in the country during the current year 2018-19 (upto December, 2018) and the status of demand and supply of power in the country are given at Annex.

(b) : Hydro, Nuclear and Renewable Energy (including Solar, Wind and Biomass) are main sources from which carbon free power would be generated in the next ten years.

Generation of electricity is a delicensed activity and decision to set up any generating plants is based on a demand assessment by the concerned generator. Hence no target has been fixed in the next ten years. However, to promote clean energy Government of India has fixed a target of 175 GW of renewable energy based generation capacity by 2022.

The details of steps being taken by the Government to promote the production of renewable energy, inter alia, are as under:

- i. Fixed a target of 175 GW renewable energy based generation capacity, out of which 100 GW would be solar power.**
- ii. Issued guidelines for procurement of solar and wind power through tariff based competitive bidding process;**
- iii. Declared Renewable Purchase Obligation (RPO) up to the year 2018-19;**
- iv. Declare Renewable Generation Obligation on new coal/lignite based thermal plants;**
- v. Notified National Offshore Wind Energy Policy;**
- vi. Notified policy for Re-powering of Wind Power Projects;**
- vii. Notified standards for deployment of solar photovoltaic systems/devices;**
- viii. Issued order for waiving inter State Transmission System charges and losses for inter-State sale of solar and wind based power projects to be commissioned by December, 2019 and March 2019 respectively.**

ANNEX**ANNEX REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 770 ANSWERED IN THE LOK SABHA ON 07.02.2019.**

Source wise generation and capacity in total power production in the country during the current year 2018-19 (Upto December, 2018)

| Category | Capacity (MW) | Generation (MU) |
|--------------------|----------------------|------------------------|
| THERMAL | 2,23,027.34 | 8,05,433.52 |
| NUCLEAR | 6,780.00 | 28,457.54 |
| HYDRO | 45,399.22 | 1,16,041.57 * |
| RES | 74,081.66 | 97,923.70 |
| Grand Total | 3,49,288.22 | 10,47,856.33 |

Note: Generation from stations of 25 MW & above only

**** Includes Bhutan Import***

The demand and supply of power in the country during April-December, 2018*

| Energy (Million Unit) | | | | Peak (Mega Watt) | | | |
|------------------------------|------------------------|----------------------------|------------|-------------------------|-----------------|-----------------------|------------|
| Energy Requirement | Energy Supplied | Energy Not Supplied | | Peak Demand | Peak Met | Demand not Met | |
| MU | MU | MU | % | MW | MW | MW | % |
| 971,490 | 965,589 | 5,901 | 0.6 | 177,022 | 175,528 | 1,494 | 0.8 |

***Provisional**

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.777
ANSWERED ON 07.02.2019**

CEA

777. SHRIMATI SANTOSH AHLAWAT:

**Will the Minister of POWER
be pleased to state:**

(a) whether the Government has asked the Central Electricity Authority (CEA) to develop norms regarding "establishment cost" of power distribution companies (discoms), if so, the details thereof and if not, the reasons therefor;

(b) whether Government is going to ask the CEA to prepare the norms, if so, the details thereof;

(c) whether due to massive capacity addition in the power sector, there will be nearly double the amount of electricity available than the requirement of the State by 2021-22, if so, the details thereof along with the Government Plan to deal with the surplus power; and

(d) whether Government is planning to provide subsidy through DBT in consumers Bank Account, if so, the details thereof and the States who have agreed on DBT of subsidiary to the Consumers?

A N S W E R

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER
AND NEW & RENEWABLE ENERGY**

(SHRI R. K. SINGH)

(a) & (b) : Government of India has requested Central Electricity Authority (CEA) to work out norms for establishment of DISCOMs with a view to streamline their cost of operations and administrative expenses.

(c) : As per the National Electricity Plan (NEP) 2018, to meet the peak demand of 225GW by FY 2021-22, the likely installed capacity, including Renewables would be 479GW.

The capacity created would be sufficient and adequate to meet the demands.

(d) : A state government can give subsidy to any class of consumers, to the extent they consider appropriate as per provision of Section 65 of the Electricity act, 2003. Draft amendment to Tariff Policy, circulated for stakeholder consultations on 30.5.2018 includes provision for subsidy through Direct Benefit Transfer (DBT).

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.798
ANSWERED ON 07.02.2019**

HYDRO POWER PROJECTS

798. SHRI PINAKI MISRA:

**Will the Minister of POWER
be pleased to state:**

- (a) whether Hydro power projects with the capacity to generate a total of 12 GW power are under construction in the country, if so, the details thereof;**
- (b) whether 16 of these Hydro power projects with a capacity to generate 5950 MW of power are stalled due to financial constraints and other reasons; and**
- (c) whether the Government is planning to come up with a Hydro policy in the near future, if so, the details thereof?**

A N S W E R

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER
AND NEW & RENEWABLE ENERGY**

(SHRI R. K. SINGH)

(a) & (b) : As on 31.01.2019, there are 37 Under Construction Hydro Power Projects (above 25 MW) in the country, with an installed capacity of 12178.50 MW. The details of these projects are given at Annex. Out of these 37 under construction Hydro Power Projects, 14 Hydro Power Projects aggregating to 4850 MW are stalled / held up due to financial constraints and other reasons.

(c) : Proposals on measures to make the hydro sector viable are under examination in this Ministry.

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 798 ANSWERED IN THE LOK SABHA ON 07.02.2019.

List of Under Construction Hydro Electric Projects in the Country (above 25 MW)

(As on 31.01.2019)

| Sl. No. | Name of Scheme (Executing Agency) | Sector | Installed Capacity (No. x MW) | Capacity. Under Execution (MW) |
|------------------------------|--|---------|-------------------------------|--------------------------------|
| Andhra Pradesh | | | | |
| 1 | Polavaram (APGENCO/Irrigation Dept., A.P.) | State | 12x80 | 960.00 |
| Sub-total: Andhra Pradesh | | | | 960.00 |
| Arunachal Pradesh | | | | |
| 2 | Kameng (NEEPCO) | Central | 4x150 | 600.00 |
| 3 | Subansiri Lower (NHPC) | Central | 8x250 | 2000.00 |
| 4 | ### Gongri (Dirang Energy) | Private | 2x72 | 144.00 |
| Sub-total: Arunachal Pradesh | | | | 2744.00 |
| Himachal Pradesh | | | | |
| 5 | Parbati St. II (NHPC) | Central | 4x200 | 800.00 |
| 6 | Uhi-III (BVPCL) | State | 3x33.33 | 100.00 |
| 7 | Sawra Kuddu (HPPCL) | State | 3x37 | 111.00 |
| 8 | Shongtong Karcham (HPPCL) | State | 3x150 | 450.00 |
| 9 | Bajoli Holi (GMR) | Private | 3x60 | 180.00 |
| 10 | Sorang (HSPCL) | Private | 2x50 | 100.00 |
| 11 | Tangnu Romai (TRPG) | Private | 2x22 | 44.00 |
| 12 | Tidong-I (Statkraft IPL) | Private | 100.00 | 100.00 |
| Sub-total: Himachal Pradesh | | | | 1885.00 |
| Jammu & Kashmir | | | | |
| 13 | Pakal Dul (CVPPL) | Central | 4x250 | 1000.00 |
| 14 | Parnai (JKSPDC) | State | 3x12.5 | 37.50 |
| 15 | Lower Kalnai (JKSPDC) | State | 2x24 | 48.00 |
| 16 | # Ratle (RHEPPL) | Private | 4x205 + 1x30 | 850.00 |
| Sub-total: Jammu & Kashmir | | | | 1935.50 |
| Kerala | | | | |
| 17 | Pallivasal (KSEB) | State | 2x30 | 60.00 |
| 18 | Thottiyar (KSEB) | State | 1x30+1x10 | 40.00 |
| Sub-total: Kerala | | | | 100.00 |
| Madhya Pradesh | | | | |
| 19 | ## Maheshwar (SMHPCL) | Private | 10x40 | 400.00 |
| Sub-total: Madhya Pradesh | | | | 400.00 |
| Maharashtra | | | | |
| 20 | Koyna Left Bank (WRD,MAH) | State | 2x40 | 80.00 |
| Sub-total: Maharashtra | | | | 80.00 |
| Punjab | | | | |
| 21 | Shahpurkandi (PSPCL/ Irrigation Deptt., Pb.) | State | 3x33+3x33+1x8 | 206.00 |
| Sub-total: Punjab | | | | 206.00 |
| Sikkim | | | | |
| 22 | Bhasmey (Gati Infrastructure) | Private | 3x17 | 51.00 |
| 23 | Rangit-IV (JAL Power) | Private | 3x40 | 120.00 |
| 24 | Rangit-II (Sikkim Hydro) | Private | 2x33 | 66.00 |
| 25 | Rongnichu (Madhya Bharat) | Private | 2x48 | 96.00 |
| 26 | Teesta St. VI (LANCO) #### | Private | 4x125 | 500.00 |
| 27 | Panan (Himagiri) | Private | 4x75 | 300.00 |
| Sub-total: Sikkim | | | | 1133.00 |

