

**Setting up of two more Nuclear
Power Reactors at Rajasthan Atomic
Power Station**

@*249. SHRI MAHENDRA PRASAD: त
SHRI MURLIDHAR CHAN-
DRAKANT BHANDARE:

Will the PRIME MINISTER be pleased to state:

(a) whether Government have decided to set up two more nuclear power reactors at Rajasthan Atomic Power Station site;

(b) if so, what are the details thereof, including their cost and capacity; and

(c) what steps are being taken in this regard?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE DEPARTMENTS OF OCEAN DEVELOPMENT, ATOMIC ENERGY, ELECTRONICS AND SPACE (SHRI K. R. NARAYANAN): (a) Yes, Sir.

(b) The cost of setting up RAPS III and IV with a combined capacity of 470 MWe is estimated to be Rs. 711.57 crores.

(c) Manufacture of long-time cycle components is in progress. Development of infrastructure at the site has commenced.

SHRI MUKHTIAR SINGH MALIK: Mr. Chairman, Sir, as you are aware of the fact and the whole House knows as well as the people of the country know that there is great scarcity of power generation in our country. Both the agricultural and industrial sectors are being starved for want of electricity. I can speak

(a) Starred Questions 243 and 249 were taken together.

†The question was actually asked on the floor of the House by Shri Mahendra Prasad.

about the State of Haryana where entrepreneurs are not coming forward to set up their industries because they know that there is great scarcity of power in the State. Thermal power stations are not working what to speak of their full capacity, they are not even generating power to the extent of half their capacity. However, I would like the Hbn. Minister to inform the House when the clearance for these four reactors in Karnataka and Rajasthan was given by the Government, when was the work in respect of the manufacture of long time cycle components started and I want to know also whether any delay shall result in cost escalation.

. SHRI K. R. NARAYANAN: Sir, sanction for these two projects has already been issued but in respect of Kaiga it has to be formalised. The preliminary work has already started. In fact, in order to avoid delays, we have already undertaken the preliminary work at the site, getting environmental clearance and also ordering equipment in advance. Some of the equipments take long time to manufacture. We have already placed order for them to avoid delay in completion of this project. We have taken all possible measures in order to expedite the actual execution of this work once it is formalised.

SHRI MUKHTIAR SINGH MALIK: As I have already observed, there is a crisis in regard to generation of power in the country. I would like to request the Minister to tell the House what measures, if any, are being taken by Government.

MR. CHAIRMAN: We are going to have a calling attention today. You can ask further.

SHRI MUKHTIAR SINGH MALIK: It is a related question as to what other measures are being taken by the Government to improve supply position of power in the country. Of course, calling attention motion is also coming up today.

MR. CHAIRMAN: the question relates to two projects, namely, Rajasthan and Karnataka.

SHRI MUKHTIAR SINGH MALIK: I would like to know how long will they take to complete the work of these Teactors.

SHRI K. R. NARAYANAN: These two projects are scheduled to be completed by 1994-95.

SHRI MAHENDRA PRASAD: Rajasthan is a border State and in the event of a war with neighbouring country, of which there is distinct possibility in view of recent developments, such installations may be the target of our enemy's attack. Therefore, what steps have the Government taken to safeguard the security of such installations from possible ravages of war?

SHRI K. R. NARAYANAN: We have thought of the security of these important installations and we are taking all normal and possible precautions to prevent any such eventuality. In fact, not only these plans, but other installations also are within the reach of a potential enemy attack. But we are taking whatever precautions are possible.

SHRI MAHENDRA PRASAD: In his answer, the hon. Minister has said that steps have been taken to build infrastructure. I would request the Minister to give some of the features of the infrastructure that the Government has decided to build.

SHRI K. R. NARAYANAN: First of all, clearing of the site; secondly, site investigations, such as topographic survey, geophysical survey, seismic and technological survey, etc., which are essential before a nuclear plant can be established; plus, ordering of equipments which will take time to manufacture. For this, we have placed order on the manufacturing companies. There have been also certain financial sanctions issued already in

order to undertake these preliminary works.

SHRI PAWAN KUMAR BANSAL: Mr. Chairman, not as a status symbol but as a compelling necessity to tide over the acute power shortage in Punjab and surrounding areas, the State of Punjab has been clamouring for an atomic power station for a number of years. A suitable land also was offered and identified for the purpose. I would like to know from the Minister what precise progress has been made in respect of setting up atomic power station in Punjab.

SHRI K. R. NARAYANAN: As regards future atomic power plants, there is a site selection committee which was appointed and this committee has surveyed the whole situation in India, with regard to siting of future nuclear plants. A final decision in the matter is yet to be taken.

