श्री रोतलाल प्रसाद वर्मा: इस बात का क्या कारण है कि झाग्नेयास्त्र झादि जो झार्डिनेस सामग्री हम विदेशों से मंगाते हैं, वह बहुत कम कीमत में मिलती है, जब कि हमारे यहां उसके दाम चार पांच गुना अधिक हैं ?

प्रो० शेर सिंह: जो चीजें हम बनाते है, उनकी कीमत दूसरे देशों की निस्बत ज्यादा नहीं है। कुछ चीजों में हमारी कीमत कम भी है।

Difficulties in storing Spent-Fuel Rods in Atomic Power Plants

*126. SHRI K. RAMAMURTHY: Will the Minister of ATOMIC ENER-GY be pleased to state:

- (a) whether the output in Tarapur Atomic Plant was reduced to 70 per cent of the designed capacity during the first six months of 1977-78 because of difficulties in storing more spentfuel rods in the existing pool;
- (b) whether the second unit of the Rajasthan Plant could not be commissioned for want of storing space for spent-fuel rods; and
- (c) if so, steps Government propose to take to solve this problem of storing spent_fuel rods as they are highly radio-active?

THE PRIME MINISTER (SHRI MORARJI DESAI): (a) Yes Sir; reduction in output became necessary on this account in the second half of 1977-78.

- (b) No, Sir.
- (c) Does not arise.

SHRI K. RAMAMURTHY: I have raised this question in three parts:

(a) whether the output in Tarapur Atomic Plant was reduced to 70 per cent of the designed capacity during the first six months of 1977-78 because

of difficulties in storing more spentfuel rods in the existing pool. To this, the hon. Prime Minister, I am glad, has said yes; he has in other words accepted that due to lack of storing facilities production has gone down to 70 per cent.

Part (b) is: whether the second unit of the Rajasthan plant could not be commissioned for want of storing space for spent-fuel rods; to this he has replied: no.

Part (c) asks the steps the Government propose to take to solve this problem of storing spent-fuel rods as they are highly radio active and for this he says it does not arise.

The Prime Minister in the first part has accepted that reduction in output to 70 per cent was necessary because of lack of storage facilities for spentfuel rods. But I do not know how this bureaucratic as well as steroytype answer "does not arise" has been given. I have asked very categorically as to what are the steps the Government is going to take to overcome this difficulty. I would like to know from the hon. Prime Minister as to what are the steps that have already been taken or are proposed to be taken.

SHRI MORARJI DESAI: I sorry that the reply to part 'C' somewhat misleading. I accent that. But what I may say is this, spent fuel storage is becoming short and therefore, this has happened. We have to see that production is tuned accordingly. The question of finding out how to utilise it is a question which can be solved only by an agreement with USA and we are negotiating it. But in view of their attitude, we have to be careful. We have to see how best we can do it. We are trying to find out what method we can use so that we get out of this impasse. But at present we are getting something more and perhaps we may hope to solve it that way. If not, we have to find out another way.

SHRI K. RAMAMURTHY: In view of the actue power shortage in the country, these atomic energy stations are expected to work to their fullest capacity. I can understand from the hon. Prime Minister's answer that due to negotiations with the United States, this sort of thing was nappend. I would like to know as to how long it will take and whether any time limit has been fixed to finalise this issue with the United States of America and get out of this power shortage.

SHRI MORARJI DESAI: It depends on the response of the other party and I cannot force it. I cannot give any time limit about it

SHRI CHITTA BASU: I would like to know from the hon. Minister whether the question of storing the spent fuel rods was a part of the contract which was agreed upon between the Government of India and the Government of United States of America and if so, whether the storage problem has been created because of the violation of the agreement by the United States of America. I would also like to know what alternative strategy the Government of India propose to adopt to save the plant from this kind of violation of the contract by the United States of America. I am saying this because our Prime Minister is credited to have said that we are thinking in terms of closing down the plant. Some newspaper reports are also there and some high officials have said that we are biding our time, say about two years or so, and after that, Tarapur plant would be closed down for good. I want the hon. Prime Minister to clarify these points.

SHRI MORARJI DESAI: I can understand the anxiety of my hon. friend about the violation of the agreement by the United States of America. It is violation, I do agree.