| Tamil Nadu | | | | |
|-------------------------------|-----------------------------------|----------------|--------------|-----------------|
| 28 | Kundah Pumped Storage | State | 1x125 | 125.00 |
| Sub-total: Tamil Nadu | | | | 125.00 |
| Uttarakhand | | | | |
| 29 | Lata Tapovan (NTPC) | Central | 3x57 | 171.00 |
| 30 | Tapovan Vishnugad (NTPC) | Central | 4x130 | 520.00 |
| 31 | Tehri PSS (THDC) | Central | 4x250 | 1000.00 |
| 32 | Vishnugad Pipalkoti (THDC) | Central | 4x111 | 444.00 |
| 33 | Naitwar Mori (SJVNL) | Central | 2x30 | 60.00 |
| 34 | Vyasi (UJVNL) | State | 2x60 | 120.00 |
| 35 | Phata Byung (LANCO) | Private | 2x38 | 76.00 |
| 36 | Singoli Bhatwari (L&T) | Private | 3x33 | 99.00 |
| Sub-total: Uttarakhand | | | | 2490.00 |
| West Bengal | | | | |
| 37 | Rammam-III (NTPC) | Central | 3x40 | 120.00 |
| Sub-total: West Bengal | | | | 120.00 |
| Grand Total: | | | | 12178.50 |

Govt. of J&K, PDD have terminated PPA on 09.02.2017 and directed JKSPDC to take over the project. JKSPDC has signed an MoU with NHPC to execute the project through a JV of NHPC and JKSPDC on 3.2.2019.

PFC as lead lender have acquired majority equity i.e. 51% in the SMHPCL w.e.f. 1st June, 2016. Matter Sub-judice.

State Govt. terminated the agreement with developer for execution of project.

NHPC Ltd. emerged as H1 bidder during bidding process by NCLT. PIB note has been circulated.

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.799
ANSWERED ON 07.02.2019**

ELECTRICITY FROM PARALI

**†799. SHRI AJAY MISRA TENI:
SHRI BHARAT SINGH:**

**Will the Minister of POWER
be pleased to state:**

- (a) whether National Thermal Power Corporation (NTPC) proposes to start generation of electricity from 'Parali' (wheat and rice plants residue) to check pollution level due to burning of 'Parali' by the farmers every year;**
- (b) if so, the details thereof, State/ location/plant-wise; and**
- (c) if not, the reasons therefor?**

A N S W E R

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER
AND NEW & RENEWABLE ENERGY**

(SHRI R. K. SINGH)

(a) to (c) : NTPC has already started biomass co-firing in its Dadri coal based station in Uttar Pradesh.

NTPC has invited expression of interest (EOI) on 26th December, 2018, for supply of paddy straw and other agro residue based pellets/torrefied pellets to its power stations for power generation through biomass co-firing. The EOI has been invited for 21 coal based power stations of NTPC including its JV at Jhajjar. Based on response to EOI, tender shall be floated for procurement of pellets/torrefied pellets for respective NTPC power stations. Last date of EOI submission is 25th February 2019.

NTPC is planning to replace 5 to 10% of coal fired in its power stations by pellets/torrefied pellets made of agro residues. List of power stations and daily pellets/ torrefied pellets requirement are given at Annexure.

ANNEXURE**ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 799 ANSWERED IN THE LOK SABHA ON 07.02.2019.**

| Sl. No. | Coal Based Stations | State | Capacity (MW) | Pellets/ Torrefied Pellets Requirement (Metric Tonnes Per Day) |
|----------------|----------------------------|----------------|----------------------|---|
| 1 | Singrauli | Uttar Pradesh | 2000 | 1000 |
| 2 | Korba | Chhattisgarh | 2600 | 1300 |
| 3 | Ramagundam | Telangana | 2600 | 1300 |
| 4 | Farakka | West Bengal | 2100 | 1060 |
| 5 | Vindhyachal | Madhya Pradesh | 4760 | 1880 |
| 6 | Rihand | Uttar Pradesh | 3000 | 1500 |
| 7 | Kahalgaoon | Bihar | 2340 | 1180 |
| 8 | Dadri | Uttar Pradesh | 1820 | 920 |
| 9 | Jhajjar (JV) | Haryana | 1500 | 760 |
| 10 | Talcher Kaniha | Odisha | 3000 | 1000 |
| 11 | Unchahar | Uttar Pradesh | 1550 | 560 |
| 12 | Talcher Thermal | Odisha | 460 | 240 |
| 13 | Simhadri | Andhra Pradesh | 2000 | 1000 |
| 14 | Tanda | Uttar Pradesh | 440 | 220 |
| 15 | Sipat | Chhattisgarh | 2980 | 1500 |
| 16 | Mouda | Maharashtra | 2320 | 1160 |
| 17 | Bongaigaon | Assam | 500 | 260 |
| 18 | Barh | Bihar | 1320 | 660 |
| 19 | Kudgi | Karnataka | 2400 | 1200 |
| 20 | Solapur | Maharashtra | 660 | 340 |
| 21 | Lara | Chhattisgarh | 800 | 400 |
| | | Total | 41,150 | 19440 |

The daily requirement is estimated based on 65% plant load factor and is indicative only. However, daily requirement given above may change based on actual plant load factor and requirement of NTPC.

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.805
ANSWERED ON 07.02.2019**

ELECTRIFICATION UNDER SAUBHAGYA

†805. SHRI RAM KUMAR SHARMA:

**Will the Minister of POWER
be pleased to state:**

- (a) whether the Government has implemented Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya) in previous years to connect all the villages with electricity, if so, the details thereof;**
- (b) whether the target had been fixed to connect villages with electricity under the above said scheme for December 2018;**
- (c) if so, the details of targets that have been achieved and the facts thereof; and**
- (d) whether the definition made for electrification of village to make available power to villages is that the entire village be considered electrified after 10% households are provided with electricity connection, if so, the details thereof?**

A N S W E R

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER
AND NEW & RENEWABLE ENERGY**

(SHRI R. K. SINGH)

(a) : Government of India launched Pradhan Mantri Sahaj Bijli Har Ghar Yojana - Saubhagya on 11th October, 2017 with the objective to achieve universal household electrification by providing electricity connections to all remaining un-electrified households in rural and all poor households in urban areas by March, 2019. In the country, 2.48 crore households have been electrified since 11.10.2017.

(b) & (c) : As reported by States, all the inhabited census villages in the country stand electrified as on 28th April, 2018 .

(d) : Pradhan Mantri Sahaj Bijli Har Ghar Yojana – Saubhagya envisages electrifying all remaining un-electrified households in the country by 31st March, 2019.

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.835
ANSWERED ON 07.02.2019**

SCHEMES FOR POWER SECTOR

**†835. SHRI BIDYUT BARAN MAHATO:
SHRI NARANBHAI KACHHADIYA:
SHRI P.P. CHAUHAN:**

**Will the Minister of POWER
be pleased to state:**

- (a) the details of the schemes launched by the Government since the year 2014 till date along with the details of the targets set and the achievements made under each of the said schemes;
- (b) the details of the proposals received from various States along with the proposals approved by the Government under the schemes, State-wise sponsored by the Ministry of Power;
- (c) the details of the funds allocated and utilized for implementation of various schemes during each of the last four years and the current year, scheme-wise and State-wise; and
- (d) whether the Government has set any time-limit for completing the pending schemes and if so, the details thereof?