SHRI SURESH KALMADI: Sir, the hon. Minister has just said that two units are coming up in Karnataka and two units are coming up in Rajasthan. Sir, it has been envisaged in the Seventh Five-year Plan that 12 units of 235 MW each would come up and out of this, nine of them would be commissioned during the Seventh Five-Year Plan period. I would like to know from the hon. Minister whether they are sticking to the schedule which has been worked out by the Department of Atomic Energy. Secondly, what steps are being taken to attract Indian industries, because if we want to have 2,000 MW by the end of the Century, there has to be a massive effort by Indian industries. At the moment, they are making things like end-shield, steam boilers etc. This is not enough. A massive effort is required. In what manner, are you encouraging the Indian industries in this matter and are you giving any incentives to them?

SHRI K. R. NARAYANAN: As regards the first question, we are keeping to the schedule outlined in the Seventh Five-Year Plan. Of course, much will depend on the availability of finance and

other resources. For this purpose, —this also answers the second question of the hon. Member—the conversion of the Atomic Energy Board into a Nuclear Power Corporation is being envisaged. The specific intention of this is to make the system work more efficiently and, secondly, to attract resources, financial resources, from the private sector in order to set up these plants. Private industry is also being involved in the manufacture of selected parts and equipment.

SHRI SURESH KALMADI: Is public sector not involved?

SHRI K. R. NARAYANAN: Public sector not involved?

SHRI A. G. KULKARNI: Sir, the hon. Minister has given the information that 12 plants are being envisaged in the Seventh Five-Year Plan and a capacity of 2,000 MW is expected to be created. I think, the Minister is aware of the meagre provision of funds in the Seventh Five Year Plan. I would like to know how these funds are going to be matched in relation to these plants which we are envisaging? Secondly—this is more important—in all these plants which we are planning, what type of technology is being used? Are there any collaborators from foreign countries like France, Canada or the U. S. S. R. ? I would also like to know whether proper steps are being taken to remove the lurking fear of accidents, the accident-proneness of these plants? I would like to know what steps Government propose to take to avoid such accidents or to minimise the hazards? I would like to have specific reply to this question as to what is the policy of the Government in this regard.

SHRI K. R. NARAYANAN: Sir, as regards resources, the House is aware that it is rather a big task for the nation to raise resources for the very ambitious development programmes which we have undertaken. However, we are optimistic of raising resources by resorting to various ways, which have been outlined in the Seventh Plan. We will also be tapping resources from the private sector

SHRI A. G. KULKARNI: Optimism is something and fact is something.

SHRI K. R. NARAYANAN: That is, why, we are tapping private sector resources also available in the country in order to set up these plants and execute what has been outlined in the Seventh Five-Year Plan. One may be pessimistic, but I think, in order to produce results, it may be slightly better to be optimistic.

In regard to the second question about the technology use, —we have not approached any other country for getting nuclear technology. Fortunately, our scientists have developed a very high level of indigenous technology for setting up nuclear reactors and they are now at a stage where they can standardise the reactors of the 235 MW type which are being installed and also they have acquired the knowledge of fabricating 500 MW type reactors. Therefore, as far as technology is concerned, certainly standardisation has taken place, high sophistication has been achieved and we are sure that without foreign collaboration these plants could be set up.

About the third question, that is about possible accident, this has been dealt with by the Prime Minister himself. He has made pronouncements on that. Though these plants are fabricated and designed with utmost care and with various layers of safety devices there could be some danger or some failure somewhere. For such contingency also we have planned various measures. Yesterday, in the other House the Prime Minister declared that the Cabinet Secretary has been asked to prepare a plan for such a disaster contingency, which may be unlikely. Apart from the devices built into the reactors, we have taken measures which are sufficient to protect the people working there as well as outside. However, we cannot rule out a misfortune or mishap and for that also we are mobilising all our knowledge for the measures that we can possibly take to face such a situation which may be unlikely.

SHRI A. G. KULKARNI: Then I wanted to know whether there is an experts committee or secretaries committee.

MR. CHAIRMAN: No, no. Government is taking measures. Yes, Mr. Kadharsa.

SHRIM. KADHARSHA; Sir, the Government is thinking about the new plants but I would like to know whether the Government has taken stock of the performance of the existing power plants. The performance of the three power plants at Tarapur, Kalpakam and Kota in Rajasthan are far from satisfactory. The Rajasthan atomic power plant has been closed for the last several months because of the leakage inside end shields. The Chairman of the Atomic Power Plant Board, Dr. Srinivasan, himself has admitted that all our technology has not been able to get it repaired or replaced. But the Minister has given a rosy picture about our technology. I would like to remind him that the Tarapur Atomic Power Plant also has failed on many occasions and in 1979 there was a mishap which resulted in thousands of liter of radiated water gushing out of the radiator. In the Fourth Plan there is a provision for a plant at Narora but the location itself is on the wrong side because it is an earthquake-prone area. So, I would like to know whether a national debate will be called before commissioning atomic power plants taking into consideration the security reasons also which we saw during the Chernobyl accident.

