

**Funds to Bihar for new and renewable energy**

2734. SHRI SABIR ALI: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) the details of funds given/spent in Bihar by the Ministry and its various organisations during the last three years and the current year, so far for new and renewable Energy;

(b) the purpose for which these amounts were given/spent; and

(c) the steps being taken to increase those funds?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) A total Central Financial Assistance (CFA) of Rs. 11.38 crore has been provided to Government of Bihar and its various Organizations during the last three years and the current year (up to 27.4.12) under various renewable energy schemes/programmes.

(b) The funds were provided mainly for deployment of (i) solar home lighting systems/power plants for households in remote villages/hamlets and in government buildings and (ii) biomass gasifier systems for rural electricity supply in rice mills and other industries.

(c) The release of CFA to the State is directly dependent on the state's action in the field of renewable energy and submission of project proposals to MNRE. The Ministry holds periodic review meetings with states to resolve/clarify project details.

**Tariffs for renewable energy**

2735. SHRI N.K. SINGH: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) whether the Central Electricity Regulatory Commission (CERC) has prescribed new guidelines for determining the tariffs of electricity generated from various renewable energy sources;

(b) if so, the details thereof;

(c) whether these guidelines are binding on various State Electricity Regulatory Commissions; and

(d) if not, the reasons therefor?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) Yes, Sir. The Central Electricity Regulatory Commission (CERC) has issued new guidelines for determining the tariffs of electricity generated from various renewable energy sources vide notification dated 06.02.2012 titled *CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2012*.

(b) Salient features of the above mentioned Regulations are given in Statement (*See below*).

(c) No, Sir.

(d) Electricity being a concurrent subject, the State Electricity Regulatory Commissions are competent to determine the tariffs for purchase of electricity from renewable power projects. In doing so, they are guided, as per Section 61 of the Electricity Act 2003, by the principles and methodologies specified by the CERC for determination of the tariff from time to time.

***Statement***

*Salient features of the CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2012*

Following are the main features of the CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2012:

- Tariff norms for following renewable energy sources have been defined:
  - (a) Wind energy power project
  - (b) Biomass power project with Rankine cycle technology
  - (c) Non-fossil fuel cogeneration project
  - (d) Small Hydro Plant
  - (e) Solar PV/Solar thermal power project
  - (f) Biomass Gasifier based power project
  - (g) Biogas based power project
- The Control Period of the Regulation is 5 years (01.04.2012 to 31.03.2017).
- The Tariff Period for Renewable Energy Power projects expect in case of Small hydro projects below 5 MW, Solar PV, Solar thermal, Biomass Gasifier and Biogas based power projects specified at minimum period of thirteen (13) years. In case of Small hydro projects below 5 MW, the tariff period shall be thirty five (35) years. In case of Solar PV and Solar thermal power projects the Tariff Period shall be twenty five years (25) years. In case of Biomass Gasifier and Biogas based projects the Tariff Period shall be twenty years (20) years.
- The Regulation has provision for determination of project specific tariff for the following types of projects like; Municipal Solid Waste Projects; Hybrid Solar Thermal Power plants; other hybrid projects include renewable—renewable or renewable-conventional sources, for which

renewable technology is approved by MNRE and any other new renewable energy technologies approved by MNRE.

- Tariff design specified is the generic tariff which is to be determined on levellised basis for the Tariff Period and for renewable energy technologies having single part tariff with two components, tariff to be determined on levellised basis considering the year of commissioning of the project for fixed cost component while the fuel cost component shall be specified on year of operation basis.
- The Regulations specify norms for fixed cost components like: Return on equity; interest on loan capital; Depreciation; Interest on working capital; and Operation and maintenance expenses.
- The general financial principles specified in the Regulations are;
  - (a) **Debt Equity Ratio:** 70:30
  - (b) **Loan Tenure:** 12 years
  - (c) **Interest rate:** Average State bank of India (SBI) Base rate prevalent during the first six months of the previous year plus 300 basis points.
  - (d) **Depreciation:** The Salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the Capital cost of the asset. The depreciation rate for the first 12 years of the Tariff Period specified at 5.83% per annum and the remaining depreciation to be spread over the remaining useful life of the project from 13th year onwards.
  - (e) **Return on Equity:** 20% per annum for the first 10 years and 24% per annum 11th years onwards.
  - (f) **Interest on working Capital:** Average State Bank of India Base Rate prevalent during the first six months of the previous year plus 350 basis points.
- Norms for technology specific parameters like: Capital Cost, Capital cost indexation mechanism, Plant Load Factor, Operation and Maintenance expenses, Gross Calorific value, Station Heat Rate, fuel price, fuel price indexation mechanism are specified in the Regulations.

#### **Law to govern wind energy**

2736. SHRIMATI KANIMOZHI: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) whether there is no specific law governing the wind energy sector and that this sector comes under the purview of the generic Electricity Act, 2003