COMMENTS OF THE USSR STATE PLANNING COMMITTEE (GOSPLAN) ON THE TASKS OF THE FIVE-YEAR PLAN OF THE PEOPLE'S REPUBLIC OF CHINA

April 30, 1953**

The USSR State Planning Committee (Gosplan) has reviewed the memorandum "The Economic Situation in China and the Tasks of the Five-Year Construction," as well as some additional materials submitted by representatives of the People's Republic of China, and provides the following comments:

- Refers to a package of Soviet-Chinese documents signed on May 15, 1953. See document 50.

** This document is an appendix to the Resolution of the Council of Ministers of the USSR "On Assistance to China in the Implementation of the Five-Year Development Plan of the People's Republic of China" dated April 30, 1953. It was handed over to the Chairman of the Central People's Government of the PRC, Mao Zedong, by the USSR Ambassador to the PRC, V.V. Kuznetsov, on May 7, 1953. Simultaneously, a Memorandum of the Soviet Government was handed over to Mao Zedong (not published, see also document 52).

The main directions of the development of the Chinese economy, as outlined in the memorandum, are correct. The tasks set out in the memorandum for the five-year period are based on the significant achievements of the Communist Party of China and the Chinese government, meet the fundamental needs of the Chinese people, and correspond to the interests of strengthening the forces of the democratic camp.

The implementation of the main tasks of the PRC's five-year plan requires, first and foremost, the development of industry and the creation of China's own heavy industry.

To date, China's industry, in terms of most basic products, has surpassed the highest level China reached before its liberation. The memorandum on the PRC's five-year plan envisages high rates of further industrial development. However, the projected average annual growth rates of the entire industry of the People's Republic of China, at 20.4%, and of state and mixed industry, at 24%, are, in our opinion, overstated.

Further growth of industrial production in China will be associated with the construction and development of new and the reconstruction of existing enterprises, rather than with the restoration of industry, which will undoubtedly lead to a slowdown in industrial production rates. The growth rates of industry and the adoption of advanced technology will inevitably be constrained by the shortage of qualified workers and engineering and technical personnel. In addition, many mining industry enterprises planned for construction, with the organization of production of goods on them, are not yet provided with detailed explored geological reserves of raw materials. Therefore, the start of construction of individual enterprises should be postponed to later dates, which will cause a decrease in the volume of production in this five-year period, and consequently, a reduction in the planned industrial growth rates.

Overstated industrial growth rates may lead to the dispersal of material resources and qualified personnel and the failure to fulfill the most important tasks of the five-year plan. Based on the foregoing and bearing in mind the need for unconditional fulfillment of the tasks of the first five-year plan, we consider it advisable to take a more cautious approach to determining growth rates and recommend setting the average annual growth rates of gross industrial output for 1953-1957 at approximately 14-15% instead of 20.4%.

If, during the implementation of the five-year plan, additional reserves for increasing industrial production are identified, they can be taken into account when compiling annual plans, which should provide for not only the fulfillment but also the overfulfillment of the tasks of the five-year plan.

The most important task in the field of the mining industry is to accelerate geological exploration, with geological exploration conducted in the planned five-year period to identify raw material resources not only for use in 1953-1957 but also for the construction of enterprises in subsequent years.

The development of large-scale industry in the People's Republic of China should be combined with the development of handicraft industry, which can produce a wide range of products necessary for the population. The development of handicraft industry in the People's Republic of China has favorable conditions, as China has abundant labor resources and experienced craftsmen, which should be taken into account in the five-year plan. The development of handicraft industry should be directed by the state, which, providing it with raw materials and organizing the cooperation of artisans, can ensure its necessary development.

Special attention should be paid to agricultural issues in the PRC's five-year plan. Ensuring the urban population with food and industry with agricultural raw materials should be one of the most important tasks of the five-year plan, and in particular, attention should be paid to increasing the production of industrial crops for the growing industry.

