

Agitation against the Kaiga Atomic Project

'-42. SHRI SHEO KUMAR MISHRA;

SHRIMATI VEENA VERMA: j

the PRIME MINISTER be pleased to state:

(a) whether it is a fact that agitation against the Kaiga Atomic Project has been gaining momentum during the last three months;

(b) if so, what are the details thereof; and

(c) what steps Government have taken in this regard and whether the project is likely to be abandoned?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE IN THE DEPARTMENTS OF OCEAN DEVELOPMENT, ATOMIC ENERGY, ELECTRONICS AND SPACE (SHRI K. R. NARAYANAN): (a) to (c) A statement is laid on the Table of the House.

Statement

(a) and (b) Government have received representations from various individuals and organisations against the setting up of the Kaiga Atomic Power Project. A movement against the project has also been organised by Citizens for Alternatives to Nuclear Energy (CANE) and some other organisations in Bangalore who have distributed literature in the Uttara Kannada District against the project. The objections against the project mainly relate to perceived hazards to public health and ecology from the Nuclear Power Plant. On the other hand, some groups have welcomed the project also.

(c) A systematic effort to educate the public about the facts regarding the

t The question was actually asked on the floor of the House by Shrimati Veena Verma.

atomic power project through publications, lectures, seminars and exhibitions has been undertaken by the Department of Atomic Energy. There is no intention to abandon the project.

SHRIMATI VEENA VERMA: Sir, a lot of controversy has been generated by the project. I want to know from the Minister whether Karnataka Government is extending its full co. operation in implementation of the project, and if so, whether it has handed over the infrastructure facilities in regard to the project to the Nuclear Power Corporation.

I would like to know whether the national debate on nuclear issue will be held on December 10 in Bangalore and whether the Karnataka Government is helping in holding it.

What steps has the Karnataka Government taken to end the controversy about the project?

What was the original cost estimate and what is the present escalated cost and when will it be completed? What will be the per unit cost of nuclear energy generated here compared to hydro and thermal cost per unit? What will be the degree of indigenisation?

SHRI K. R. NARAYANAN: Sir, as regards cooperation from the Karnataka Government, we are getting full cooperation for the execution of this project. Land has been given. All the infrastructural facilities are being set up. In fact, the Karnataka Government was very eager to get this nuclear plant.

As regard the debate, we have held a very major seminar in Bangalore in the Indian Institute of Science on nuclear energy and its consequences, and the Kaiga question was also debated. There will be another seminar in Bangalore in December and also yet another at the University of Mysore.

With regard to the steps being taken by the Karnataka Government. I think, the steps are actually being taken by the Department of Atomic Energy

(Nuclear power Corporation) for the establishment of and for the work in regard to this project. Of course, the Karnataka Government is cooperating with the Department of Atomic Energy.

The cost of the plant is estimated at about Rs. 720 crores and there has been no revision of this cost because it is in the process of being built. Whether there will be an escalation or not, we will come to know only later.

The unit cost of nuclear electricity currently varies from 43 paise per unit to about 54 paise per unit. This is the range of the unit cost. And it is by and large, cheaper than thermal electricity. It is, of course, costlier than hydro.

As regards the other question about indigenisation, as the House knows, the entire atomic energy programme is indigenous and apart from the import of certain rare materials not available in India, it is done indigenously including atomic technology development.

SHRIMATI VEENA VERMA: Sir, a great deal of thick tropical rain forest will be destroyed as the project is being located in its midst, causing environmental disturbance. I want to know what steps are being taken to ensure that the forests to be destroyed will be regenerated. And also what steps have been taken to rehabilitate the people who are being uprooted because of this project and what arrangements have been made to give them employment and vocational training?

SHRI K. R. NARAYANAN: Sir, there would be a very little destruction of the forest as a result of this project. But I can inform the hon. Member that the six hydro-electric dams built in the same Kalanadi area have submerged nearly 15000 hectares of forest land. This nuclear plant will affect about 120 hectares while it will produce more electricity than the

hydro projects in the same area. About 732 hectares of land has been diverted for the purpose of the Kaiga project, out of which 120 are required for the plant and its infrastructure. Whatever forest has been cut off or destroyed in the process will be planted as afforestation, elsewhere by the Corporation, at whichever place may be indicated by the State authorities. In fact, in the entire area, about 545 hectares of forest land will remain unaffected and, therefore, as far as deforestation is concerned, it does not pose any significant threat at all. In fact, all our atomic energy reactors are surrounded by forests or greenery planted by the atomic energy establishment themselves.

With regard to rehabilitation, about 75 families have been affected in the plant area, and another 48 families in the township, where residences are being built by the project. These are the families who have to be given employment. It is only at the plant site that families are being displaced and, for them, alternative sites as well as compensation are given by the Corporation. In fact, they have deposited almost the whole amount with the State Government for payment of compensation to the people who have been displaced. In the township area nobody has been displaced, but land has been taken of people who live outside the area, and for this also compensation is being given. With regard to rehabilitation, we have offered employment to one member of each family, and already 31 people have been employed. For the remaining people we would be finding employment. In fact, there are some qualified people, educated people like matriculates, diploma holders and graduates. We propose to have them trained properly and I think as many as possible would be absorbed in the project itself.

WELCOME TO PARLIAMENTARY DELEGATION FROM CYPRUS

MR. CHAIRMAN: Honourable Members, I have an announcement to make.

