GOVERNMENT OF INDIA MINISTRY OF POWER

LOK SABHA UNSTARRED QUESTION NO.3122 TO BE ANSWERED ON 03.08.2017

PER CAPITA CONSUMPTION OF POWER

3122. SHRI TEJ PRATAP SINGH YADAV:

Will the Minister of POWER be pleased to state:

- (a) whether India is 5th largest producer of electricity in the world but it ranks 150th in terms of per capita consumption;
- (b) if so, the details thereof;
- (c) whether the demand and supply mismatch for electricity is growing even as millions have no access to power at all, especially in rural areas;
- (d) if so, the details thereof;
- (e) whether reforms in power sector is imperative as estimated financial loss amounts to over 4 per cent of GDP; and
- (f) if so, the steps being taken by the Government in this regard?

ANSWER

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

- (a) & (b): As per information available from International Energy Agency (IEA), India was the 3rd largest producer of electricity in the world and 105th in terms of per capita consumption in 2014. Top ten electricity producing countries in the world as per data by Key World Energy Statistics 2016 (IEA) for the year 2014 is given at Annexure-I. The per capita consumption of various countries as per Key World Energy Statistics 2016 (International Energy Agency) for the year 2014 is given at Annexure-II.
- (c) & (d): The gap in demand and supply of electricity, in terms of Peak in MW and Energy in MU has progressively reduced despite increase in Peak demand and Energy requirement. The details are given at Annexure-III.
- (e) & (f): As per the report of PFC, the aggregate losses for utilities selling power directly to consumers are having decreasing trend. As a reform measure, Ministry of Power has commenced UDAY (Ujwal DISCOM Assurance Yojana), [a Scheme for the Financial turnaround of Power Distribution Companies (DISCOMs)] with a view to improving the operational and financial efficiency of the State DISCOMs.

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3122 TO BE ANSWERED IN THE LOK SABHA ON 03.08.2017.

Top ten electricity producing countries in the world as per data by Key World Energy Statistics 2016 (IEA) for the year 2014

| S. No. | Country | Electricity Production (TWh) 5666 4319 | | | |
|--------|------------------------|--|--|--|--|
| 1 | People's Rep. of China | | | | |
| 2 | United States | | | | |
| 3 | India | 1279* | | | |
| 4 | Russian Federation | 1062 | | | |
| 5 | Japan | 1036 | | | |
| 6 | Canada | 656 | | | |
| 7 | Germany | 622 | | | |
| 8 | Brazil | 591 | | | |
| 9 | France | 557 | | | |
| 10 | Korea | 546 | | | |

^{*}Figure in respect of India has been calculated by CEA and pertains to the financial year 2014-15

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3122 TO BE ANSWERED IN THE LOK SABHA ON 03.08.2017.

Per capita consumption of various countries as per Key World Energy Statistics 2016 (International Energy Agency) for the year 2014

| SI. No. | Region/Country | Electricity per capita consumption (kWh/popl.) |
|---------|----------------------|--|
| 1 | Iceland | 53896 |
| 2 | Norway | 23001 |
| 3 | Bahrain | 19224 |
| 4 | Qatar | 16736 |
| 5 | Canada | 15544 |
| 6 | Kuwait | 15333 |
| 7 | Finland | 15246 |
| 8 | Luxembourg | 13873 |
| 9 | Sweden | 13480 |
| 10 | United States | 12962 |
| 11 | United Arab Emirates | 11245 |
| 12 | Chinese Taipei | 10738 |
| 13 | Korea | 10564 |
| 14 | Brunei Darussalam | 10113 |
| 15 | Australia | 10002 |
| 16 | Saudi Arabia | 9410 |
| 17 | New Zealand | 9131 |
| 18 | Singapore | 8844 |
| 19 | Austria | 8358 |
| 20 | Japan | 7829 |
| 21 | Belgium | 7745 |
| 22 | Switzerland | 7520 |
| 23 | Trinidad and Tobago | 7137 |
| 24 | Germany | 7035 |
| 25 | France | 6955 |
| 26 | Slovenia | 6728 |
| 27 | Estonia | 6725 |
| 28 | Netherlands | 6713 |
| 29 | Israel | 6604 |
| 30 | Russian Federation | 6603 |
| 31 | Czech Republic | 6259 |
| 32 | Oman | 6128 |
| 33 | Hong Kong, China | 6073 |
| 34 | Denmark | 5859 |
| 35 | Gibraltar | 5818 |
| 36 | Ireland | 5725 |
| 37 | Kazakhstan | 5600 |
| 38 | Spain | 5358 |
| 39 | Slovak Republic | 5137 |
| 40 | United Kingdom | 5131 |
| 41 | Greece | 5047 |
| 42 | Malta | 5012 |
| 43 | Italy | 5002 |
| 44 | Cyprus ⁵ | 4868 |
| 45 | Curaçao | 4795 |