To develop agricultural production and increase its marketability, measures should be outlined to organize the supply of agriculture with agricultural tools, implements, and mineral fertilizers. It is necessary to ensure the expansion of trade relations between the city and the countryside, paying particular attention to the wider involvement in trade of products produced in peasant farms, especially in areas with a predominance of subsistence farming and not connected by transport routes with industrial regions of the country. The most important condition for this is to ensure an uninterrupted flow of consumer industrial goods from the city to the countryside. The task of using the vast labor resources of the Chinese countryside, where small peasant farming is the dominant type of farming as a result of agrarian reform, to increase agricultural production and its marketability, requires the comprehensive development of the production of the simplest agricultural implements by organizing small enterprises in all provinces of the PRC.

For the creation of heavy industry, the development of China's natural resources, the uplift of agriculture, the strengthening of ties between individual regions, the increase of the country's defense capability, and the strengthening of ties between China and the USSR, the significant railway construction planned in the five-year plan is entirely correct. It is also necessary to provide in the five-year plan for measures to increase the utilization of the existing railway network and rolling stock, the development of water transport, and the improvement of fleet utilization.

It should be noted that the memorandum did not adequately address issues of public finance and monetary circulation. Meanwhile, the implementation of the five-year plan's tasks, in particular, the implementation of large-scale industrial construction while simultaneously raising the living standards of workers, requires strengthening public finances and strengthening monetary circulation based on the development of trade. For this purpose, it is necessary to develop special measures in the field of finance and monetary circulation in the five-year plan.

The memorandum poorly addresses the issues of the personnel training plan necessary for the implementation of the first five-year plan. As the experience of the Soviet Union shows, one of the most difficult tasks of the country's industrialization is the mass training of qualified personnel, the

creation of an intelligentsia from the working classes of the population. A plan for training qualified workers and engineering and technical personnel should be specifically developed.

When developing the five-year plan, it is necessary to make additional calculations that are absent in the submitted materials, in particular, calculations of production and consumption for the most important types of products (material balances), the volume of capital investments in individual sectors of the national economy by year; determine the sources of financing capital investments and providing construction with material resources. It is also necessary to have calculations of increasing agricultural productivity and marketability, trade turnover, and the financial plan of the five-year period.

Regarding individual sectors of the national economy, we consider it necessary to make the following comments:

On geological exploration. According to information from PRC representatives, explored reserves according to the classification adopted in the USSR by categories A, B, and C1, necessary for the design, construction of new, and expansion of existing industrial enterprises, for a number of mineral deposits for ferrous and non-ferrous metallurgy, coal, and chemical industries, are absent.

Thus, of the four metallurgical plants planned for construction, the construction of plants in Daye and Baotou is the most justified. However, even for these plants, additional serious geological work to determine the explored reserves of iron ore is required before making a final decision on their construction.

Construction of enterprises on an unexplored mineral resource base may lead to unjustified costs and diversion of funds from the implementation of priority tasks. Therefore, it would be advisable to accelerate geological exploration to identify reliable reserves of minerals in the areas of planned construction and only after that decide on the timing of enterprise construction.

The tasks accepted for the five-year period for identifying explored reserves of coal and copper ores are acceptable. The planned increases in iron ore and oil reserves should be additionally checked, as they are not supported by the projected volume of exploration drilling.

The memorandum does not highlight the task of exploring coking coal, nor does it provide for the task of exploring manganese ores, which is extremely important for the development of ferrous metallurgy. Tasks for exploring reserves of non-ferrous and rare metals (except copper) and basic raw materials for the chemical industry are also not provided.

To ensure the needs of ferrous metallurgy enterprises, it is recommended to provide for the task of increasing coking coal and manganese ore reserves over the five-year period. It is also advisable to set a task for the five-year period to increase the explored reserves of lead, zinc, molybdenum, tungsten, tin, antimony, mercury, and aluminum raw materials, as well as tasks to identify the main types of mineral raw materials for the chemical industry and the construction materials industry and non-metallic raw materials for the metallurgical industry.

For more rational use of the PRC's limited geological personnel and equipment, geological exploration to identify explored reserves of minerals for the development of ferrous and non-ferrous metallurgy, coal and oil industries, chemical industry, and construction materials industry should be concentrated in the areas of planned enterprise construction.

