

LOK SABHA DEBATES

I

LOK SABHA

2

Tuesday, December 2, 1980/Agraha-
yana 11, 1902 (Saka)

The Lok Sabha met at Eleven of the
Clock

[MR. SPEAKER in the Chair]

ORAL ANSWERS TO QUESTIONS

Plant Load Factor of Power Plants

*205. SHRI CHINTAMANI PANI-
GRAHI: Will the Minister of ENERGY
be pleased to state:

(a) whether Central Electricity
Authority has stated in its report that
the average plant load factor of all
power plants installed in 1978-79 was
barely 17 per cent against the accep-
ted minimum of 28 per cent;

(b) if so, whether this defect has
been studied in depth; and

(c) whether steps have been taken
to remedy this?

THE MINISTER OF ENERGY (SHRI
A. B. A. GHANI KHAN CHAU-
DHURI): (a) to (c). A statement is
laid on the Table of the House.

Statement

(a) No, Sir. The Plant Load Fac-
tor achieved in the thermal power sta-
tions installed in 1978-79 was 21.4 per
cent during 1979-80 and 32.0 per cent
during 1980-81 (April to October).

(b) The performance of newly com-
missioned units has been reviewed
from time to time and the reasons
for their somewhat unsatisfactory
performance have also been examined
in depth. As per these studies, these
2729 LS-1.

units are taking somewhat longer
period for stabilisation and some of
the auxiliaries have also been not
working satisfactorily.

(c) The following measures have
been and are being taken to improv-
the performance of these units:—

- (i) Adoption of proper commis-
sioning procedures and plant
betterment programmes;
- (ii) identification of deficiencies
in design of equipment etc.
and taking up programme of
their rectification and replace-
ment;
- (iii) organisation of intensive train-
ing programme in operation
and maintenance of thermal
power plants;
- (iv) supply of requisite quantity
and quality of coal to thermal
power stations;
- (v) arranging assistance to the
power stations in repairing/
recommissioning generating
units under prolonged shut-
downs;
- (vi) introduction of modern main-
tenance techniques including
preventive maintenance prac-
tices;
- (vii) arranging visit of experts from
various disciplines to power
stations for suggestions for
improving the performance of
power stations; and
- (viii) Quality Assurance measures
are being taken up both during
manufacturing and erection of
the units.

SHRI CHINTAMANI PANIGRAHI:
May I know from the hon. Minister

whether the Government is aware that the plant load factor of all our plants in this country was 56 per cent in 1976-77. According to the statement of the hon. Minister, it was only 21.4 per cent in 1979-80 and I am happy to note that it has gone up only to 32.0 per cent in 1980-81. May I know from the hon. Minister whether the total availability of power due to outage of main equipment was 74.65 per cent and the total contribution of these outages by the boilers was 45.09 per cent, and the turbine contributed to 19.4 per cent and the generators contributed to 10.16 per cent. In view of these difficulties in the equipments, I would like to know whether the Government has enquired into all the problems of the power plants in our country and can we hope from the Government that at least in the coming year it can go up to pre-1976 level which was 56 per cent because in other countries like the USSR it is 62 per cent plant load factor and in Hungary it is 60 per cent and in Japan it is 53 per cent?

SHRI A. B. A. GHANI KHAN CHAUDHURI: Mr. Speaker, Sir, the question is with regard to installed capacity of 2210 MW which was added in 1978-79. That was the main question. Of these, the bulk of the capacity consists of 200/210 MW units totalling 1640 MW. These units were commissioned towards the fag end of the financial year and units are still under stabilisation. It is not possible for new thermal units to immediately start giving the rated name plate output. This is due to several teething factors of the plant components and auxiliaries which require to be adjusted before they can be run on full load. In the UK and the USA also, the normal stabilisation time is two to three years. In planning our new capacity, the Central Electricity Authority also takes a four year period for stabilisation of new units.

The plant load factor of new units commissioned in 1978-79 was not 17 per cent as indicated in the question, but 21.4 per cent during 1979-80. This has already improved to 32 per cent

in 1980-81. This year for the month of November it is going to be 42 per cent. The whole problem is of stabilisation of new units and all over the country it takes time and here also it is taking time.

SHRI CHINTAMANI PANIGRAHI: Sir, in 1976-77 our plant load factor was 56 per cent. I just wanted to know from the hon. Minister why is it in the last 3-4 years our plant load factor has come down from 56 per cent to 21.4 per cent. I am happy that it has improved to 32 per cent. But why we have not come up to 56 per cent?

My second question is this. I would like to know whether the hon. Minister is aware of the fact that all the bigger thermal plants having 200/210 MW generating capacity, out of these bigger thermal plants 68 thermal plants were examined and there it was found that the boilers and equipment which were supplied from BHEL, because they were defective, their plant load factor has not improved. I would like to know whether all these things have been studied and if so, what steps have been taken to remedy all these defects. It should come to at least 56 per cent plant load factor.

SHRI A. B. A. GHANI KHAN CHAUDHURI: Difficulties have been identified and we are in constant touch with BHEL and other suppliers to know how things can be improved and this is being pursued.

SHRI CHINTAMANI PANIGRAHI: You can put a question, if I can't put it properly. (*Interruptions*). Mr. Speaker, Sir, you can put a question and get the answer. What is the improvement?

MR. SPEAKER: Can you satisfy the Member?

SHRI CHINTAMANI PANIGRAHI: I just wanted to know, how many cases have been examined by now because I am trying to help the Minister. I would like to know in how many cases these things have been

examined and whether all the defects have been found out, and if so, what is the remedy found.