A N S W E R

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER
AND NEW & RENEWABLE ENERGY**

(SHRI R. K. SINGH)

(a) to (d) : The details of major schemes launched by the Government since the year 2014 are given as under:

- (i) **Deen Dayal Upadhyaya Gram Jyoti Yojana:** Government of India launched Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) in December, 2014 for various rural electrification works including separation of agriculture and non-agriculture feeders, strengthening and augmentation of sub-transmission & distribution infrastructure, metering at distribution transformers/feeders/consumers and electrification of villages across the country.

Under DDUGJY projects of Rs. 42,676.67 crore have been sanctioned. In addition, an amount of Rs.11,996 crore has also been sanctioned for creation of additional infrastructure to cater to the requirement of households electrification being executed under Saubhagya. All the inhabited census villages in the country stand electrified as on 28th April, 2018.

Details of the funds allocated/disbursed under the scheme during each of the last four years and the current year, State-wise are given in Annex-I.

- (ii) **Pradhan Mantri Sahaj Bijli Har Ghar Yojana – “Saubhagya”:** Government of India launched Pradhan Mantri Sahaj Bijli Har Ghar Yojana – “Saubhagya” in October, 2017 with an outlay of Rs. 16,320 crore to achieve universal household electrification by providing last mile connectivity and electricity connections to all households in rural and all poor households in urban areas by March, 2019. Project of Rs. 13,785 crore have been sanctioned under the scheme.

As informed by the States, 2.48 crore households have been electrified up to 28.01.2019, since launch of Saubhagya scheme in October, 2017.

Details of the funds allocated/disbursed under the scheme during each of the last four years and the current year, State-wise are given in Annex-II.

- (iii) **Integrated Power Development Scheme (IPDS):** The Integrated Power Development Scheme (IPDS) was approved by the Government of India on 20.11.2014 with a total outlay of Rs. 32,612 crore and a budgetary support of Rs. 25,354 crore. The aim of the scheme is to provide quality and reliable power supply in the urban areas.

As on 15.01.2019, projects worth Rs. 31,962 crore, (system strengthening-Rs. 28,235cr, IT Ph-2-Rs. 985 cr, Smart metering-Rs. 834cr, ERP-Rs. 747 cr, RT-DAS-Rs. 183 cr, GIS s/s- Rs. 978cr) have been sanctioned for 546 circles in 32 states by the Monitoring Committee. Progress of 52.7% works has been reported by the Utilities. The final sunset for the IPDS Scheme, including old subsumed projects, is March, 2022.

Details of the funds allocated/disbursed under the scheme during each of the last four years and the current year, State-wise are given in Annex-III.

- (iv) **Ujwal DISCOM Assurance Yojana (UDAY):** The Government of India launched Ujwal DISCOM Assurance Yojana (UDAY) for the financial and operational turnaround of state-owned Power Distribution Companies (DISCOMs). The scheme aims to reduce the interest burden, reduce the cost of power, reduce power losses in Distribution sector, and improve operational efficiency of DISCOMs. There are no financial implications on the part of Government of India under UDAY.
- (v) **Power System Development Fund (PSDF):** Government of India has approved the scheme for operationalization of Power System Development Fund (PSDF) on 10th January, 2014. The scheme was operationalized with the issuance of the Guidelines / Procedure for Disbursement of Fund from Power System Development Fund (PSDF) on 18th September, 2014. The funds under schemes are provided as grant to State / Uts/Power Utilities under the scheme.

As on 31/01/2019, Ministry of Power has sanctioned grant of Rs 10864 crores under PSDF to various State/UTs/Power Utilities as per the details given in the Annex-IV.

- (vi) **North-Eastern Region Power System Improvement Project (NERPSIP):** Implementation of this project (as central Sector Scheme, with funding on 50:50 basis by Gol & World Bank) would strengthen the Intra-State transmission & Distribution infrastructure of six states of North Eastern Region (Assam, Meghalaya, Manipur, Mizoram, Nagaland and Tripura); improve its connectivity to the upcoming load centers, and thus would extend the benefits of the grid-connected power to all the consumers. The project would also provide the required grid connectivity to such villages and towns of the States, where development of distribution system at the downstream level has been taking place under Gol sponsored RGGVY/ APDRP/ R-APDRP schemes. NERPSIP covers many transmission & distribution lines & sub-stations at 33kV, 66kV, 132kV and 220kV voltage levels.

State wise Infrastructure to be created in Transmission/Sub-transmission and Distribution under NERPSIP is tabulated below:

| Transmission/ Sub-transmission (132 kV & above) | | | | Distribution (Not below 33kV) | | |
|--|-------------|---------------|--------------------------------|----------------------------------|---------------|--------------------------------|
| Name of State | Line (Kms.) | New S/s (Nos) | Total MVA (New & Augmentation) | Line (Kms.) | New S/s (Nos) | Total MVA (New & Augmentation) |
| Assam | 235 | 11 | 1668 | 479 | 16 | 240 |
| Manipur | 254 | 2 | 112.5 | 131 | 13 | 274.85 |
| Meghalaya | 225 | 4 | 940 | 263 | 11 | 150 |
| Mizoram | 144 | 3 | 108.32 | 5 | 1 | 6.3 |
| Nagaland | 285 | 5 | 245 | 76.5 | 10 | 190 |
| Tripura | 261 | 9 | 1307 | 1077 | 34 | 450.5 |
| Total | 1404 | 34 | 4380.82 | 2031.50 | 85 | 1311.65 |

The projects sanctioned under the scheme are under various stages of implementation and scheduled to be completed progressively by November, 2020.

Details of Fund utilised (upto December 2018)

| Sl. No. | Particulars | Total (in Crs.) |
|---------|------------------|-----------------|
| 1 | Amount disbursed | Rs. 1040.17 |
| 2 | Amount utilized | Rs. 967.44 |

- (vii) **Comprehensive Scheme for strengthening of Transmission & Distribution System in Arunachal Pradesh & Sikkim:** Comprehensive scheme was evolved for strengthening of T&D works in Arunachal Pradesh & Sikkim which covers various lines and substations at 33kV, 66kV, 132kV and 220kV voltage levels. The details of T& D scheme is given as under:

Date of Govt. Approval : October 2014

Implementing Agency : PGCIL (as“Design-cum-implementation supervision Consultant”)

Sanctioned Cost (Rs. crs) : 4754.42 Cr. (at April, 2013 price level)

Completion Schedule : 48 months from the date of release of 1st installment.

Details of fund utilised under Comprehensive Scheme for Arunachal Pradesh & Sikkim

(up to Nov, 2018)-In Rs. Crore

| Sl. No. | State | Fund Allocated | Amount received | Amount spent |
|----------------|--------------------------|-----------------------|------------------------|---------------------|
| 1 | Arunachal Pradesh | 3199.45 | 610.64 | 514.61 |
| 2 | Sikkim | 1554.97 | 483.61 | 447.34 |
| | Total | 4754.42 | 1094.25 | 961.95 |

(viii) **Renewable Energy Management Centre (REMC) : Govt. of India has an ambitious target to have 175 GW of renewable power capacity by 2022 with 100 GW of Solar & 60 GW contributions from wind & balance from other generations. Proper Visualization and situational awareness tool at control center is required for monitoring & control of Renewable power. To perform forecasting, Scheduling and real time tracking of RE generation and co-ordinate closely with respective Load Dispatch Centers, the establishment of REMCs were envisaged. The Forecasting System shall facilitate System Operators in better management of grid operation to ensure Power System Security and Stability. Under the scheme REMC control centers have been sanctioned for 11 locations as per the details given in the Annex-V.**

ANNEX-I

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 835 ANSWERED IN THE LOK SABHA ON 07.02.2019.