For a correct assessment of the state of the PRC's mineral resources, it is recommended to re-evaluate all geological data on known mineral deposits and, first and foremost, in the areas of

planned industrial enterprise construction, organize the accounting of minerals, and introduce into the practice of geological exploration the classification of mineral reserves used in the USSR.

On ferrous metallurgy. Of the 12 blast furnaces planned for commissioning in the five-year period, 9 blast furnaces are the most realistic, including 6 blast furnaces at the Anshan metallurgical plant, 2 blast furnaces at the Benxi plant, and 1 blast furnace at the Dadakou plant.

As for the 3 blast furnaces at the two new plants, the issue of the timing of their construction can only be finally resolved after the necessary iron ore reserves are explored in the construction areas of these plants.

The resulting reduction in pig iron production will not affect the steel production program, as the planned pig iron production significantly exceeds the demand for it.

On non-ferrous metallurgy. The available data on geological reserves of raw materials allow us to decide on the possibility of construction and reconstruction of the following non-ferrous metallurgy enterprises: expansion of the tin plant in Gejiu, expansion of the molybdenum mine in Yangjiadjangzi, reconstruction of the titanium-vanadium mine in Rehe province, construction of the second stage of the Fushun aluminum plant, construction of a hard alloy plant, expansion of the aluminum alloy processing plant in Harbin, restoration of the magnesium plant, and construction of a tungsten mine with a concentrating mill in Jiangxi province.

The construction of the remaining enterprises, mainly copper-lead-zinc, necessary to ensure the planned level of non-ferrous metal production, is considered advisable to recommend only after additional study of raw material resources in the areas of planned construction and the related study of the size and location of enterprises in connection with energy and water resources.

As for the construction of two copper smelting plants at the Dongchuan and Baiyinchan deposits, their construction can only be started after clarifying the explored reserves of raw materials.

The same applies to the construction of the Jilin zinc plant.

On the coal industry. We consider it correct that a significant increase in coal production is planned to be obtained through the development and improvement of the utilization of the capacities of mines operating at the beginning of the planned five-year period.

As of the beginning of 1953, 19 mines and coal open-pit mines with a capacity of 14.5 million tons of coal per year are under construction; in 1953, of the 6 mines with a capacity of 4 million tons of coal per year planned for laying, only 3 mines with a capacity of approximately 2 million tons, which can be commissioned by 1957, are provided with design documentation.

Thus, it is possible to count on the commissioning of new mines with a total capacity of approximately 16.5 million tons during the five-year period. With the accepted degree of capacity utilization of new mines, the increase in coal production from these mines will be about 9 million tons, instead of the planned 15 million tons.

In this regard, the planned coal production plan of 93.8 million tons should be slightly reduced.

The plan provides for the construction of 107 new mines. Of the 44 large mines with a capacity of 53.7 million tons submitted for consideration, geological documentation is currently available for only 8 mines and one open-pit mine with a total capacity of approximately 20 million tons. For the remaining 63 mines with a capacity of 23.3 million tons, data on the status of geological documentation were not provided at all.

Due to the current lack of geological documentation for the construction of new mines, in addition to those recommended above, it is considered advisable to consider the issue of the number of these mines and the timing of their construction in annual plans, depending on the availability of geological materials and approved industrial coal reserves for mine fields.

Given the foregoing, it is considered advisable to recommend the following:

- pay special attention to geological exploration, bearing in mind the priority of conducting detailed surveys on the sites of mines to be designed and laid in the current five-year period, as well as on the increase in coking coal reserves;
- clarify the location of new mine construction by region, taking into account the need to minimize coal transportation;
- clarify the timing of new mine commissioning in relation to the timing of commissioning of industrial enterprises and railways.

On the oil industry. The planned development of oil-producing regions in Gansu and Shaanxi provinces, as the most studied, is correct. However, even in these regions, a thorough check of oil reserves in categories A+B is necessary, as they should serve as the basis for further development of the oil industry.

