1	2	3
8.	Madhya Pradesh	47
9.	Manipur	66
10.	Meghalaya	168
11.	Mizoram	12
12.	Odisha	434
13.	Rajasthan	1
14.	Uttar Pradesh	6
15.	Uttarakhand	51
16.	West Bengal	4
	TOTAL	3,618

R&D in energy transmission

1676. DR. R. LAKSHMANAN: Will the Minister of POWER be pleased to state:

(a) whether Government has undertaken any Research and Development (R&D) activities in the field of energy transmission to use equipment made of such materials which can minimise dissipation of energy during transmission, transformation, sub-transmission and distribution of power;

(b) if so, the details thereof; and

(c) if not, the reasons therefor?

THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI PIYUSH GOYAL): (a) to (c) Ministry of Power through Central Power Research Institute (CPRI), an autonomous organization under this Ministry, has taken up following Research and Development (R&D) projects in the field of energy transmission:¬

(i) Development of High Temperature Low Sag Nano Composite Core with the objective to achieve high strength, low Coefficient of Thermal Expansion (CTE), low creep, low corrosion rate, increased ampacity and improved reliability of transmission and distribution grid etc.

(ii) Development and AC Characterization of 2nd Generation High Temperature Superconductor (HTS) based Modular Superconducting Fault Current Limiter (SFCL) System.

(iii) Study of AC Corona Phenomena and power loss for 1200 kV conductors and characterization of Corona discharges from line/substation components for evaluating the AC corona power loss for different configuration bundled conductors under fair and foul weather conditions and optimization of bundled conductor configuration based on the corona performance for 1200 kV transmission lines.

In addition, Powergrid Corporation of India Limited (PGCIL) is also involved in R&D activities and carries out pilot projects to gain operational experience in case of requirement of validation of new technology and equipment before adopting in commercial projects. In collaboration with Indian manufacturers, PGCIL has indigenously developed 1200kV Ultra High Voltage (UHV) AC system technology, the adoption of this technology in commercial projects, would lead to the reduction in energy loss in transmission of power.

Hydro power generation by NHPC

1677. SHRI SAMBHAJI CHHATRAPATI: Will the Minister of POWER be pleased to state:

(a) the amount of additional power National Hydroelectric Power Corporation (NHPC) is likely to generate by 2019;

(b) whether a number of hydro-power generation projects are running behind schedule adding on their projected estimates;

(c) if so, the details thereof along with the time for completion and commissioning, cost escalation and the causes of delay in execution in each case; and

(d) the steps Government has taken or plans to take for expeditious commissioning of pending projects?

THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI PIYUSH GOYAL): (a) NHPC is scheduled to generate 4458.69 Million Units (MUs) additional power (based on design energy) from two of its present under construction hydro projects, viz., Parbati-II H.E.P (800 MW) in Himachal Pradesh, scheduled to be commissioned in October, 2018 and Kishanganga H.E.P (330 MW) in Jammu and Kashmir scheduled to be commissioned in January, 2018.