State-wise, Year-wise details of grant disbursed under DDUGJY (incl. Additional Infra) during last four years and current year

| (Rs Crore) | | | | | | |
|------------|--------------------|--------------|--------------|--------------|--------------|---------------|
| Sr. | Name of State | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| 1 | Andhra Pradesh | 20 | 31 | 128 | 165 | 161 |
| 2 | Arunachal Pradesh | 60 | 31 | 101 | 81 | 7 |
| 3 | Assam | 115 | 338 | 598 | 401 | 722 |
| 4 | Bihar | 1,490 | 710 | 1,292 | 763 | 1,568 |
| 5 | Chhattisgarh | 94 | 279 | 126 | 552 | 79 |
| 6 | Gujarat | 12 | 58 | 110 | 143 | 166 |
| 7 | Haryana | (14) | - | - | 45 | 22 |
| 8 | Himachal Pradesh | - | 28 | - | - | 15 |
| 9 | J&K | - | - | - | 65 | 340 |
| 10 | Jharkhand | - | - | 327 | 862 | 930 |
| 11 | Karnataka | 26 | 44 | 145 | 204 | 296 |
| 12 | Kerala | 15 | - | 134 | 87 | 57 |
| 13 | Madhya Pradesh | 359 | 439 | 421 | 598 | 620 |
| 14 | Maharashtra | - | 43 | 257 | 143 | 270 |
| 15 | Manipur | - | 7 | 36 | 33 | 25 |
| 16 | Meghalaya | - | - | 26 | 58 | 49 |
| 17 | Mizoram | - | 19 | 14 | 42 | 27 |
| 18 | Nagaland | - | 48 | 21 | 24 | 33 |
| 19 | Orissa | - | 514 | 1,079 | 366 | 884 |
| 20 | Punjab | - | - | - | 15 | 42 |
| 21 | Rajasthan | - | 253 | 347 | 782 | 615 |
| 22 | Sikkim | - | - | - | 18 | 8 |
| 23 | Tamil Nadu | - | 77 | 110 | 2 | 151 |
| 24 | Telangana | 3 | 5 | 27 | 60 | 61 |
| 25 | Tripura | 48 | 49 | 78 | 62 | 22 |
| 26 | Uttar Pradesh | 1,121 | 1,249 | 2,262 | 3,149 | 3,026 |
| 27 | Uttarakhand | 1 | 71 | 16 | 33 | 159 |
| 28 | West Bengal | 145 | 305 | 273 | 241 | 869 |
| 29 | Goa | - | - | - | - | 4 |
| 30 | D&N Haveli | - | - | - | - | 1 |
| 31 | Puducherry | - | - | 1 | - | - |
| 32 | Andaman Nicobar | - | - | - | 1 | - |
| | Grand Total | 3,609 | 4,599 | 7,930 | 8,995 | 11,228 |

* Negative figure pertains to refund of excess funds due to reduction in final project execution cost

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 835 ANSWERED IN THE LOK SABHA ON 07.02.2019.

State-wise details of grant disbursed under Saubhagya since launch of the scheme i.e. 11.10.2017

(Rs. Crore)

| Sl. No | State | 2017-18 | 2018-19 (upto 31.01.2019) | Total Release |
|---------------|-------------------|----------------|----------------------------------|----------------------|
| 1 | Arunachal Pradesh | - | 182 | 182 |
| 2 | Assam | 42 | 389 | 431 |
| 3 | Bihar | 115 | - | 115 |
| 4 | Chhattisgarh | 43 | 190 | 233 |
| 5 | Himachal Pradesh | - | 1 | 1 |
| 6 | J&K | 2 | 51 | 53 |
| 7 | Jharkhand | | | 146 |
| 8 | Kerala | 15 | - | 15 |
| 9 | Madhya Pradesh | 260 | 147 | 407 |
| 10 | Maharashtra | | | 109 |
| 11 | Manipur | 6 | 14 | 20 |
| 12 | Meghalaya | - | 64 | 64 |
| 13 | Mizoram | - | 29 | 29 |
| 14 | Nagaland | 5 | 29 | 34 |
| 15 | Odisha | 76 | 129 | 205 |
| 16 | Rajasthan | - | 103 | 103 |
| 17 | Tripura | - | 156 | 156 |
| 18 | Uttar Pradesh | 864 | 506 | 1,370 |
| 19 | Uttarakhand | 13 | 7 | 20 |
| 20 | West Bengal | 14 | 33 | 47 |
| | Total | 1,541 | 2,200 | 3,741 |

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 835 ANSWERED IN THE LOK SABHA ON 07.02.2019.