From the planned task of increasing oil reserves to 1,100 million tons, reserves in category "C" should be excluded, as reserves of this category cannot serve as the basis for the construction of oil production and refining enterprises. Reserves in categories A+B, which, according to information from PRC representatives, should amount to 620 million tons by the end of the five-year period, are, in our opinion, overstated, given the planned volume of exploration drilling. Therefore, the task of increasing oil reserves should be brought into line with the planned volume of exploration drilling.

The restoration of the production of synthetic liquid fuel from coal and shale at Fushun and other plants to 300,000 tons of liquid products per year is advisable.

The construction of an oil refinery in Lanzhou in the current five-year period should be carried out based on a capacity of 1 million tons of oil processing per year instead of 3 million tons.

To prepare oil production in the Liaodunmiao area to the extent that ensures the loading of the oil refinery in Lanzhou by the time it is commissioned, it is advisable to drill a sufficient number of production wells in advance, timing their commissioning to the start of operation of the oil refinery.

It is also necessary to consider the possibility of increasing oil refining at existing oil refineries compared to the planned processing volume.

On power plants. Taking into account the comments on the growth rates of industry and other sectors of the national economy of the People's Republic of China, the demand for electricity will decrease slightly. Therefore, the power plant construction plan must be brought into line with the demand for electricity.

The planned priority expansion and reconstruction of existing thermal power plants and the Fengman hydroelectric power plant is considered correct, as this ensures the fastest increase in electrical capacity.

In the further development of the five-year plan, special attention should be paid to planning the development of individual regional energy systems in order to ensure full coordination of the

commissioning of power plant capacities with the development of existing and the construction of new industrial enterprises.

It is also advisable to develop a plan for the construction of high-voltage electrical networks and substations.

The use of the Yellow River's energy resources is of great national economic importance for the PRC, but its implementation is a complex technical task, especially in connection with the large volume of solid runoff and the risk of rapid reservoir siltation.

In the USSR, the design of powerful hydroelectric power plants on large rivers is preceded by the development of a scheme for the integrated use of these rivers' water and energy resources, which allows for the correct placement of hydroelectric power plants and other hydraulic structures in accordance with geological, topographic, and other conditions, determining the appropriate degree of flow regulation and the distribution of water resources between individual sectors of the economy, and establishing the sequence of hydroelectric power plant construction. Simultaneously with the development of such schemes, issues of industrial development, which will use the electricity of the planned hydroelectric power plants, are developed. Such a scheme must be developed for the Yellow River, using all accumulated survey materials.

Therefore, the issue of the timing of the construction of priority hydroelectric power plants on this river should be resolved after the development of a general scheme.

A similar approach should be taken to the issue of the construction of the Jieshui and Hongjin hydroelectric power plants.

On the machine-building industry. In the field of machine-building, a particularly important task is the creation of capacities and the development of the production of steam turbines, generators, hydraulic turbines complete with generators, power transformers, cable products, electric motors, metal-cutting machines, metallurgical equipment, mining and chemical equipment, and automobiles.

Special attention should be paid to the development in the PRC of related industries that ensure the completion of equipment with various semi-finished products, components, and finished products. First of all, it is necessary to develop the production of large forgings, as well as large steel and cast iron castings for machine-building, the production of plastics, porcelain and ceramic products, electrical steels, insulation materials, ignition and carburetion devices for automobiles, rubber products, lighting devices, measuring instruments, and fasteners.

Along with the reconstruction of existing enterprises, new machine-building plants should be built and commissioned in 1953-1957, primarily:

- a turbine production plant in Harbin with a total capacity of 360,000 kW per year, with the possibility of increasing production volume to 600,000 kW per year in the future;
- an electrical equipment and mercury rectifier plant in Xi'an for the production of high-voltage circuit breakers up to 26,000 sets and mercury rectifiers with a capacity of up to 250,000 kW per year;
- a static capacitor plant in Xi'an with a capacity of 1 million kvar, instead of the planned 350,000 kvar;
- a heavy machine-building plant in Fulaerdi with a capacity of 40,000 tons of mechanical products per year;

- a mining equipment production plant with a capacity of 15-20,000 tons per year, with commissioning in 1958;
- an automobile production plant in Changchun (first stage);
- a ball and roller bearing production plant in Xi'an with an output of 10 million bearings per year.

