Statement-V
List of under construction nuclear power plants

| Sl. N | Vo. Project Name                        | State      | Agency C | Capacity |
|-------|---|------------|----------|----------|
| 1     | Kakrapar Atomic Power Plant             | Gujarat    | NPCIL    | 1400     |
| 2     | Rajasthan Atomic Power Station          | Rajasthan  | NPCIL    | 1400     |
| 3     | PFBR (Kalpakkam)                        | Tamil Nadu | BHAVINI  | 500      |
| 4     | Kudankulam Nuclear Power Project (U3&4) | Tamil Nadu | NPCIL    | 2000     |
| 5     | GHAVP (U1)                              | Haryana    | NPCIL    | 700      |
| 6     | Kudankulam Nuclear Power Project (U5)   | Tamil Nadu | NPCIL    | 1000     |
|       | Grand Total                             |            |          | 7000     |

## Sustainable Energy infrastructure

2700. DR. PRABHAKAR KORE: Will the Minister of POWER be pleased to state:

- (a) whether it is a fact that the significant structural change in energy system currently underway can become more manageable only if proactive measures are set in motion;
- (b) whether Indian energy companies are taking steps to quickly adopt and adapt to these energy transitions and digital technologies at a faster pace; and
- (c) if so, the details of the steps taken by Government to build sustainable energy infrastructure that can cater to the energy needs?

THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI RAJ KUMAR SINGH): (a) to (c) It is a fact that singnificant structural changes are currently underway in the energy system in the country. Electricity access in India has improved remarkably through creation of a single national power system and major investments in thermal and renewable capacity. India's power system is experincing a major shift to higher shares of variable renewable energy, which is making system integration and flexibility priority areas. Government has set a target to install 175 GW of renewable energy capacity in the country by the year 2022 for sustainable development and to meet the growing demand.

Government of India has already taken various initiatives for integration of electricity generation from renewable energy sources in the grid, as under:-

- \* Green Energy Corridors comprising Inter-State and Intra-State transmission system,
- \* Transmission system for integration of Ultra Mega Solar Power parks,

- Setting up of 11 nos. Renewable Energy Management Centres at the renewable resource rich States,
- Transmission planning for Renewable Energy Zones (66.5 GW) by 2022 etc.

Further, it is stated that distribution of electricity, including modernization of infrastructure to adapt to new requirements, is the responsibility of the States and their distribution to utilities. However, Government of India has been assisting States through schemes such as Integrated Power Development Scheme (IPDS) and National Smart Grid Mission (NSGM) in constructing a robust, resilient and adaptive distribution system. Assistance under these shemes includes smart metering of consumers for ascertaining near real time energy folows; Supervisory control and data acquisition system (SCADA); Information Technology (IT)/Operational technology (OT) enabled feeders; rooftop solarisation of government buildings; etc.

Besides, for achieving sustainable energy infrastructure in the country, Bureau of Energy Efficiency (BEE), a statutory body under the Ministry of Power (MoP) has been taking many steps for conserving enery through various flagship programmes in the areas of industries, appliances, buildings, transport, agriculture and demand side management etc.

## Closure of old polluted coal-based power plants

2701. SHRI BHASKAR RAO NEKKANTI: Will the Minister of POWER be pleased to state:

- the number of old polluting coal-based power plants that have been identified to be shut down as mentioned by the Finance Minister during the budget speech on 1st February 2020, the details thereof along with dates of shut down as decided;
- the number of coal-based power plants that have been given environmental clearance during the last five years by MoEF&CC, along with the list with location and developer information; and
- the number of coal-based power plants that have been shut down during the last five years due to environmental issues in the country, the details thereof along with the reason for the shut downs?

THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI RAJ KUMAR SINGH): (a) and (c) Generation is a delicensed activity; and the decision to retire power generating units is taken by the concerned utilities themselves based on technocommercial considerations. As per report received from the Central Electricity Authority (CEA), 102 units of 43 Thermal Power Stations /Plants wijh capacity of 10,002.88 MW have been retired from April 2014 till date (List is given in Statement-I (See below) based