| SANCTION-DISBURSEMENT STATUS UNDER IPDS | | | | | | | | | | | | | |
|---|-------------|--------------|--------------|--------------|--------------|------------|------------------|------------|------------|------------|------------|------------|------------------------|
| State | Utility | Sanc 2014-15 | Sanc 2015-16 | Sanc 2016-17 | Sanc 2017-18 | Sanc 18-19 | Sanc Amount Cum. | Disb 14-15 | Disb 15-16 | Disb 16-17 | Disb 17-18 | Disb 18-19 | Disb Amount Cumulative |
| Haryana | UHBVNL | 0 | 79 | 0 | 17 | 13 | 109 | 0 | 0 | 5 | 7 | 2 | 13 |
| | DHBVNL | 0 | 0 | 311 | 21 | 6 | 338 | 0 | 0 | 19 | 6 | 28 | 53 |
| | TOTAL | 0 | 79 | 311 | 37 | 19 | 447 | 0 | 0 | 24 | 13 | 30 | 66 |
| HP | HPSEB | 0 | 111 | 0 | 39 | 40 | 190 | 0 | 0 | 9 | 2 | 21 | 33 |
| J&K | J&K PDD | 0 | 447 | 0 | 21 | 54 | 521 | 0 | 0 | 3 | 35 | 0 | 38 |
| Punjab | PSPCL | 0 | 326 | 0 | 113 | 26 | 465 | 0 | 0 | 20 | 29 | 20 | 69 |
| Chandigarh | ED | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rajasthan | AVVNL | 0 | 410 | 0 | 38 | 45 | 493 | 0 | 0 | 25 | 45 | 0 | 70 |
| | JaVVNL | 0 | 497 | 0 | 91 | 30 | 675 | 0 | 0 | 54 | 33 | 0 | 87 |
| | JoVVNL | 0 | 403 | 0 | 63 | 28 | 513 | 0 | 0 | 51 | 21 | 0 | 72 |
| | TOTAL | 0 | 1310 | 0 | 192 | 103 | 1681 | 0 | 0 | 130 | 99 | 0 | 229 |
| UP | MVVNL | 0 | 724 | 0 | 86 | 15 | 824 | 0 | 0 | 92 | 34 | 212 | 338 |
| | PoorvaVVNL | 607 | 672 | 0 | 210 | 36 | 1527 | 20 | 39 | 145 | 138 | 305 | 648 |
| | PaschimVVNL | 460 | 1026 | 0 | 196 | 15 | 1698 | 5 | 23 | 216 | 316 | 174 | 733 |
| | DVVNL | 0 | 769 | 0 | 78 | 10 | 858 | 0 | 0 | 116 | 125 | 142 | 383 |
| | KESCO | 0 | 463 | 0 | 28 | 4 | 496 | 0 | 0 | 62 | 22 | 167 | 251 |
| TOTAL | 1068 | 3654 | 0 | 599 | 81 | 5402 | 25 | 62 | 631 | 635 | 1001 | 2353 | |
| Uttarakhand | UPCL | 0 | 192 | 12 | 40 | 481 | 725 | 0 | 0 | 16 | 33 | 87 | 136 |
| Delhi | NDMC | | | 198 | 0 | 0 | 198 | | | 0 | 0 | 33 | 33 |
| Delhi | Total | | 0 | 198 | 0 | 0 | 198 | 0 | 0 | 0 | 0 | 33 | 33 |
| MP | MPPKVCL(E) | 0 | 498 | 0 | 90 | 32 | 619 | 0 | 0 | 37 | 53 | 9 | 98 |
| | MPPKVCL(C) | 0 | 485 | 0 | 30 | 14 | 522 | 0 | 0 | 29 | 19 | 38 | 86 |
| | MPPKVCL(W) | 73 | 453 | 0 | 15 | 114 | 649 | 1 | 3 | 35 | 0 | 48 | 87 |
| | TOTAL | 73 | 1436 | 0 | 135 | 159 | 1790 | 1 | 3 | 101 | 71 | 95 | 272 |
| Gujarat | PGVCL | 0 | 462 | 8 | 18 | 0 | 488 | 0 | 0 | 83 | 0 | 115 | 198 |
| | DGVCL | 0 | 188 | 3 | 7 | 0 | 197 | 0 | 0 | 34 | 0 | 0 | 34 |
| | MGVCL | 375 | 0 | 3 | 20 | 0 | 398 | 5 | 18 | 45 | 130 | 5 | 203 |
| | UGVCL | 0 | 103 | 7 | 141 | 0 | 251 | 0 | 6 | 12 | 0 | 0 | 19 |
| | TOTAL | 375 | 753 | 22 | 185 | 0 | 1334 | 5 | 24 | 175 | 130 | 120 | 453 |
| Chhattisgarh | CSPDCL | 0 | 492 | 66 | 53 | 45 | 656 | 0 | 30 | 0 | 40 | 1 | 71 |
| Maharashtra | MSEDCL | 0 | 2312 | 0 | 136 | 80 | 2529 | 0 | 0 | 191 | 160 | 63 | 414 |
| | BEST | 0 | | 105 | 0 | 0 | 105 | 0 | 0 | 6 | 0 | 13 | 19 |
| | TOTAL | 0 | 2312 | 105 | 136 | 80 | 2553 | 0 | 0 | 197 | 160 | 76 | 433 |
| Goa | GOA ED | 0 | 0 | 0 | 32 | 52 | 84 | 0 | 0 | 0 | 2 | 0 | 2 |
| AP | APSPDCL | 209 | 143 | 17 | 34 | 68 | 472 | 3 | 10 | 44 | 120 | 7 | 184 |
| | APEPDCL | 224 | 78 | 4 | 101 | 62 | 469 | 0 | 18 | 23 | 113 | 11 | 165 |
| | TOTAL | 433 | 221 | 21 | 136 | 131 | 941 | 3 | 28 | 67 | 232 | 18 | 349 |
| Telangana | TSNPDCL | 0 | 201 | 6 | 43 | 4 | 255 | 0 | 0 | 12 | 19 | 77 | 108 |
| | TSSPDCL | 0 | 452 | 18 | 38 | 6 | 514 | 0 | 0 | 27 | 51 | 146 | 225 |
| | TOTAL | 0 | 654 | 24 | 81 | 10 | 769 | 0 | 0 | 39 | 70 | 223 | 333 |
| Karnataka | BESCOM | 0 | 459 | 0 | 85 | 0 | 545 | 0 | 0 | 28 | 54 | 130 | 212 |
| | CESC | 0 | 171 | 0 | 19 | 67 | 257 | 0 | 0 | 10 | 19 | 29 | 58 |
| | GESCOM | 0 | 184 | 0 | 6 | 0 | 191 | 0 | 0 | 11 | 18 | 4 | 33 |
| | HESCOM | 0 | 171 | 0 | 45 | 92 | 309 | 0 | 0 | 10 | 19 | 56 | 86 |
| | MESCOM | 0 | 159 | 0 | 15 | 40 | 213 | 0 | 0 | 10 | 19 | 57 | 86 |
| TOTAL | 0 | 1144 | 0 | 171 | 199 | 1514 | 0 | 0 | 69 | 130 | 276 | 475 | |
| Kerala | KSEB | 0 | 0 | 618 | 108 | 5 | 731 | 0 | 0 | 107 | 0 | 0 | 107 |
| | CPT | | | 5 | 0 | 0 | 5 | | | 0 | 0 | 0 | 1 |
| | Total | | 0 | 623 | 108 | 5 | 736 | 0 | 0 | 108 | 0 | 0 | 108 |
| Tamil Nadu | TANGEDCO | 0 | 1569 | 0 | 135 | 150 | 1854 | 0 | 0 | 29 | 250 | 0 | 279 |
| Puducherry | PD | 0 | 22 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 4 | 4 |
| A&N islands | | | | 18 | 0 | 0 | 18 | | | | 1 | 0 | 1 |
| Bihar | NBPDCL | 172 | 891 | 0 | 22 | 364 | 1449 | 2 | 8 | 160 | 0 | 7 | 177 |
| | SBPDCL | 74 | 974 | 0 | 46 | 618 | 1712 | 0 | 4 | 161 | 20 | 0 | 185 |
| | Total | 246 | 1865 | 0 | 68 | 982 | 3161 | 2 | 13 | 321 | 20 | 7 | 363 |
| Jharkhand | JSEB | 0 | 0 | 735 | 54 | 0 | 790 | 0 | 0 | 44 | 89 | 160 | 292 |
| West Bengal | WBSEDCL | 1075 | 1530 | 276 | 32 | 88 | 3000 | 14 | 51 | 109 | 316 | 19 | 508 |
| | DPL | 0 | 59 | 0 | 0 | 0 | 59 | 0 | 0 | 4 | 3 | 4 | 10 |
| | TOTAL | 1075 | 1589 | 276 | 32 | 88 | 3059 | 14 | 51 | 112 | 319 | 23 | 519 |
| Odisha | SOUTHCO | 0 | 260 | 0 | 25 | 3 | 288 | 0 | 0 | 42 | 0 | 39 | 81 |
| | WESCO | 0 | 261 | 0 | 24 | 4 | 289 | 0 | 0 | 44 | 0 | 89 | 133 |
| | NESCO | 0 | 0 | 328 | 21 | 3 | 351 | 0 | 0 | 57 | 0 | 1 | 58 |
| | CESU | 0 | 0 | 234 | 72 | 3 | 310 | 0 | 0 | 40 | 0 | 80 | 120 |
| TOTAL | 0 | 521 | 562 | 142 | 12 | 1238 | 0 | 0 | 183 | 0 | 210 | 392 | |
| Assam | APDCL | 0 | 585 | 0 | 74 | 83 | 742 | 0 | 50 | 0 | 103 | 0 | 153 |
| Arunachal Pradesh | PD | 0 | 151 | 0 | 0 | 8 | 159 | 0 | 0 | 13 | 0 | 0 | 13 |
| Nagaland | PD | 0 | 0 | 44 | 0 | 94 | 138 | 0 | 0 | 4 | 7 | 8 | 19 |
| Manipur | PD | 0 | 130 | 0 | 4 | 23 | 157 | 0 | 11 | 21 | 0 | 0 | 32 |
| Meghalaya | MeECL | 0 | 62 | 0 | 0 | 46 | 108 | 0 | 0 | 5 | 0 | 9 | 15 |
| Mizoram | PD | 0 | 49 | 0 | 4 | 58 | 111 | 0 | 0 | 12 | 0 | 3 | 15 |
| Sikkim | PD | 0 | 0 | 0 | 15 | 146 | 161 | 0 | 0 | 0 | 1 | 9 | 10 |
| Tripura | PD | 0 | 74 | 0 | 31 | 116 | 141 | 0 | 6 | 0 | 8 | 3 | 17 |

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 835 ANSWERED IN THE LOK SABHA ON 07.02.2019.

