- (c) whether Government has identified the potential areas with the possibility to harness tidal energy in all the States of the country;
  - (d) if so, the details thereof, State-wise; and
  - (e) if not, the reasons therefor?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) and (b) Ministry of New and Renewable Energy has policy guidelines for Research, Development and Demonstration in the area of New and Renewable Energy including tidal energy. The policy has provision to provide financial support for resource assessment, research and development and demonstration projects.

- (b) Yes, Sir.
- (c) According to the study undertaken by Central Electricity Authority, New Delhi, there is an estimated potential of about 7000 MW in the Gulf of Cambay, 1200 MW in the Gulf of Kutch in the State of Gujarat and about 100 MW in the Gangetic Delta in the Sunderbans region of West Bengal.
  - (d) Does not arise.

## Private sector in solar projects

†1357. SHRI RAM JETHMALANI:

SHRI RAMCHANDRA PRASAD SINGH:

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) whether it is a fact that Government had entrusted the work of constructing some projects to private sector for generating solar energy in the country;
  - (b) if so, the details in this regard;
- (c) the number of projects entrusted so far, to private sector for construction, and the final time schedule stipulated for completion of these projects; and
  - (d) whether these projects have been completed as per their schedules?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) and (b) Under Jawaharlal Nehru National Solar Mission, launched by the Government in January 2010, grid solar power projects are set up by solar project developers on build, own and operate basis. These projects are selected through international competitive bidding.

(c) The projects for entire capacity for the target of 1100 MW under JNNSM Phase 1 have been allocated. The projects based on solar photovoltaic technology were allowed to be completed in a period of 12 months for batch I

<sup>†</sup>Original notice of the question was received in Hindi.

(January 2012) and in 13 months for batch II (February 2013). The projects based on solar thermal technology were allowed a period of 28 months (May 2013). An extra period of up to 6 months is allowed against encashment of bank guarantees and payment of liquidated damages as per JNNSM guidelines.

(d) It is reported that projects of aggregate capacity of 221 MW have been commissioned so far under JNNSM subject to verification of documents.

## Targets under JNNSM

- 1358. SHRIMATI NAZNIN FARUQUE: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:
- (a) whether Government has plans to install 20 million solar lights and 20 million square meters of solar thermal panels to generate 20,000 MWs by 2020, as part of its Jawaharlal Nehru National Solar Mission;
  - (b) if so, the details thereof, State-wise; and
- (c) the number of solar lights installed in the country till date, State-wise? THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) Government has plans to install 20 million solar lights by 2022. Government also has plans to install 20 million square meters of solar thermal collector area for water heating system by 2022. For generation of power, Government has separately planned for grid connected solar power projects totaling 20,000 MW and 2000 MW off-grid applications by 2022.
- (b) The above targets are at national level. The details are given in Statement-I (See below)
  - (c) Number of solar lights installed in the country is given in Statement-II.

Statement-I Target of JNNSM

Application Segment	Target for Phase I (2010-13)	Cumulative Target for Phase-II	Cumulative Target for Phase-III
	(2010 10)	(2013-17)	(2017-22)
Grid Solar power incl. roof top and distributed small grid connected plants	1100 MW	4,000 MW	20,000 MW
Off-Grid Solar Application	200 MW	1,000 MW	2,000 MW
Solar Collectors	7 million sq. Meters	15 million Sq. meters	20 million sq.meters