

[Translation]

Expansion of Atomic Power Plants

*206. SHRI DILEEP SINGH BHURIA : Will the PRIME MINISTER be pleased to state :

(a) whether Government have formulated any scheme for the expansion of atomic power plants to meet the power requirement of the country and to provide electricity at cheaper cost ; and

(b) if so, the number of new atomic power plants proposed to be set up during Seventh Five Year Plan period and the names of States where these will be set up ?

[English]

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND IN THE DEPARTMENTS OF OCEAN DEVELOPMENT ATOMIC ENERGY SPACE AND ELECTRONICS (SHRI SHIVRAJ V. PATIL) :

(a) Yes, Sir. A 15 year profile has been drawn up for increasing the installed nuclear power capacity to 10,000 MWe by 2000 A.D.

(b) As per the profile, approved by the Government, in principle, it is proposed to commence work on twelve more units of 235 MWe each and six units of 500 MWe each during the Seventh Five Year Plan period. Out of the additional 235 MWe units, it has been decided to locate two units at Rawatbhata in Rajasthan and two at a new site at Kaiga in Karnataka. Final decision on other sites is yet to be taken.

[Translation]

SHRI DILEEP SINGH BHURIA : Mr. Deputy Speaker, Sir, I thank the Hon. Prime Minister for fixing the target of power generation at ten thousand Megawatts by the turn of this century. Electricity has today become a necessity of human life. In the 21st century we may possibly need electricity for walking too! I would like to know the quantum of electricity which would be required at that time and also the sources from which we would generate it.

SHRI SHIVRAJ V. PATIL : Sir, it has been estimated that by the end of this century, we would be able to generate about 1.20 lakh Megawatt of electricity in the country. At that time we would generate 10,000 Megawatt of electricity through nuclear technology with the help of nuclear reactors. The electricity which would be generated would be through thermal, hydel and nuclear power stations. Today, we are trying to tap non-conventional sources of energy to generate electricity. Apart from the known sources of energy that have been used for generating electricity so far, we are trying to generate electricity through solar energy, agricultural produce, gobar gas, wind power and tidal waves. We are conducting research to find out new sources through which electricity could be generated.

SHRI DILEEP SINGH BHURIA : Mr. Deputy Speaker, Sir, as the hon. Minister has said, 40 per cent of the total requirement of energy is met through wood, animal dung and human waste. But while replying to a question earlier, he had mentioned that our forests were being denuded. Keeping this in view, we may not be able to get wood after some time. Similarly, coal is being used to run thermal power stations and our coal reserves are fast getting depleted. Therefore, you would not be able to meet the target of generating 10,000 Megawatt of electricity by the start of the 21st century. Have you kept in mind this situation, while fixing the target ?

SHRI SHIVRAJ V. PATIL : We have just estimated the quantum of atomic or nuclear energy likely to be generated by the end of the this century. This is only planning. Only time will tell us how far our new technology would develop and the extent to which it could be used to produce more electricity than estimated, if the need arose. We have fixed the targets in the prevailing circumstances. If need be, we would acquire and adopt new technology and sources so that the shortage of electricity could be met.

[English]

SHRI S. JAIPAL REDDY : May I

know whether the hon. Minister is aware of the representation of Andhra Government for location of atomic power plant at Nagarjunasagar and, secondly, whether the Government realise the need for evolving a formula by which the atomic power projects are divided among various States ?

SHRI SHIVRAJ V. PATIL : There is a Committee constituted for deciding upon the sites where the reactors would be established. We have set certain criteria for the Committee to take into account to decide about the sites. We have received representations from different State Governments, including Andhra Pradesh, and those representations are looked into by the Committee.

As far as the electricity produced in these atomic reactors is concerned, it is shared by the States which are in the vicinity. We are feeding the electricity produced by Rajasthan in the northern grid and we are feeding the electricity produced in Tarapur in the western grid. In this fashion, the electricity produced is shared by different States.

SHRI S. JAIPAL REDDY : I referred to the need for evolving a general formula by which power projects can be distributed between various States. The Government knows about the dispute that arose in regard to the distribution of power from Kalpakkam project. Will the hon. Minister therefore look into this matter ?