| Details of Funds Sanctioned/Disbursed under PSDF to States/UTs/ Power utilities | | | |
|--|-------------------------------|----------------------------------|---------------------------------|
| Year 2014-15 : | | | |
| State / Utility | Approved Cost (Rs. cr) | Grant Sanctioned (Rs. cr) | Funds Disbursed (Rs. cr) |
| POWERGRID | 374.63 | 262.24 | 173.99 |
| Kerala | 91.46 | 82.31 | 46.82 |
| Rajasthan | 183.4 | 165.06 | 34.18 |
| West Bengal | 120.67 | 108.6 | 37.74 |
| Year 2015-16 : | | | |
| State / Utility | Approved Cost (Rs. cr) | Grant Sanctioned (Rs. cr) | Funds Disbursed (Rs. cr) |
| Assam | 352.89 | 352.89 | 106.96 |
| Bihar | 71.35 | 64.22 | 56.04 |
| Nagaland | 39.96 | 39.96 | 32.9 |
| Gujarat | 6.99 | 6.82 | 1.7 |
| Karnataka | 86.97 | 78.27 | 44.9684 |
| Odisha | 180.56 | 162.50 | 38.09 |
| Uttar Pradesh | 322.23 | 278.01 | 119.24 |
| Puducherry | 10.56 | 9.5 | 0.95 |
| Meghalaya | 101.72 | 101.72 | 59.95 |
| Tamil Nadu | 138.28 | 124.45 | 23.09 |
| Mizoram | 26.84 | 26.84 | 8 |
| NRPC | 6.45 | 6.45 | 4.486 |
| Jammu & Kashmir | 286.16 | 286.16 | 26.411 |
| Telangana | 59.97 | 53.97 | 12.29 |
| Himachal Pradesh | 55.44 | 55.44 | 34.4400 |
| Tripura | 31.05 | 31.05 | 26.10 |
| POWERGRID | 700.31 | 630.28 | 316.38 |
| Delhi | 125.98 | 113.38 | 20.75 |
| ERPC | 20.00 | 20.00 | 14.8342 |
| Madhya Pradesh | 107.00 | 96.30 | 55.37 |
| Punjab | 18.21 | 16.39 | 0 |
| Uttarakhand | 125.05 | 125.05 | 101.75 |
| Year 2016-17 : | | | |
| State / Utility | Approved Cost (Rs. cr) | Grant Sanctioned (Rs. cr) | Funds Disbursed (Rs. cr) |
| Madhya Pradesh | 58.55 | 52.70 | 9.57 |
| Andhra Pradesh | 169.69 | 152.72 | 29.55 |
| Chhattisgarh | 68.52 | 61.67 | 0.00 |
| Arunachal Pradesh | 18.21 | 18.21 | 0.00 |
| Telangana | 53.63 | 48.27 | 36.99 |
| Manipur | 33.50 | 33.50 | 3.35 |
| West Bengal | 26.09 | 23.48 | 2.35 |
| Haryana | 364.27 | 273.20 | 28.35 |
| Bihar | 75.67 | 68.10 | 0.00 |
| Punjab | 15.30 | 13.78 | 3.01 |
| SRPC | 30.59 | 30.59 | 19.84 |
| Kerala | 5.30 | 4.77 | 0.48 |
| DVC | 28.85 | 25.96 | 2.60 |

| | | | |
|-------------------------|-----------------------------------|--------------------------------------|---------------------------------|
| Tamil Nadu | 13.31 | 11.98 | 1.20 |
| Gujarat | 32.37 | 29.13 | 2.91 |
| PGCIL | 5778.00 | 2889.00 | 0.00 |
| PGCIL/ RECTPCL | 233.03 | 233.03 | 21.78 |
| Year 2017-18 : | | | |
| State / Utility | Approved Cost (Rs. cr) | Grant Sanctioned (Rs. cr) | Funds disbursed (Rs. cr) |
| Kerala | 630.1 | 494.72 | 118.87 |
| DVC | 156.11 | 140.5 | 14.05 |
| West Bengal | 143.24 | 114.89 | 28.89 |
| Tamil Nadu | 497.05 | 322.96 | 16.75 |
| Telangana | 245.74 | 145.49 | 0.65 |
| NERPC | 6.50 | 6.50 | 3.44 |
| Maharashtra | 233.89 | 188.19 | 19.13 |
| Chhattisgarh | 5.03 | 4.53 | 0.00 |
| Uttar Pradesh | 63.31 | 47.48 | 4.74 |
| Rajasthan | 768.14 | 389.35 | 58.16 |
| Gujarat | 631 | 364.75 | 25.4 |
| Manipur | 13.37 | 13.37 | 1.34 |
| | 8.15 | 4.08 | 0.41 |
| Odisha | 24.83 | 22.35 | 2.24 |
| | 51.22 | 25.61 | 0.00 |
| Madhya Pradesh | 7.45 | 6.71 | 0.67 |
| Andhra Pradesh | 284.96 | 142.48 | 0.00 |
| PGCIL | 472.55 | 378.04 | 37.8000 |
| BBMB | 25.86 | 23.27 | 2.33 |
| Jharkhand | 153.48 | 138.13 | 0.00 |
| Uttarakhand | 37.46 | 18.73 | 0.00 |
| Year 2018-19 : | | | |
| State / Utility | Approved Cost (Rs. cr) | Grant Sanctioned (Rs. cr) | Funds disbursed (Rs. cr) |
| ERPC | 6.07 | 6.07 | 0 |
| Chhattisgarh | 145.91 | 42.96 | 0.00 |
| West Bengal | 50.18 | 45.16 | 0.00 |
| Karnataka | 253.57 | 126.79 | 0.00 |
| Andhra Pradesh | 21.48 | 19.33 | 0.00 |
| Punjab | 66.1 | 33.05 | 0.00 |
| Himachal Pradesh | 43.02 | 33.7 | 0 |
| Madhya Pradesh | 428.31 | 219.96 | 0 |
| Odisha | 30.26 | 27.23 | 0.00 |
| Puducherry | 7.37 | 3.69 | 0.00 |
| NERPC | 18 | 18.00 | 0.00 |
| NRPC | 28 | 28.00 | 0.00 |
| Grand Total | | 10864.02 | 1894.25 |

ERPC= Eastern Region Power Committee
NRPC = Northern Region Power Committee
SRPC = Southern Region Power Committee
NERPC = North Eastern Region Power Committee

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 835 ANSWERED IN THE LOK SABHA ON 07.02.2019.

Details of the REMC Centers

| Sl. No. | Location of REMC | Estimated Cost (Rs. Cr.) |
|----------------|-------------------------|-------------------------------------|
| 1 | Tamil Nadu | 45.4 |
| 2 | Andhra Pradesh | 36.5 |
| 3 | Karnataka | 41 |
| 4 | SRLDC | 30.5 |
| 5 | Gujarat | 44 |
| 6 | Madhya Pradesh | 35.8 |
| 7 | Maharashtra | 39.5 |
| 8 | WRLDC | 35 |
| 9 | Rajasthan | 38.7 |
| 10 | NRLDC | 35 |
| 11 | NLDC | 27.6 |
| | Total | 409 |

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.857
ANSWERED ON 07.02.2019**

SHORTAGE OF THERMAL FUEL

857. SHRI MALLIKARJUN KHARGE:

**Will the Minister of POWER
be pleased to state:**

- (a) the total thermal power generated in the country, State-wise, as on date;**
- (b) whether many thermal power plants are not getting sufficient quantity and quality of coal since last year and if so, the details thereof;**
- (c) the steps taken by the Government to address the problems faced by these power plants; and**
- (d) the measures adopted to provide incentives and other encouragements to the major power producing States in the country?**

A N S W E R

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER
AND NEW & RENEWABLE ENERGY**

(SHRI R. K. SINGH)

- (a) : Details of total thermal power generation in the country, State-wise, from 25 MW & above capacity power plants during the current year 2018-19 (up to December 2018) is given at Annexure-I.**
- (b) : Coal is supplied to power plants as per the Fuel Supply Agreements (FSA) between power producer and the coal companies. The details of coal receipt at power plants during last year and current year is given at Annexure-II. With this receipt of coal at power plants, the power requirement in the Electricity grid has been met.**

With the concerted efforts of Ministry of Power, Ministry of Coal and Railways, the coal stock available with the power plants monitored in Central Electricity Authority (CEA) on daily basis has improved to 20.77 MT as on 03.02.2019 which is sufficient for 13 days of generation as compared to 14.6 MT for 9 days as on the same day last year.

(c) & (d) : In order to address the coal quality issue, it has been decided by the Ministry of Power and the Ministry of Coal that the power utilities would appoint a Third Party Sampler namely Central Institute of Mining and Fuel Research (CIMFR) for Third Party Sampling and Analysis of coal at loading-end as well as at unloading-end. Based on the Third Party Sampling analysis results furnished by CIMFR, credit/debit note are issued by coal companies to the power plants in case of difference between declared grade of coal and analyzed grade of coal.

An Inter-Ministerial Sub-Group comprising representatives of Ministry of Power, Ministry of Coal and Ministry of Railways, CEA, CIL and SCCL monitors coal supply position on regular basis. Based on the decision taken in the meeting, CIL/SCCL augment supply of coal and the Railways give priority in supply of rakes to the power plants having less coal stock.

