

(d) if so, whether reforms in power sector is imperative as estimated financial loss amounts to over 4 per cent of GDP; and

(e) if so, the steps taken by Government in this regard?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRI PIYUSH GOYAL): (a) and (b) As per the International Energy Agency (IEA) publication on World Energy Statistics 2013, India ranks 5th in Electricity production and 110th in the per-capita consumption of electricity.

(c) to (e) The demand supply mismatch has been reducing. The peak shortage has reduced from 8.5% in 2010-11 to 4.2% in 2013-14 and energy deficit has reduced from 9.5% in 2010-11 to 4.5% in 2013-14.

A Reforms Monitoring Unit (RMU) constituted in May, 2011, is already working under Central Electricity Authority to monitor reforms process in the power sector, initiated by the Electricity Act, 2003, the National Electricity Policy, 2005 and the National Tariff Policy, 2006. The progress in implementation of the reforms is monitored regularly by this RMU.

### **Hydro power projects**

3465. SHRI BASAWARAJ PATIL: Will the Minister of POWER be pleased to state:

(a) the number of hydro power projects in the country;

(b) the number of those projects which have not been commenced, State-wise;

(c) the steps taken by Government to start these projects; and

(d) the mechanism to find out the potential of hydro projects and whether any hydro power project had been surveyed in Raichur district under Krishna Basin *i.e.* Golapally Hydro Project?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRI PIYUSH GOYAL): (a) As on 31.07.2014, there are 188 Hydro Electric Projects (HEPs) with installed capacity of 40798.75 MW (having station capacity above 25 MW) under operation in the country.

(b) At present, 40 HEPs aggregating to Installed capacity of 26,080 MW, concurred by Central Electricity Authority (CEA) are yet to be taken up for construction. State-wise details are given in the Statement (*See below*).

(c) Out of above 40 concurred HEPs/Schemes, 30 HEPs/Schemes could not be commenced due to non-availability of environment/forest clearances and other difficulties.

Ministry of Power/CEA reviews above projects with the project developers and the concerned authorities periodically for resolving the issues.

(d) The potential of Hydro Projects in the country was assessed by CEA during 1978-87 utilizing hydrological, meteorological and other related data collected from various sources including information obtained from the detailed study of Topographical maps available at that time. The study also took into account the available information regarding diversions of water for irrigation and other purposes of all the schemes which were in operation or under construction.

While assessing the hydro potential of a particular project, the discharge data and the available head between the diversion structure and tail race has been taken to make an assessment of the hydro potential in terms of Installed Capacity and energy generation.

CEA has not identified Golapally Hydro Project in Krishna Basin in Raichur district in the above re-assessment study.

#### *Statement*

*Hydro Electric Schemes concurred by CEA and yet to be taken up for construction since 2002-03*

Sl. No.	Scheme/Sector	Installed Capacity (MW)
<b>Northern Region</b>		
<b>Jammu and Kashmir</b>		
1.	Pakal Dul/Central	1000
2.	New Ganderwal	93
<b>Himachal Pradesh</b>		
3.	Kutehr/Private	240
4.	Miyar/Private	120
5.	Chango Yangthang	180
<b>Uttarakhand</b>		
6.	Kotlibhel St-IA/Central	195

Sl. No.	Scheme/Sector	Installed Capacity (MW)
7.	Kotlibhel St-IB/Central	320
8.	Kotlibhel St-II/Central	530
9.	Pala Maneri/State	480
10.	Alaknanda/Private	300
11.	Rupsiyabagar Khasiyabara/Central	261
12.	Vyasi/State	120
13.	Devsari/Central	252
SUB- TOTAL: NR		4091
<b>Western Region</b>		
<b>Chhattisgarh</b>		
14.	Matnar/State	60
SUB- TOTAL: WR		60
<b>Eastern Region</b>		
<b>West Bangal</b>		
15.	Rammam St-III/Central	120
<b>Odisha</b>		
16.	Jalaput Dam Toe/Private	18
<b>Sikkim</b>		
17.	Teesta St-IV/Central	520
SUB - TOTAL: ER		658
<b>Southern Region</b>		
<b>Kerala</b>		
18.	Athirappilly/State	163
<b>Andhra Pradesh</b>		
19.	Indirasagar (Polavaram)/State	960
<b>Karnataka</b>		
20.	Gundia/State	200
SUB - TOTAL: SR		1323

Sl. No.	Scheme/Sector	Installed Capacity (MW)
<b>N-E Region</b>		
<b>Manipur</b>		
21.	Tipaimukh/Central	1500
22.	Loktak D/S/Central	66
<b>Arunachal Pradesh</b>		
23.	Dibang/Central	3000
24.	Dibbin/Private	120
25.	Lower Siang/Private	2700
26.	Nafra/Private	120
27.	Nyamjang Chhu/Private	780
28.	Tawang St-I/Central	600
29.	Tato-II/Private	700
30.	Tawang St-II/Central	800
31.	Demwe Lower/Private	1750
32.	Gongri/Private	144
33.	Hirong/Private	500
34.	Etalin/Private	3097
35.	Talong Londa/Private	225
36.	Naying/Private	1000
37.	Siyom	1000
38.	Kalai-II	1200
<b>Mizoram</b>		
39.	Kolodyne St-II/Central	460
<b>Nagaland</b>		
40.	Dikhu	186
SUB-TOTAL NER		19948
TOTAL ALL INDIA		26080