SHRI K. R. NARAYANAN; Sir, I did not try to give a rosy picture, but I wanted to bring it to the notice of the House the objective capability of our own scientists to set up such reactors. Certainly, there have been shortcomings, fail-lures, like the one we saw at Chernobyl. These are part of the difficulties involved in development of technology. Please do not forget that we started this adventure in building up atomic energy reactors right from the scratch. When most of the "world was not willing to give us any technology, our own scientists learnt this technology and some of them were started on experimental basis. There have been difficulties, but with regard to the actual functioning of Tarapur, MAPS or Rajasthan IF, I would like to point out that

some of them work near 85 per cent capacity factor while others are working under 45 to 50 per cent of capacity factor. If you compare them with the plant load factor of thermal power stations, it is almost the same, that is 48 to 50 per cent. So, by no stretch of imagination can we say that the atomic power reactors are not working reasonably well.

PROF. C. LAKSHMANNA: Mr. Chairman, Sir, the Minister has just now stated about having acquired capability of 500 MW and it is also a fact that there were several committees which went into this question in several parts of the country and, I understand, most of their recommendations have been accepted by the Government. If that is the case, I would like to ask the Minister as to when they will be able to set up other nuclear power plants, say, in places like Nagarjuna Sagar etc.

SHRI K. R. NARAYANAN; Well, I cannot give an answer when we will be able to set up a nuclear power plant at Nagarjuna Sagar. But as I said, there is a Site Selection Committee which went into the whole question of final selection of sites for future nuclear power plants. A final decision in the matter is yet to be taken.

SHRI PARVATHANENI UPENDRA: They have approved it.

SHRI SANTOSH BAGRODIA: May I know from the hon. Minister what is the production or generation in the installed capacity of nuclear power plants in Rajasthan vis-a-vis other plants in the country? Do you think that this level can be further improved? If so, by what time and upto what maximum level or efficiency? Do you think that frequent shutdowns and trippings of these plants can be avoided?

SHRI K. R. NARAYANAN; This is about RAPP-I? RAPP-I is closed because of leakage of water from the end shields and this is unfortunate. But our scientists and technologists are making efforts to repair this. I want to point out that if

is an old technology plant which we got from Canada and it has developed problems in Canada also and they have decommissioned such plants. But we have managed, through native ingenuity, to continue working this plant. Of course if we fail to repair it, we have to de-commission it. But a last effort is being made and I have been told by some of our top scientists that do not give up the prospects of having this defect set right before the end of the year.

MR. CHAIRMAN: Next question. No. 244.

Crimes in running trains

*244. DR. MOHD. HASHIM KIDWAI: Will the Minister of HOME AFFAIRS be pleased to state:

(a) the number of crimes committed in the running trains during the last two years;

(b) whether these crimes are on the increase; and

(c) if so, what steps have been taken to check such crimes in the running trains?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS AND MINISTER OF STATE IN THE MINISTRY OF HOME AFFAIRS (SHRI P. CHIDAMBARAM): (a) and (b) The prevention, detection and investigation of crime on the railways is the responsibility of the Government Railway Police which is under State Governments. The information regarding the number of crimes committed in the running trains during the last two years is being collected and will be laid on the Table of the House.

(c) Government Railway Police provides escorts on fast/superfast Mail/Ex-press trains according to local conditions and requirements. Railway Protection Force also assists Government Railway Police in this task.

DR. MOHD. HASHIM KIDWAI: Sir, the hon. Minister has not given any an-

swer as to what steps the Central Government have taken to check such crimes in the running trains. However, I would like to ask the hon. Minister as to what extent GRP has been effective in checking the crimes.

SHRI P. CHIDAMBARAM: Sir, as I said, the responsibility of checking crimes on the railways rests with the State Governments and the Government Railway Police is under the State Governments. As far as figures of crimes are concerned, I cannot claim that the figures with me are totally accurate, because many States have not reported any figures and the information is not available. I have some figures and on the basis of those figures I can say that there it does not appear to be any alarming increase in crimes on the railways. But as I said, I will collect these figures from the State Governments and lay them on the Table of the House.

DR. MOHD. HASHIM KIDWAI: Sir, I would like to know whether the Railway Protection Force is under the control of the Central Government or the State Governments.

SHRI P. CHIDAMBARAM: Sir, prevention, detection and investigation of crime is the Responsibility of the Government Railway Police (GRP) which is under the State Governments. The Railway Protection Force is under the Central Government and its duties are different; it is not concerned with prevention, detection and investigation of crime.

MR. CHAIRMAN. - Mr. Minister, under the rules of our Rajya Sabha, Parliament questions relating to crime on railways other than offences relating to pilferage must be answered by the Minister. There, fore, you have to collect the information and give.

SHRI P. CHIDAMBARAM: Sir, I have said that I will collect the information and lay it on the Table of the House.

SHRI PARVATHANENI UPENDRA: Sir, the Minister has cleverly evaded his responsibility. Railways always take the plea that they are not responsible for the safety of the passengers and that their