Following steps have also been taken by the Government to address the problems faced by thermal power plants:

- (i) Phase out of erstwhile Letter of Authorisation (LoA) -Fuel Supply Agreement (FSA) regime and Introduction of new SHAKTI POLICY-2017.**
- (ii) Provision of Bridge Linkages to allottees whose mines are under development.**
- (iii) Recommendation of the High Level Empowered Committee to address the issues of stressed Thermal Power Projects.**

ANNEXURE-I**ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 857 ANSWERED IN THE LOK SABHA ON 07.02.2019.**

State-wise Thermal Generation during current year 2018-19(Up to December 2018)

| State | Generation (Million Unit) |
|------------------------|----------------------------------|
| ANDAMAN NICOBAR | 99.98 |
| ANDHRA PRADESH | 46292.41 |
| ASSAM | 4053.81 |
| BIHAR | 23730.92 |
| CHHATTISGARH | 88426.9 |
| DELHI | 6155.66 |
| DVC | 26490.02 |
| GUJARAT | 69052.52 |
| HARYANA | 19520.77 |
| JHARKHAND | 10254.36 |
| KARNATAKA | 21437.68 |
| KERALA | 1.23 |
| MADHYA PRADESH | 88157.25 |
| MAHARASHTRA | 91981.11 |
| ORISSA | 29624.07 |
| PUDUCHERRY | 181.45 |
| PUNJAB | 20932.74 |
| RAJASTHAN | 35635.77 |
| TAMIL NADU | 52398.65 |
| TELANGANA | 35319.44 |
| TRIPURA | 4873.95 |
| UTTAR PRADESH | 91546.28 |
| UTTARAKHAND | 880.81 |
| WEST BENGAL | 38385.74 |
| Total | 805433.52 |

Note:

- 1. Gross Generation from Thermal stations of 25 MW and above only.**
- 2. Figures given above indicate gross generation of all power stations (Central, State & Private Sector) located geographically in the respective State/UT.**

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 857 ANSWERED IN THE LOK SABHA ON 07.02.2019.

Coal Receipt at the Power Plants (MT)

| Sl. No. | | 2017-18 | 2018-19 (upto December) |
|----------------|--|----------------|------------------------------------|
| 1. | CIL | 416.0 | 337.2 |
| 2. | SCCL | 52.1 | 40.9 |
| 3. | Captive | 31.6 | 29.3 |
| 4. | E Auction | 39.0 | 22.0 |
| 5. | Total Domestic Receipt [1 to 4] | 538.6 | 429.3 |
| 6. | Imported (Blending) | 17.0 | 15.3 |
| 7. | Imported (Imported coal plants) | 39.4 | 29.4 |
| 8. | Total Imported Receipt [6+7] | 56.4 | 44.6 |
| 9. | Total Coal Receipt [5+8] | 595.0 | 473.9 |

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.871
ANSWERED ON 07.02.2019**

POWER EQUIPMENTS

871. SHRI KONAKALLA NARAYANA RAO:

**Will the Minister of POWER
be pleased to state:**

- (a) whether the Government is making it mandatory for indigenous and thermal and hydro power producers to purchase power equipments from local markets;
- (b) if so, the details thereof;
- (c) whether the Government while issuing the guidelines ensured that the equipments that power producers are going to purchase are made available in the local markets, if so, the details thereof; and
- (d) the measures being taken by the Government to make sure that the equipments are made available in the local market?

A N S W E R

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER
AND NEW & RENEWABLE ENERGY**

(SHRI R. K. SINGH)

(a) to (d) : Government of India, Department of Industrial Policy & Promotion under order dated 15th June, 2017 and 28th May, 2018 has issued Public Procurement (Preference to Make in India), Orders, 2017 to encourage "Make in India" and to promote manufacturing and production of goods and services in India. In pursuance of the aforesaid order, the Ministry of Power has issued orders dated 20th December, 2018 and 27th December, 2018 in respect of Hydro and Thermal Power Sectors respectively, to provide for purchase preference (linked with local content). As per these orders, preference shall be given by public procuring entities to domestically manufactured products used in thermal and hydro power sector. These orders have been issued after taking into consideration the aspect of indigenous availability of power equipments, current import content and target of local content for next five years including assessment by manufacturers/suppliers for the same.

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.887
ANSWERED ON 07.02.2019**

MEETING WITH MOS

887. SHRI J.C. DIVAKAR REDDY:

**Will the Minister of POWER
be pleased to state:**

- (a) whether the Government recently held a meeting with all the States Power Ministers; and**
- (b) if so, the details of issues discussed and outcome thereof particularly related to Andhra Pradesh State?**

A N S W E R

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER
AND NEW & RENEWABLE ENERGY**

(SHRI R. K. SINGH)

(a) & (b) : The last Conference of Power and Renewable Energy Ministers of States and Union Territories was held on 3rd July, 2018 at Shimla, Himachal Pradesh. The issues discussed therein, inter-alia, included, Saubhagya - household electrification, implementation of Integrated Power Development Scheme (IPDS), performance under Ujwal DISCOM Assurance Yojana (UDAY), 24X7 power for all, flexibility in utilization of coal, charging infrastructure for E-vehicles, energy conservation, compliance of renewable purchase obligations (RPOs), and bidding for solar and wind capacity etc. The decisions / recommendation arising out of Power Ministers Conference, including those related to Andhra Pradesh are given at Annexure.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 887 ANSWERED IN THE LOK SABHA ON 07.02.2019.

Gist of important decisions / recommendations arising out of Power Ministers' Conference held on 3rd July, 2018 in Shimla, including those related to Andhra Pradesh, is as under:

- 1. Achievement of 100% household electrification by 31st December 2018.**
- 2. State Government were requested to give comments on proposed amendments in the Electricity Act and Tariff Act.**
- 3. The States were requested to increase the pace of implementation of IPDS scheme so as to complete the works by March 2019.**
- 4. The States having more than 15% AT&C losses were requested to submit action plan/road map for loss reduction.**
- 5. All subsidies have to be provided by Direct Benefit Transfer (DBT) which need to be released in time.**
- 6. There shall be a provision for penalty for unscheduled load shedding with effect from 1.4.2019.**
- 7. Thrust has to be given to use of electric energy instead of fossil-fuel energy.**
- 8. A target was set to achieve 30% of vehicles being manufactured to be electrical vehicle by 2020.**
- 9. Setting up of charging stations for electrical vehicles through out the country in a gradual manner.**
- 10. States and UTs will prepare month-wise plans for bidding of Solar and Wind power capacity in order to achieve 175 GW renewable energy target by 2022.**
- 11. The RPO compliance should be ensured by State/UT strictly and RPO trajectory should be aligned as per long term trajectory upto 2022, as notified by Ministry of Power.**
- 12. Promotion of Solar based cooking.**
- 13. Solarization of agricultural pumps.**
- 14. States/UTs were requested to submit proposals for Solar parks under additional 20,000 MW capacity allocation.**
- 15. Disposal of Bio-mass in an environmentally friendly manner and conversion of bio-mass into small briquettes so as to use the same in Thermal Power Plants.**
- 16. An R&D Mission shall be formulated to encourage development of new technology in renewable energy sector.**

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.889
ANSWERED ON 07.02.2019**

UDAY SCHEME

889. SHRI GUTHA SUKENDER REDDY:

**Will the Minister of POWER
be pleased to state:**

- (a) whether the Ujwal Discom Assurance Yojana (UDAY) scheme has shown any positive effect on the performance of the Power Distribution Companies;**
- (b) if so, the details thereof;**
- (c) whether in spite of implementation of UDAY Scheme still the power distribution companies are becoming further debt driven;**
- (d) whether any study has been conducted to evolve the issues, if so, the details thereof; and**
- (e) the details of the estimated targets and achieved results so far, State-wise?**

A N S W E R

**THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER
AND NEW & RENEWABLE ENERGY**

(SHRI R. K. SINGH)

(a) to (d): As a result of Ujwal Discom Assurance Yojana (UDAY), State Power Distribution Utilities have reported improvement in their performance in number of parameters such as (i) Aggregate Technical & Commercial (AT&C) losses have come down from 20.80% in 2015-16 to 18.76% in 2017-18. 23 UDAY States out of 27 have reduced AT&C losses from 2015-16 to 2017-18; (ii) Average Cost of Supply (ACS) – Average Revenue Realised (ARR) gap has come down from 60 paise per unit in 2015-16 to 17 paise per unit in 2017-18; (iii) Book losses reduced from Rs.51,575 crore in 2015-16 to Rs.15,132 crore in 2017-18; and (iv) Total debt has not increased.

(e): The details of State-wise targets and achievements for key parameters of UDAY in respect of AT&C losses and ACS-ARR gap are given at Annexure-I and Annexure-II respectively.

