

following correction may be made in the reply given earlier to the Unstarred Question :—

In column 4, at page 2 of the statement "Action against newspapers and journals under the DIR" against 'Siyasat Jadid', Urdu daily—

For "A case against the editor, printer and publisher of this paper was registered for publishing a highly communal and objectionable article. Editor of this paper has been discharged by High Court.

Substitute "A case against the editor, printer and publisher of this paper was registered for publishing a highly communal and objectionable article. The State Government have subsequently issued orders sanctioning withdrawal of the case against the editor and publisher of the daily 'Siyasat Jadid' keeping in view of the revised policy regarding the application of the Defence of India Rules, 1962."

12.16 hrs.

PAPERS LAID ON THE TABLE

FINAL REPORT OF THE ROAD TRANSPORT TAXATION ENQUIRY COMMITTEE

THE MINISTER OF TRANSPORT AND SHIPPING (DR. V. K. R. V. RAO) : I beg to lay on the Table a copy of the Final Report of the Road Transport Taxation Enquiry Committee. [Placed in Library. See No. LT-1973/67]

NAVAL CEREMONIAL, CONDITIONS OF SERVICE AND MISCELLANEOUS (SIXTH AMENDMENT) REGULATIONS, 1967

THE MINISTER OF STATE IN THE MINISTRY OF DEFENCE (SHRI L. N. MISHRA) : On behalf of Sardar Swaran Singh I beg to lay on the Table a copy of the Naval Ceremonial, Conditions of Service and Miscellaneous (Sixth Amendment) Regulations, 1967 published in Notification No. S.R.O. 362 in Gazette of India dated the 25th November, 1967 under section 185 of the Navy Act, 1957. [Placed in Library. See No. LT-1974/67]

GOA, DAMAN AND DIU (ABSORBED EMPLOYEES CONDITIONS OF SERVICE) AMENDMENT RULES, 1967

THE DEPUTY MINISTER IN THE MINISTRY OF HOME AFFAIRS (SHRI

K. S. RAMASWAMY) : On behalf of Shri Vidya Charan Shukla I beg to lay on the Table a copy of the Goa, Daman and Diu (Absorbed Employees Conditions of Service) Amendment Rules, 1967, published in Notification No. 3702 in Gazette of India dated the 21st October, 1967 under sub-section (3) of section 3 of the Goa, Daman and Diu (Absorbed Employees) Act, 1965. [Placed in Library. See No. LT-1975/67].

MESSAGE FROM RAJYA SABHA

SECRETARY : Sir, I have to report the following message received from the Secretary of Rajya Sabha :—

"In accordance with the provisions of rule 127 of the Rules of Procedure and Conduct of Business in the Rajya Sabha, I am directed to inform the Lok Sabha that the Rajya Sabha, at its sitting held on the 11th December, 1967 agreed without any amendment to the Cotton Textile Companies (Management of Undertakings and Liquidation or Reconstruction) Bill, 1967 which was passed by the Lok Sabha at its sitting held on the 28th November, 1967."

COMMITTEE ON PRIVATE MEMBERS' BILLS AND RESOLUTIONS SEVENTEENTH REPORT

SHRI R. K. KHADILKAR (Khed) : I beg to present the Seventeenth Report of the Committee on Private Members' Bills and Resolutions.

12.17 hrs.

STATEMENT RE: DAMAGE TO KOYANGAR AND PROJECT DUE TO EARTHQUAKE

Mr. SPEAKER : Dr. K. L. Rao to make a statement about the earthquake.

THE MINISTER OF IRRIGATION AND POWER (DR. K. L. RAO) : Mr. Speaker, Sir, I wish to make a statement on the damage to Koyna Project and Koyanagar due to the earthquake on the 11th December, 1967.

Construction of the Koyna Dam was commenced in 1956 and the first partial filling of the reservoir started in 1961. Power generation commenced in 1962 and at present constitutes about 40% of the total power generation in Maharashtra State.

For the last four years, minor earth tremors were noticed and seismographic instruments were installed to detect and record them as advised by a Committee of Experts appointed by the Government of Maharashtra in 1963 to study the seismic disturbances.

On 13th September, this year at 11.39 a.m. there was a severe earthquake shock. The Committee met immediately and also consulted two Japanese experts Prof. Okamoto and Prof. Tanimoto who visited the site also. The Japanese experts expressed the view that the major shocks were of tectonic origin and opined that Koyna Dam may not experience shocks of intensity greater than that of September 1967.

On 11th December, 1967 in the early hours, at 4.22 a.m. severe earthquake shocks were recorded at Koyna and felt in varying degrees of intensity at Ahmednagar, Belgaum, Bijapur, Bombay, Broach, Goa, Nanded, Ooty, Ratnagiri and Hyderabad. The severity of this exceeded at all the previous earthquakes felt in the South West Coast of India. The major shock was preceded by minor shocks between midnight of 10th December and early morning of 11th. The major shock itself recorded in Koyna was in three waves in quick succession. The major shock was followed by series of minor shocks of which nearly fifty were recorded upto 3.20 p.m. on 11th December. Thereafter another fifty shocks have been recorded by the Poona observatory in the next 24 hours. At the time of my inspection on 12th, I felt three minor shocks, the most intense of these occurring at 11.49 a.m. while I was in the underground Power House. Seismologists advise that after a major shock of the type that occurred on 11th, after shocks generally continue for some more days. They also state that there is no scientific method for prediction of the time and place of occurrence of earthquakes.