SHRI A. B. A. GHANI KHAN CHAUDHURI: Mr. Speaker, Sir, as I have said, we are constantly in touch with the BHEL and other suppliers and whenever complaints come from the State Electricity Boards, we tell them to have a meeting and identify the defects and try to rectify them.

MR. SPEAKER: Have you done in certain cases?

SHRI A. B. A. GHANI KHAN CHAUDHURI: Yes.

PROF. MADHU DANDAVATE: Sir, in the statement that has been laid by the hon. Minister on the Table of the House, while replying to part (c) of the question in (iv), he has said that one of the measures that have been taken to improve the performance is supply of requisite quantity and quality of coal to thermal power stations. Sir, as far as the performance of power plants is concerned, unless there is a coordination between the Steel Ministry, then the Ministry dealing with coal and railways, this problem cannot be solved and in the light of part (c)(iv) of this answer, I would like to know from him that if proper quality and quantity of coal is to be transported to the thermal plants concerned, is it not a fact that though there are four lakhs of wagons and normally 10 to 15 per cent are generally sick. In spite of that, is it not a fact that because the Durgapur Steel plant has not been in a position to give the promised wheel sets to the railways, as a result of which a number of wagons which had already been manufactured, completely remain stalled without wheel sets and as a result of that we have not been able to take coal to a number of thermal plants and that is why the performance has suffered.

MR. SPEAKER: Does that come into this?

PROF. MADHU DANDAVATE: Yes, Sir, it comes very much. Ask him whether it comes or not. He himself is aware of this.

MR. SPEAKER: But that is not covered by this question.

PROF. MADHU DANDAVATE: Sir, it is covered by this question. Please read the answer Part (c)(iv) deals with coal being carried. Coal is to be carried, I hope, not on our shoulders, but through the wagons.

MR. SPEAKER: On that point you are right. But that steel output is not covered here.

PROF. MADHU DANDAVATE: Sir, that is very much relevant.

SHRI A. B. A. GHANI KHAN CHAUDHURI: Sir, whenever any State Electricity Boards have complained to us with regard to quality of coal, we have immediately paid attention to that.

SHRI NIREN GHOSH: No, no.

SHRI A. B. A. GHANI KHAN CHAUDHURI: Now, the arrangement is like this. Whenever there is a complaint, the State Electricity Board people, the railway people and coal people go to the linkage point and they find out their complaint of quality coal, and whatever is necessary to do, they do.

PROF. MADHU DANDAVATE: Sir, a very specific, sharp question was put. He wants to carry coal to the thermal plants through the wagons and these wagons are stable because they are not getting the wheel sets from the Durgapur steel plant. I asked him a specific question. They have a Coordination Committee of Steel, Coal and Railways. That is why he should be able to give the answer.

MR. SPEAKER: He cannot answer that question.

PROF. MADHU DANDAVATE: Sir, already a slip has come to his table. He should not give me the slip, Sir.

MR. SPEAKER: He is not giving the slip. He has taken all the components to the linkage point!

PROF. MADHU DANDAVATE: He is willing to answer.

(Interruptions)

SHRI JAGANNATH RAO: Sir, the Talcher Thermal Plant is an old one not in the sense that it is very old. It has been functioning for more than a decade. How is it that it is not able to produce power of the rated capacity and what are the turbines? Are they made by BHEL and whether the technology of BHEL is upto date and what steps they are going to take to see that Talcher produces the maximum power of the installed capacity?

SHRI A. B. A. GHANI KHAN CHAUDHURI: Mr. Speaker, Sir, as I said, BHEL machinery is upto date, modern. There is no complaint as such, but we are trying to introduce quality control on that again and I am quite emphatic and of opinion that if this quality control is introduced, there will be no more complaint about BHEL.

Contractual Obligation of the Damodar Valley Corporation regarding Power Supply to Calcutta

+
*206. **SHRIMATI GEETA MUKHERJEE:**

SHRI SUSHIL BHATTACHARYA:

Will the Minister of ENERGY be pleased to state:

(a) what is the contractual obligation of the Damodar Valley Corporation in regard to supply of power to Calcutta Electricity Supply Corporation;

(b) how much maximum power Damodar Valley Corporation has been

supplying during morning and evening peak hours on average in MW during each month for the last one year ending 30th September, 1980; and

(c) what is the basis of allocation of power produced by the Damodar Valley Corporation to different consumers and whether such policy decision was taken in consultation with the two participating State Governments?

THE MINISTER OF ENERGY (SHRI A. B. A. GHANI KHAN CHAUDHURI): (a) to (c). A statement is laid on the Table of the House.

Statement

(a) Maximum contractual obligation of the Damodar Valley Corporation for supply of power to CESC is 105 MVA. The *force majeure* clause in the contract allows lower allocation at lower levels of generation.

(b) A statement showing the average maximum supply of power per month for the 12 months from October 1979 to September 1980 is attached as annexure-I. Separate figures for morning and evening peak are not available.

(c) The actual power supply on a day to day basis to the various consumers of the D. V. C. is regulated in accordance with graded priorities drawn up to rationalise distribution of electricity under conditions of reduced generation. These priorities had been fixed in consultation with the State Electricity Boards of Bihar and West Bengal. Recently in September, Government issued fresh directives for the distribution of DVC power at various levels of generation. This may be seen in Annexure-II. The CESC is included in the category of mixed and other loads. Highest priority is given to railway traction for which no cut is made even at low levels of generation.