In addition, to accelerate the organization of tractor production and output, it is advisable, instead of the PRC's planned construction of a tractor plant with a capacity of 40,000 tractors per year with the start of tractor production in the next five-year period, to build a tractor plant with an output of 15,000 tractors per year.

On the chemical industry. The submitted materials lack data on the demand for chemicals in individual sectors of the economy. Therefore, it is recommended to check the coordination of the chemical industry's production volume with other industries, in particular with the military industry, which consumes chemical products.

It is advisable to organize the production of ammonium sulfate at coke-chemical plants, as its production at chemical plants using synthetic ammonia is considered irrational.

The planned increase in the production level of chemical products through the construction of new plants is not supported by data on explored reserves of raw materials for the chemical industry contained in the materials submitted by PRC representatives. It is advisable to recommend that explored reserves of raw materials be established first, after which the issue of the location of chemical plant construction, and primarily plants for the production of sulfuric acid and soda ash, should be resolved.

The construction of one plant with a capacity of 15-20,000 tons of rubber per year using the off-gases of the oil refinery and the construction of two nitrogen fertilizer plants is considered correct.

On the construction materials industry. To ensure the planned cement production and create reserves in the construction of cement plants, the reconstruction and improvement of the operation of existing plants, as well as the restoration of 5 destroyed cement plants with a capacity of 800,000 tons and the construction of 5 new cement plants with a total capacity of 700,000 tons, are planned. It is recommended to clarify cement raw material reserves, determine the type of equipment (cement kilns) to be installed at new plants, and, in accordance with the demand for cement by region, clarify the capacity of new plants and their location.

On the growth rates of capital investments and the construction industry. The volume of capital construction should be brought into line with production growth rates, funding sources, and the metal balance.

To ensure the implementation of the construction program, it is necessary to provide for the creation of special industry and territorial construction organizations in major construction areas with permanent staff of qualified construction workers and engineering and technical personnel for general construction work (stone, concrete, reinforced concrete, etc.), as well as for special types of work (electrical installation, heating, ventilation, sewerage, hydraulic engineering, etc.).

It is desirable to provide for the expansion and creation of new design organizations both in industrial ministries and in the Ministry of Construction, as well as to strengthen these organizations with qualified personnel by creating and expanding educational institutions for the training of construction designers.

On labor and personnel issues. The memorandum and the additional materials submitted by PRC representatives lack projections and substantiated calculations of the need for specialists and qualified workers both in the national economy as a whole and in individual sectors, as well as calculations of the sources of meeting this need. A labor plan, without which it is impossible to establish substantiated tasks for the training of specialists and qualified workers, has also not been developed.

Therefore, when preparing the draft first five-year plan of the PRC, it is recommended to develop a labor plan, which should include tasks for the growth of labor productivity, the number of workers, engineering and technical personnel, and employees, average wages, and wage funds.

When developing a specialist training plan, it is necessary to coordinate this training with the need for specialists in individual sectors of the national economy.

The materials on the five-year plan provide for the graduation of 132,000 engineers and 160-180,000 technicians. The ratio of engineer to technician training should be revised to increase the number of technicians relative to engineers in industry and construction. It is necessary to increase, compared to the planned, enrollment in secondary technical educational institutions.

Given that the planned enrollment in universities exceeds the graduation of students from secondary schools, it is necessary to provide in the five-year plan for the deployment, especially in the early years of the five-year period, of short-term courses for university preparation and a network of secondary educational institutions of the type of former workers' faculties in the USSR, attaching them to individual universities.

When developing tasks for the training of qualified workers for industry, construction, and transport, it is advisable to use the existing craftsmen and artisans by individually and collectively training them at enterprises, as well as organizing short-term courses.

The experience of the USSR shows that the preparation of a five-year plan and, especially, ensuring the necessary proportions between sectors and spheres of the national economy requires more thorough justification and economic calculations. Given also that many important issues that need to be resolved in the first five-year period are still insufficiently developed, additional extensive work on the draft five-year plan of the PRC is necessary.

State Archive of the Russian Federation. – F. R – 5446 secret – Op. 3 secret. – D. 215. – L. 215-227.