

(b) The Kudankulam Unit-1 (1000 MW) had achieved full capacity on June 07, 2014 and commenced commercial operation on December 31, 2014. Kudankulam Unit-2 (1000 MW) achieved full capacity on January 21, 2017 and commenced commercial operation on March 31, 2017. On December 05, 2017, both the units together generated 2000 MW of commercial power for the first time.

(c) The power from central sector generating stations is allocated by the Ministry of Power. The present allocation from Kudankulam 1&2 (including unallocated quota) is as follows:

State/Union Territory	Share in % (based on time of the day)	
	KKNPP-1	KKNPP-2
Andhra Pradesh	0	0
Karnataka	23.39 to 23.40	22.10
Kerala	13.96 to 14.00	13.30
Tamil Nadu	58.93 to 58.96	56.25
Telangana	0	5.00
Puducherry	3.68	3.35

*Source:* Southern Region Power Committee notification dated 20.10.2017.

(d) and (e) As per the extant norms, the home state is allocated 50% of the power. In addition, the state is also allocated power from the unallocated quota of 15%, based on the demand from time to time.

#### **Unit-2 of Kudankulam nuclear power plant**

642. DR. R. LAKSHMANAN: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that Unit-2 of Kudankulam nuclear power plant was non- operational for a substantial period during the year 2017;

(b) if so, the reasons therefor;

(c) whether Government would come forward to adopt new technology to overcome such faults in operating nuclear power plants across the country; and

(d) if so, the details thereof?

THE MINISTER OF STATE IN THE DEPARTMENT OF ATOMIC ENERGY (DR. JITENDRA SINGH): (a) Kudankulam Unit-2 (KKNPP-2, 1000MW) attained first criticality (start of controlled self sustaining nuclear fission chain reaction for the first time) on July 10, 2016. Following the first criticality, various tests at low power, primarily core physics experiments were conducted to establish meeting of

design intent. The unit power was raised to about 400 MW and connected to the grid on August 29, 2016. The power level was thereafter raised in steps of 75%, 90% and full power (100%) in line with regulatory clearances. The unit was declared commercial on March 31, 2017. It had generated 2327 Million Units of infirm (non commercial) power before start of commercial operation. In the current financial year 2017-18, the unit generated 2384 Million Units upto November 2017.

During the year 2017, the Unit-2 of Kudankulam Nuclear Power Project underwent a major shutdown during the period August 04, 2017 to November 19, 2017. The unit was reconnected to the grid on November 20, 2017 and reached its full capacity of 1000 MW on December 05, 2017. It has since been operating at full power.

(b) The unit was shut down due to an issue noticed in the generator. As per the existing procedure, the incident was thoroughly investigated, root cause analysis carried out and the necessary repairs carried out in consultation with Russian experts.

(c) While KKNPP 1&2 set up in cooperation with the Russian Federation are Light Water Reactors (LWR), bulk of the reactors in operation in India are Pressurised Heavy Water Reactors (PHWR), a technology which is matured in the country. Thus there is no such requirement.

(d) Does not arise in view of (c) above.

#### **Shutting down of nuclear power plants**

643. DR. SANJAY SINH: Will the PRIME MINISTER be pleased to state:

(a) whether Government plans to shut down nuclear power plants of the country;

(b) if so, the present status thereof;

(c) whether it is a fact that globally, several countries have shut down their nuclear reactors during the last five years; and

(d) if so, the proposal of Government to meet the energy demand challenges of the country?

THE MINISTER OF STATE IN THE DEPARTMENT OF ATOMIC ENERGY (Dr. JITENDRA SINGH): (a) No, Sir.

(b) The present installed nuclear power capacity comprises of 22 operational reactors with a total capacity of 6780 MW. There are 21 other nuclear power plants approved or at various stages of completion.

(c) There are presently 448 reactors in operation in the world. In the last five years (2013 to 2017), globally 32 new reactors were connected to the grid while