The earthquake shock of great intensity 11th had its epicentre three miles from Koyna Dam. According to the Richter scale this earthquake had a magnitude of 7.5 and is classified as a major shock and can cause severe damage near its epicentre. Data recorded by the instruments are being studied but it is felt that acceleration due to this earthquake near Koynanagar is likely to be twenty percent of gravity and more.

Geologists had been of the opinion that location of Koyna Dam is on one of the geologically stablest parts of the world. No major earthquakes were therefore expected. In spite of that as a measure of caution, the dam and other works were designed to withstand an acceleration of a fourth of what occurred on the 11th of this month.

Immediately on hearing about the occurrence of the earthquake I proceeded to the spot and inspected in detail the various components of the Project. During my inspection on 12th December, Shri S. B. Chavan, Minister for Irrigation and Shri R. A. Patil, Minister for Industries and Electricity, Maharashtra State, were present. I took along with me a geologist, the Chief Engineer, who was incharge of the construction of the dam and other concerned officers of the Central and State Governments.

The inspection revealed the following in respect of important items of the Koyna Project. The only item of importance not inspected is the water conductor system (that is tunnel) as it is filled with water.

Koyna Dam.—The Dam is in a sound condition. No damage of any kind is visible. Due to movement of earth and of the dam built into it, there appears to be relative motion between the spillway bridge which is separate from the dam and dam proper with the result that a few cracks appeared in the parapets and the bridge slab. These are not of any consequence and can be repaired. There has been very little seepage of water in the operation gallery at 2002, while the water level at the time of inspection was +2161, indicating the absence of any damage to the dam. On either side in the earth connections, there were cracks in the earth. These occur usually in severe earthquakes and are easily rectified.

Intake Tower.—Generally, a slender and high structure of this type suffers a great deal from severe earthquakes but fortunately there has been no appreciable damage to this structure.

Underground Power House.—No effect of the earthquake has been noticed in the Underground Power House. After the earthquake on 13th September this year, some cracks were noticed in the busbar and transformer passage tunnels. The Committee of Experts who examined this in September 1967 was of opinion that these were probably in the concrete lining and at the

[Dr. K. L. Rao]

construction joints. Except in these small tunnels, no cracks were noticed elsewhere. Nor further effects were noticed as a result of the 11th December earthquake in the civil engineering structure of the Power House.

As a result of the earthquake, one of the circuit breakers in the outdoor switchyard (at Pophali) went out of alignment breaking its insulation and the generators consequently tripped. As stated earlier, the electrical equipment in the Power House do not appear to have been damaged and it is possible to restore the power supply in a week or two. Electrical engineers in charge of the Station feel that a thorough check of the machines, specially of the bearings is desirable before starting the machines by way of abundant precaution. The work has been taken in hand. I have asked the Chairman, Maharashtra State Electricity Board, Member (Hydro-Electric), Member (Designs and Research), Central Water & Power Commission, and other engineers to remain at the spot and make an early resumption of power generation.

Koynanagar, the colony built for the construction of the dam and other works at Koyna suffered very badly as a result of earthquake. Most of the buildings collapsed. The only ones standing unaffected are the ones built of steel columns and roofed with corrugated sheets. Almost all the residential buildings, offices, etc. at Koyna were built as temporary structures using stone or brick works and tiled roofings. These could not stand the violent motion of the earth. It is estimated that 33 persons died at Koynanagar and about 200 seriously injured. This number does not include the persons affected in the nearby villages. Koynanagar bore the burnt of the disaster due to its nearness to the epicentre and the nature of the buildings.

In the face of tragic occurrence, I found the Chief Engineer and other officers at Koyna full of confidence and discharging their duties with great devotion.

Koyna Dam and the related works are the first of the large river valley structures in our country to be subjected to a severe earthquake of the type experienced. To advise on the possibility of recurrence of severe earthquakes in future in this region and on

the protective measures, if any, needed to strengthen the structures against such severe attacks, I am taking steps to constitute a High level Committee of Expert Seismologists and Engineers including an expert from foreign countries where severe earthquakes occur.

MR. SPEAKER : Shri P. Ramamurti :

श्री मधु लिमये (मुंनेर) : अध्यक्ष महोदय, कुछ बातों का खुलासा होना चाहिये। मैंने ध्यानाकर्षण का नोटिस भी दिया था। एक सवाल पूछना है।

MR. SPEAKER : No, If I allow one member, I will have to allow others and there will be a debate right now.

श्री मधु लिमये : श्रीर कोई रास्ता बताइये। इस पर खुलासा कैसे मांगा जा सकता है।

MR. SPEAKER : If he wants to have a debate on this, let him give notice. We can have a debate for one or two hours. If he has some material on which he thinks a useful debate can be held, we can have it, say for an hour. I have no objection to discussing it.

12:26 hrs.

PERSONAL EXPLANATION BY MEMBER

SHRI P. RAMAMURTI (Madurai) : On 11-12-1967, the Minister for Home Affairs made a statement in response to a call Attention Motion on the "reported anti-national activities in West Bengal and Kashmir by the Communist Party of India (Marxist)."

That statement and the subsequent statements made by various members under the guise of putting questions, made the purpose quite clear. It was to use the Parliamentary forum for creating a political climate for an attack on our party.

As early as 1959, when the dispute between China and India came to the open, the then united Communist Party of India had taken the stand that the question can and must be resolved through a negotiated political settlement. After we separated, we continued to advocate negotiations for a political settlement. We will continue to do so, since we are convinced that this alone is in the interest of our country. Any amount