large mechanised opencast mines in Singrauli, Ramgarh and Jharia. The Jharia project will have washeries also. Feasibility reports for all these mines except for Jharia have been completed jointly by U.S.S.R. and Indian Engineers. Soviet know-how in planning and design of these projects is being gainfully utilised for similar other projects. The collaboration has also been extended for implementation of these projects and for consultancy on specific mining technology problems. FEDERAL REPUBLIC OF GERMANY Co-operation for mining thin seams through coal ploughs was initiated in 1976 and two units of fast moving ploughs were procured on commercial basis for exploiting good quality thin coking coal seams in Jharia. Results have been fairly encouraging and more application is envisaged.

In 1978 an agreement was signed with the Government of Federal Republic of Germany for specialised training in degassification, longwall mining coal beneficiation technology and hydraulic mining. Indian engineers have been trained in F.R.G. and F.R.G. experts have been deputed to India. A mine site for trail of hydraulic mining has been identified in Jharia. The other areas of further collaboration are under examination.

FRANCE: In 1960, a team of Indian engineers were trained in France for mining thick seams with greater recovery of coal reserves without stowing In 1965—67, a pilot project in Karanpura was successfully implemented for extraction of an eleven metre thick seam by sub-level caving using wire netting as artificial roof which continued till 1977. In 1978 more advanced French Technology for mining virgin and developed thick and steep coal seams was sought from France. Feasibility reports for application of such techniques in Jharia, Ranigunj, Karanpura and Talcher are being prepared by French agencies. Further assistance in the form of equipment and technology transfer is envisaged.

UNITED KINGDOM: British assistance has so far been limited to import of coal mining equipment and more recently transfer of know-how in the areas of mechanised longwall mining with shearers and self advancing support. Supply of complete package of equipment and associated training of Indian personnel in longwall mining are presently being availed. Many mine engineers have been and are being trained in Britain under the Colombo Plan schemes.

CANADA: A proposal for cooperation with Canadian mining group for introduction of hydraulic mining in steep and soft coal thick seam has been finalised.

Indian technology of coal mining prior to nationalisation was mainly limited to extraction of seams lying at shallow depths by bord and pillar method with or without stowing resulting in low productivity, lower safety and lower percentage of extraction. After nationalisation, more stress has been given to mechanised opencast mining and gradual changeover from bord and pillar to mechanised longwall technology for higher productivity, safety, conservation and economy. Foreign technology for under-ground and opencast mining is being sought only in such cases where application of conventional Indian practices are proving inadequate and uneconomic. Application of each particular foreign technology is being decided after assessment of specific needs of the mining situation and the competence of the collaborating country.

Power Production in the Country

315. SHRI PIUS TRIKEY:
SHRI H. N. GOWDA:
SHRI D. M. PUTTE GOWDA:
SRI K. LAKKAPPA:

Will the Minister of ENERGY be pleased to state:

(a) what is the position of power production in the country since March last year;

(b) whether there is any improvement; and

(c) if so, the extent therefor and what steps have been taken to plug loopholes in the distribution of power?

THE MINISTER OF STATE IN THE MINISTRY OF ENERGY (SHRI VIKRAM MAHAJAN): (a) to (c). The All-India gross energy generation of 10525 MU during April 1979 to March 1980 was 2.1 per cent more as compared to the year 1978-79. The total energy generation in the country during the period April 1980 to October 1980 was 62635 MU as against 62613 MU during the corresponding period last year. Generation during this year is more by 22 million units as compared to the corresponding period last year.

Guidelines have been issued to the States to avoid wasteful and ostentatious use of power so as to ensure adequate supply of power to essential sectors, like agriculture, water supply, hospital, core sector industries, etc. Steps are also being taken to reduce the transmission and distribution losses and to detect theft of energy.

U.P. Power Projects Pending Clearance

316. SHRI ZAINUL BASHER: Will the Minister of ENERGY be pleased to state:

(a) the names of U.P. Projects pending with Electricity Auhority of India and his Ministry;

(b) the reasons for delay in clearing these projects; and

(c) the time upto which the clearance is expected to be issued?

THE MINISTER OF STATE IN THE MINISTRY OF ENERGY (SHRI VIKRAM MAHAJAN): (a) to (c). The power projects submitted by the U.P. authorities which are still pending techno-economic approval by the Central Electricity Authority and their status are indicated in the statement attached.

Statement

Name of the Project	Installed capacity (MW)	Present Status
	2	3
HYDRO		
1. Lakhwar Vyasi Multipurpose Project	420	This project has already been approved by the Planning Commission in January, 1976 subject to clearance of CEA and the work on this project is in progress. Replies to comments of CEA and other concerned agencies on the revised project report has recently been received from the State authorities.
2. Koteshwar Dam HEP	180	The project authorities have not yet submitted a detailed project report on the basis of detailed investigations.