| | T | | | |
|-----|--------------------------|------|--|--|
| 46 | Bulgaria | 4709 | | |
| 47 | Portugal | 4663 | | |
| 48 | Malaysia | 4646 | | |
| 49 | Montenegro | 4611 | | |
| 50 | Serbia | 4273 | | |
| 51 | South Africa | 4240 | | |
| 52 | Hungary | 3966 | | |
| 53 | China (People's Rep. of) | 3927 | | |
| 54 | Poland | 3923 | | |
| 55 | Chile | 3863 | | |
| 56 | Lithuania | 3826 | | |
| 57 | Croatia | 3715 | | |
| 58 | Suriname ⁵ | 3699 | | |
| 59 | Belarus | 3682 | | |
| 60 | Lebanon | 3565 | | |
| 61 | Latvia ⁵ | 3514 | | |
| 62 | FYR of Macedonia | 3500 | | |
| 63 | Ukraine | 3412 | | |
| 64 | Bosnia and Herzegovina | 3144 | | |
| 65 | Uruguay | 3068 | | |
| 66 | Argentina | 3052 | | |
| 67 | Islamic Rep. of Iran | 2996 | | |
| 68 | Turkey | 2870 | | |
| 69 | Kosovo | 2803 | | |
| 70 | Turkmenistan | 2759 | | |
| 71 | Venezuela | 2661 | | |
| 72 | Romania | 2584 | | |
| 73 | Brazil | 2578 | | |
| 74 | Thailand | 2566 | | |
| 75 | Jordan | 2517 | | |
| 76 | Albania | 2305 | | |
| 77 | Georgia | 2225 | | |
| 78 | Azerbaijan | 2202 | | |
| 79 | Mauritius | 2182 | | |
| 80 | Mexico | 2169 | | |
| 81 | Panama | 2082 | | |
| 82 | Mongolia | 2027 | | |
| 83 | Costa Rica | 1958 | | |
| 84 | Kyrgyzstan | 1942 | | |
| 85 | Armenia | 1901 | | |
| 86 | Libya | 1841 | | |
| 87 | Botswana | 1708 | | |
| 88 | Egypt | 1699 | | |
| 89 | Uzbekistan | 1645 | | |
| 90 | Dominican Republic | 1578 | | |
| 91 | Namibia | 1563 | | |
| 92 | Paraguay | 1563 | | |
| 93 | Tajikistan | 1492 | | |
| 94 | Tunisia | 1463 | | |
| 95 | Cuba | 1442 | | |
| 96 | Vietnam | 1439 | | |
| 97 | Moldova | 1386 | | |
| 98 | Ecuador | 1381 | | |
| 99 | Algeria | 1363 | | |
| | | | | |
| 100 | Iraq | 1313 | | |

| 101 | Peru | 1308 | | |
|-----|------------------------|------|--|--|
| 102 | Gabon | 1303 | | |
| 103 | Colombia | 1290 | | |
| 104 | Jamaica | 1110 | | |
| 105 | India | 1010 | | |
| 106 | El Salvador | 966 | | |
| 107 | Morocco | 912 | | |
| 108 | Syrian Arab Republic | 823 | | |
| 109 | Indonesia | 814 | | |
| 110 | Bolivia | 753 | | |
| 111 | Philippines | 706 | | |
| 112 | Zambia | 703 | | |
| 113 | Honduras | 697 | | |
| 114 | DPR of Korea | 602 | | |
| 115 | Nicaragua | 580 | | |
| 116 | Guatemala | 575 | | |
| 117 | Zimbabwe | 543 | | |
| 118 | Sri Lanka | 535 | | |
| 119 | Pakistan | 472 | | |
| 120 | Mozambique | 463 | | |
| 121 | Ghana | 357 | | |
| 122 | Angola | 347 | | |
| 123 | Bangladesh | 311 | | |
| 124 | Côte d'Ivoire | 281 | | |
| 125 | Cameroon | 274 | | |
| 126 | Cambodia | 270 | | |
| 127 | Sudan | 248 | | |
| 128 | Senegal | 222 | | |
| 129 | Yemen | 217 | | |
| 130 | Republic of Congo | 213 | | |
| 131 | Myanmar | 211 | | |
| 132 | Kenya | 171 | | |
| 133 | Togo | 155 | | |
| 134 | Nigeria | 144 | | |
| 135 | Nepal | 140 | | |
| 136 | Dem. Rep. of the Congo | 107 | | |
| 137 | Tanzania | 100 | | |
| 138 | Benin | 97 | | |
| 139 | Ethiopia | 70 | | |
| 140 | Eritrea | 63 | | |
| 141 | Niger | 52 | | |
| 142 | Haiti | 39 | | |
| 143 | South Sudan | 39 | | |
| | • | • | | |

Note: Figure in respect of India has been calculated by CEA and pertains to the financial year 2014-15

ANNEXURE-III

ANNEXURE REFERRED TO IN REPLY TO PARTS (c) & (d) OF UNSTARRED QUESTION NO. 3122 TO BE ANSWERED IN THE LOK SABHA ON 03.08.2017.

Year wise Demand and supply of electricity

| FY | Peak demand (MW) | Peak Met (MW) | Gap | | Energy | Energy | Gap | |
|-------------|------------------------|---------------------|---------|-------|---------------------|------------------|-------------|-----------|
| | | | (MW) | % | requirement (MU) | supplied (MU) | (MU) | (%) |
| 2014- 15 | 1,48,166 | 1,41,160 | -7,006, | -4.7% | 10,68,923 | 10,30,785 | - 38,138 | - 3.6% |
| 2015- 16 | 1,53,366 | 1,48,463 | -4,903, | -3.2% | 11,14,408 | 10,90,850 | - 23,558 | 2.1% |
| 2016- 17 | 1,59,542 | 1,56,542 | -991, | -1.6% | 11,42,928 | 11,35,332 | -7,596 | - 0.7% |