But what can we do about it? Can we go to court? Can any court decide it? It is not possible and we do not want to take any such steps. We have, therefore, to find out alternative methods of working it and if it does not happen, I cannot give up my self-respect and continue it.

डा० बलदेव प्रकाश: प्रधान मंत्री महोदय ने अभी बताया है कि स्टोरेज की कठिनाई होने के कारण तारापुर एटामिक प्लांट के उत्पादन में कमी हुई है। क्या इसके अतिरिक्त उत्पादन में कमी होने के और भी कुछ कारण हैं और क्या यू एस ए की तरफ से जो यूरेनियम की सप्लाई नहीं की जा रही है वह भी विजली के उत्पादन में कमो होने का एक कारण हैं?

श्री मोरारजी देसाई: इसी लियं तो यह हो रहा है कि वहां फयूश्रल है, फिर भी प्रोडवंशन थोड़ा कम करना पड़ता है, इसलियं कि स्टोरेज कपेसिटी एक्सीड हो जाय, तो फिर हम क्या करेंगे। इसीलियं इस को थोड़ा एडजस्ट करना पड़ता है

SHRI SAMAR GUHA: I am sorry after the answer given by the Prime Minister, I am completely confused. The question is about want of storing space for the spent fuel. It is not a question of supply of enriched uranium from USA. All the questions have been answered as if the question that has been asked is for the supply of enriched uranium or fuel from The question is whether our atomic energy commission have been successful in preparing certain kind of storage for keeping those spent uranium rods that have been used and have become radioactive. using, it cannot be thrown away any-It has to be where and everywhere. preserved somewhere. How does that depend upon USA? It is absolutely Our atomic energy business. commission_will have to do it. They should have anticipated that after a

certain period of time enriched uramium rods will become radioactive and they should have prepared for sufficient storage in lead chamber. storage under water or storage under sea. The question is answered in a completely different way. Why have our atomic energy commission failed to prepare some kind of storage, either lead chamber or underground storage or under-sea storage for keeping these spent radioactive rods that are used in our atomic plant?

SHRI MORARJI DESAI: My hon. friend is confused on account of my answer not on account of his own...

SHRI SAMAR GUHA: This is my subject.

SHRI MORARJI DESAI: If it is his subject he ought to know that the spent fuel cannot be thrown anywhere as it will create other problems. He does not realise....

SHRI SAMAR GUHA: I realised and that is why I asked the question. On this question, please don't sav that I do not realise.

MR. SPEAKER: The Prime Minister is on his legs

SHRI MORARJI DESAI: The Atomic Energy Commission has not been able to find ways and means by itself to use up the spent fuel or dispose it of. That we have to do with the Americians' aid. They had agreed to give it, but now they are not doing it.

(Interruptions).

MR. SPEAKER: Papers to be laid.

MR. SPEAKER: Mr. Guha, this is question time.

SHRI MORARJI DESAI: I am prepared to grant that my hon, friend knows more than I do. I must admit that I am not a professor, but he is. 3749 LS—2

WRITTEN ANSWERS TO QUESTIONS

Nuclear Power Project at Kalpakkam

*127. SHRI RAGAVALU MOHA-NARANGAM:

SHRI S. D. SOMASUNDA-RAM;

Will the Minister of ATOMIC ENERGY be pleased to state:

- (a) whether the project at Kalpakkam is not proceeding according to schedule;
- (b) if so, the extent of slippages and the reasons therefor; and
- (c) the concrete plans for completing the remaining phases of the project and the time-bound programme in this regard?

THE PRIME MINISTER (SHRI MORARJI DESAI): (a) The Madras Atomic Power Project at Kalpakkam is behind schedule.

- (b) The main reasons for the delay are (i) delayed deliveries of indigenously manufactured nuclear and conventional equipment, (ii) delay in the delivery of some equipment affected by the ban imposed by certain countries on the export of equipment/materials intended for nuclear power projects, and (iii) other causes like strikes, shortages of construction materials, etc.
- (c) Most of the equipments have now been delivered including those affected by the embargo. The erection work has been speeded up wherever feasible. Precommissioning activities have also been taken up in parallel to reduce the time required after erection for commissioning and full power operation. The first unit of the Project is likely to attain critically by December 1979 and the second unit in mid-1981. Pull commissioning can be expected a few months thereafter.