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (e) OF UNSTARRED QUESTION NO. 889 ANSWERED IN THE LOK SABHA ON 07.02.2019.

| Target and achievement of AT&C Losses | | | | | | | |
|--|----------------------------|---------------|------------------------------------|-----------------------|----------------------------|-----------------------|----------------------------|
| Sl. No. | State/UT | Unit | Base Year figures (2015-16) | Target 2016-17 | Achievement 2016-17 | Target 2017-18 | Achievement 2017-18 |
| 1 | Andhra Pradesh | (In %) | 9.41 | 9.26 | 10.96 | 9.00 | 8.69 |
| 2 | Arunachal Pradesh | (In %) | 64.27 | 52.41 | 35.88 | 43.00 | 65.45 |
| 3 | Assam | (In %) | 25.51 | 19.00 | 23.81 | 17.75 | 15.71 |
| 4 | Bihar | (In %) | 43.74 | 36.43 | 38.97 | 29.03 | 33.19 |
| 5 | Chhattisgarh | (In %) | 21.79 | 18.93 | 19.34 | 18.00 | 18.8 |
| 6 | Dadra and Nagar Haveli | (In %) | - | 7.95 | 9.23 | 7.50 | 6.09 |
| 7 | Daman and Diu | (In %) | 13.25 | 10.33 | 10.65 | 9.32 | 10.34 |
| 8 | Goa | (In %) | 17.12 | 18.75 | 16.79 | 16.59 | 16.12 |
| 9 | Gujarat | (In %) | 15.04 | 14.00 | 12.28 | 13.50 | 11.71 |
| 10 | Haryana | (In %) | 29.83 | 24.02 | 25.43 | 20.04 | 20.29 |
| 11 | Himachal Pradesh | (In %) | 12.92 | 13.25 | 8.48 | 13.00 | 12.14 |
| 12 | Jammu & Kashmir | (In %) | 61.6 | 46.00 | 61.34 | 35.00 | 53.78 |
| 13 | Jharkhand | (In %) | 34.71 | 28.00 | 31.8 | 22.00 | 31.78 |
| 14 | Karnataka | (In %) | 14.94 | 15.50 | 15.36 | 15.00 | 14.48 |
| 15 | Kerala | (In %) | 16.03 | 11.45 | 17.28 | 11.23 | 12.05 |
| 16 | Madhya Pradesh | (In %) | 23.97 | 21.15 | 26.53 | 19.15 | 29.74 |
| 17 | Maharashtra | (In %) | 19.07 | 16.74 | 18.88 | 17.51 | 17.41 |
| 18 | Manipur | (In %) | 44.21 | 28.89 | 36.89 | 20.33 | 24.61 |
| 19 | Meghalaya | (In %) | 36.48 | 32.51 | 34.87 | 27.50 | 34.64 |
| 20 | Puducherry | (In %) | 19.88 | 19.00 | 18.98 | 15.00 | 19.56 |
| 21 | Punjab | (In %) | 15.9 | 15.30 | 14.46 | 14.50 | 17.26 |
| 22 | Rajasthan | (In %) | 30.41 | 20.11 | 26.02 | 17.57 | 20.02 |
| 23 | Sikkim | (In %) | 38.06 | 29.50 | 40.59 | 25.94 | 32.57 |
| 24 | Tamil Nadu | (In %) | 14.58 | 14.05 | 14.53 | 13.79 | 14.23 |
| 25 | Telangana | (In %) | 13.95 | 12.45 | 15.88 | 11.19 | 13.5 |
| 26 | Tripura | (In %) | 20.94 | 30.00 | 16.61 | 25.00 | 15.52 |
| 27 | Uttar Pradesh | (In %) | 26.47 | 28.27 | 30.21 | 23.63 | 27.67 |
| 28 | Uttarakhand | (In %) | 17.19 | 16.00 | 14.02 | 15.00 | 15.73 |
| | UDAY States Average | (In %) | 20.8 | 18.74 | 20.25 | 16.83 | 18.76 |

(Above data is based on provisional data as submitted by States /DISCOMs on UDAY portal)

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (e) OF UNSTARRED QUESTION NO. 889 ANSWERED IN THE LOK SABHA ON 07.02.2019.

| Target and achievement of ACS-ARR gap | | | | | | | |
|---------------------------------------|------------------------|----------|-----------------------------|----------------|---------------------|----------------|---------------------|
| Sl. No | State/UT | UNIT | Base Year figures (2015-16) | Target 2016-17 | Achievement 2016-17 | Target 2017-18 | Achievement 2017-18 |
| 1 | Andhra Pradesh | Rs./Unit | 0.82 | 0.21 | 0.44 | 0.09 | 0.02 |
| 2 | Arunachal Pradesh | Rs./Unit | 3.76 | 0 | 5.22 | 0 | 4.32 |
| 3 | Assam | Rs./Unit | 0.58 | 0.43 | 0.3 | 0.19 | 0.43 |
| 4 | Bihar | Rs./Unit | 0.65 | 1.33 | 0.59 | 0.83 | 0.39 |
| 5 | Chhattisgarh | Rs./Unit | 0.18 | -1.21 | -0.15 | -0.34 | -0.03 |
| 6 | Dadra and Nagar Haveli | Rs./Unit | - | 0 | 0.27 | 0 | 0.06 |
| 7 | Daman and Diu | Rs./Unit | -0.11 | -0.36 | -0.11 | -0.22 | -0.02 |
| 8 | Goa | Rs./Unit | 1.5 | 0.75 | 0.95 | 0.2 | 0.41 |
| 9 | Gujarat | Rs./Unit | -0.02 | -0.04 | -0.03 | -0.04 | -0.04 |
| 10 | Haryana | Rs./Unit | 0.18 | 0.83 | 0.04 | 0.51 | -0.02 |
| 11 | Himachal Pradesh | Rs./Unit | -0.32 | -0.04 | 0.21 | -0.05 | -0.09 |
| 12 | Jammu & Kashmir | Rs./Unit | 2.55 | 0.68 | 2.15 | 0.71 | 1.96 |
| 13 | Jharkhand | Rs./Unit | 1.22 | 1.99 | 1.39 | 0.99 | 0.57 |
| 14 | Karnataka | Rs./Unit | 0.06 | 0 | 0.06 | -0.01 | 0.07 |
| 15 | Kerala | Rs./Unit | 0.23 | 0.26 | 0.53 | -0.04 | 0.27 |
| 16 | Madhya Pradesh | Rs./Unit | 0.92 | 0.34 | 0.24 | 0.16 | 0.33 |
| 17 | Maharashtra | Rs./Unit | 0.3 | 0.36 | 0.28 | 0.01 | -0.07 |
| 18 | Manipur | Rs./Unit | 1.31 | 1.68 | 0.1 | 0.64 | 0.08 |
| 19 | Meghalaya | Rs./Unit | 0.88 | 0.83 | 1.99 | 0.61 | 1.3 |
| 20 | Puducherry | Rs./Unit | 0.03 | 0 | -0.11 | 0 | 0 |
| 21 | Punjab | Rs./Unit | 0.53 | 0.37 | 0.65 | 0.04 | 0.48 |
| 22 | Rajasthan | Rs./Unit | 1.65 | 0.4 | 0.36 | 0.2 | -0.33 |
| 23 | Sikkim | Rs./Unit | 7.96 | 0.7 | 4.62 | 0.39 | 6.93 |
| 24 | Tamil Nadu | Rs./Unit | 0.6 | 0.2 | 0.39 | 0.05 | 0.28 |
| 25 | Telangana | Rs./Unit | 0.69 | 0.87 | 1.24 | 0.4 | 0.55 |
| 26 | Tripura | Rs./Unit | 0.24 | 0.05 | 0.02 | 0.04 | 0.08 |
| 27 | Uttar Pradesh | Rs./Unit | 0.88 | 1.04 | 0.62 | 0.6 | 0.28 |
| 28 | Uttarakhand | Rs./Unit | 0.1 | 0.04 | 0.22 | -0.01 | 0.17 |
| | UDAY State's Average | Rs./Unit | 0.60 | 0.48 | 0.42 | 0.24 | 0.17 |

(Above data is based on provisional as submitted by States /DISCOMs on UDAY portal)