We have with us this morning, sealed in the Special Box, Members of a Parliamentary Delegation from Cyprus which is currently on a visit to our country under the distinguished leadership Of His Excellency Dr. Vassos Lyssarides, President of the House of Representatives.

On behalf of the Members of the House and on my own behalf. I take pleasure in extending a very hearty welcome to the Leader and other Members of the Delegation and wish our distinguished guests a very enjoyable and fruitful stay in our country. We hope that during their stay here they would be able to see and learn more about our parliamentary system, our country and our people and their visit to this country will further strengthen the friendly bonds that exist between us. Through them, we convey our greetings and best wishes to the Members of the House of Representatives and the friendly people of Cyprus.

ORAL ANSWERS TO QUESTIONS Contd.

SHRI KAPIL VERMA : Sir, an international conference on Nuclear free Asia-Pacific held at Hong Kong in June last expressed the apprehension that the Kaiga project will create massive problems for the stability of the region and safety of the future generations in view of the hazards involved in transport Of nuclear materials, disposal of wastes and dismantling of the reactors. The local protestors have also voiced similar feelings. I want to know from the Government what steps are being taken to take care of nuclear accidents. Specifically I want to know, since this project is located in the catchment area, whether the Government is taking any steps to ensure that water is not pol-

luted by radioactive wastes from the plant and whether the Nuclear Safety Board has okayed the project and what safety measures are being taken to take care of nuclear accidents.

SHRI K. R. NARAYANAN: Sir, we have read about the conference in Hong Kong. They have, *inter alia*, during the discussions, expressed some doubts about the Kaiga Project also. I think, the conference was generally opposed to nuclear energy as such. It is a view expressed by quite a number of people. But there are contrary views expressed by the majority of scientists in the world.

With regard to the stability of the foundations of the Kaiga Project, this has been gone into thoroughly by the Corporation and also by other institutions like the Earthquake Engineering Institute in Roorkee. As regards seismic threat the area is not a major seismic area. It is included in what you call, Zone III of the earthquake prone areas in India. In any case anti-earthquake devices and technology has been incorporated into the engineering work that is being done here. We believe that, according to all the evidence and studies conducted, the foundations are stable, and the plant will be able to withstand any sort of earthquake.

A question has been asked about disposal of waste and about other safety provisions. We have full knowledge of the technology for disposing of waste. There is always a waste disposal plant, treatment plant at reactor sites a plant come up in Kaiga.

With regard to water pollution, this is a fear which has been expressed by many people. Water is taken from the river Kalmadi and discharged back into it. But it is treated and purified and the water which is sent back to the Kalmadi, would not have any trace of radiation at all. It is completely protected water which will go into that river.

I want to say that this project has been cleared by the Ministry of Environment, One and Two of Kaiga. There has been, of course, some protest. But I am afraid that it is not a local protest. People have been coming from Bangalore and other places anti protesting there, in fact, we have representation from the people who actually live there that they would like to have the project completed as quickly as possible because they believe that it will add to the development of the area and to the welfare of the people concerned. All possible safety measures are being adopted and also engineered into the plant itself.

SHRI R. S. NAIK; Sir, the Karnataka Government is going to extend its fullest cooperation so far as the Kaiga Project is concerned regarding rehabilitation and all that. That is not the problem here. The problem is this, that a lot of social organisations, peasants, students, women are going and agitating there against the Project. They are afraid that the nuclear waste from the plant will continue to be radioactive for centuries. There is a reason because why they are afraid is....

MR. CHAIRMAN: He has assured you that it is not.

SHRI R. S. NAIK; Yes, Sir. A naval base is coming up. The naval base is about 25 km. from that place. It is the biggest project. Sea Bird is coming up. Besides that, there is the Kali Hydroelectric Project. This is the biggest project in Asia. That river is passing just by the side of the project?

MR. CHAIRMAN: Come to your question please.

SHRI R. S. NAIK: That is why, my specific question is whether the Government is going to have any nation wide debate to convince the representatives of that agitation that there will not be any disaster as far as this project is concerned, if so, when is

that Government going to have a debate on that particular issue?

MR. CHAIRMAN: Will you have a national debate? If so, when?

SHRI K. R. NARAYANAN: Sir the debate is going on all over the country. I think the debate has been going on in both the Houses of Parliament also almost at every Question Hour.

SHRI R. S. NAIK: (*Interruptions*) I would like to know to convince the people and to take the people into confidence.. .

MR. CHAIRMAN; Question No. 243.

Budget on Research and Development in the Seventh Five Year Plan

*243. SHRI M. S. GURUPADASWAMY: Will the Minister of PLANNING be pleased to state;

(a) the total amount budgeted on Research and Development in the Seventh Five Year Plan;

(b) whether any priorities and areas were denuded; and

(c) what is the ratio between the expenditure on Research and Development and the additional Income?

THE MINISTER OF STATE IN THE MINISTRY OF PLANNING AND THE MINISTER OF STATE IN THE MINISTRY OF PROGRAMME IMPLEMENTATION (SHRI BIREN SINGH ENGTI): (a) to (c) A statement is laid on the Table of the House.

Statement

(a) The outlay in the Science and Technology Sector for Research and Development in the Seventh Five Year Plan is Rs. 4398 crores under 'plan'.

(b) The Science and Technology Chapter in the Seventh Five Year Plan Document has brought out the approach, priorities, thrust areas, missions concept and linkages with a number of socio-economic sectors. Some of the Priority areas include biotechnology, space, science and so-