THE PRIME MINISTER (SHRI RAJIV GANDHI) : The hon. Member is very right that there is a need for proper distribution of power. But we must keep in mind that there is a need for the distribution of power, not the distribution of power sources. This is important. We have to keep in mind that hydro energy is available in some parts of the country; coal is available in other parts of the country. We have to make a balance between hydro, coal, nuclear and other types of energy and produce a composite picture so that everybody gets the requisite amount of power. This does not necessarily mean a political

distribution of atomic power stations. It means distribution according to energy requirements and energy sources. We are looking into this question.

MR. DEPUTY SPEAKER : Put specific question. You want to put a question.

DR. KRUPASINDHU BHOI : The Prime Minister has categorically stated about the requirement of (*Interruptions*) hydel power energy. The Prime Minister has categorically announced that there is requirement of hydel power energy and thermal power energy.

MR. DEPUTY SPEAKER : What is the clarification you want ? I do not want anything from you. What exactly you want ?

DR. KRUPASINDHU BHOI : I am talking about.....

MR. DEPUTY SPEAKER : Put your question. Otherwise, I would not allow. I do not want anything. You please put the question.

DR. KRUPASINDHU BHOI : I would like to know whether the hon. Minister is aware of the fact that the mineral which is used for the atomic power station is available 625 KM off the coast of Orissa and this quantity of mineral is much more sufficient to have an atomic power station in Orissa because hydel power is always..... (*Interruptions*) According to international law and the norms of our country, hydel power is always kept in reserve when the thermal power and atomic power energy is not available in the country. Orissa has the maximum hydel power capacity.

MR. DEPUTY SPEAKER : I would not allow. You are not specific. You are not following what I am saying. You are not putting the question. You are making statements.

DR. KRUPASINDHU BHOI : I would like to know whether the hon. Minister is aware of the fact that atomic power station can be set up in Orissa

because all the atomic minerals and all infrastructure are available in Orissa. I would like to know whether the hon. Minister will consider the question of setting up atomic power plant in Orissa or not.

SHRI SHIVRAJ V. PATIL : Availability of power is one thing and conserving the mineral is another thing. Unless the mineral is turned into fuel and unless a reactor is established, it is not possible to produce power.

Hon. Prime Minister has clarified that it is the requirement of power which will be taken into account.

We will be producing electricity by using hydel, thermal and nuclear methods and feeding into the grid and then supplying it. The question of establishing the atomic or nuclear reactor in a particular area on the basis of the requirement of electricity is something different from establishing it at a particular place.

The hon. Member wants to know whether the power station will be set up in Orissa because the mineral is available there.

If the Committee comes to the conclusion that it can be established and that other facilities and infrastructures are available, that is a different thing.

But simply because mineral is available, it will not help us.

(Interruptions)

MR. DEPUTY SPEAKER : Please sit down.

PROF. K.K. TEWARY : I would like to know from the hon. Minister whether there was a proposal before the Central Government for setting up a nuclear power plant in Bihar in view of the fact that nuclear material is found only in Bihar at a place called Jaduguda and also because Bihar is a chronically deficient State in power generation and also because of the general level of back-

wardness of the State. Nuclear technology will make the State usher into modernity.

Therefore, I would like to know from the hon. Minister whether the proposal was there and why this proposal has not been accepted.

I may also draw your attention.....

MR. DEPUTY SPEAKER : That is enough. One supplementary is enough.

PROF. K.K. TEWARY : We have submitted a memorandum to the Central Government. I would like to know whether the Government will look into it.

SHRI RAJIV GANDHI : This has already been answered in my previous answer. We have a Committee looking into where the power plants will be located. The Committee will look into the various parameters which include cost of transportation of the mineral cost of transmission of the power and all the other things that are involved in any such major project. I am sure the Committee will look into the problems of Bihar sympathetically.

SHRI SOBHANADREESWARA RAO : The hon. Prime Minister has stated that the Committee's recommendations will be taken into consideration. Our information is that the committee appointed for selecting suitable sites has recommended a place near Nagarjunasagar in Andhra Pradesh. Will the Prime Minister kindly take a decision in the matter and decide to locate one nuclear power plant near Nagarjunasagar? The Committee has already recommended.

SHRI SHIVRAJ V. PATIL : The Committee has visited different places and the report is being discussed. No final decision has been taken. Until a final decision is taken, it will be wrong to say that we are going to establish here or that we are not going to establish there, at any particular place. The results of the Committee would be known and would be available to the Members at the appropriate time.