

MAY 1952

50X1-HUM

CLASSIFICATION CONFIDENTIAL
 SECURITY INFORMATION
 CENTRAL INTELLIGENCE AGENCY
 INFORMATION FROM
 FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT
 CD NO.

COUNTRY USSR
 SUBJECT Economic - Electric power
 HOW PUBLISHED Daily newspapers, monthly periodicals, book
 WHERE PUBLISHED USSR
 DATE PUBLISHED 1950 - 3 Jun 1953
 LANGUAGE Russian

DATE OF INFORMATION 1940 - 1953

DATE DIST. /3 Oct 1953

NO. OF PAGES 4

SUPPLEMENT TO REPORT NO.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES. WITHIN THE MEANING OF TITLE 18, SECTIONS 793 AND 794, OF THE U.S. CODE, AS AMENDED. ITS TRANSMISSION OR REVELATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. THE REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

SOURCE As indicated

PROGRESS ON VOLGA PROJECTS AND TRANSMISSION LINES;
 POSTWAR SHIFTS IN USSR ELECTRIC POWER OUTPUT

[Numbers in parentheses refer to appended sources]

Kuybyshevskaya GES

Altogether, about 7 million cubic meters of concrete are to be placed during the construction of the Kuybyshevskaya GES. Ten automatic concrete mixing plants with a total capacity of 20,000 cubic meters in 24 hours will be in operation at the peak of the concreting.(1) From 70 to 80 kilograms of steel bars will be required for each cubic meter of reinforced concrete placed. Consequently, 350,000 tons of steel bars will be required and 5 million bar joints will have to be welded.(4)

By 21 January 1953, several hundred cubic meters of concrete had already been placed in the foundation of the power plant structure near the right bank of Volga River. Concreting the lower navigable lock near the left bank of the river has started also (2), and by 23 April 1953 about 50,000 cubic meters of concrete had already been placed.(3)

All branches of the work, including concreting, continued throughout the winter despite the cold weather and frozen river.(5) On 23 April, the spring flood water level in the river was 5.5 meters above pre-flood level. Suction dredges were at work as usual without slowing down.(6)

The cofferdams which were built to prevent flooding of the excavations withstood very well the pressure of the high flood waters.(7)

Stalingradskaya GES

The work on driving 5,000 sheet piles along the cofferdam to protect excavations on Peschanyy Island against spring floods was started in January (8) and was almost completed on 17 March.(9)

50X1-HUM

CLASSIFICATION		CONFIDENTIAL											
STATE	NAVY	NSRB	DISTRIBUTION										
ARMY	AIR	FBI											

CONFIDENTIAL

50X1-HUM

One electric power generating train, Type D-3,000, with a generating capacity of 3,000 kilowatts and having an automatic voltage regulator, is on the job. It supplies power to two electric dredges, each of which has electric motors with a total capacity of 1,250 kilowatts, including a main motor of 864 kilowatts. Another power generating train with a capacity of 1,000 kilowatts is also on the job.(10)

Construction of the second high-voltage transmission line across the Volga River has started. The line will supply power to the Volga-Ural Canal construction project.(11)

Dredges were at work throughout the winter and dredged about 1.5 million cubic meters of earth, despite the cold weather and frozen river.(12)

Construction of the ropeway across the Volga River to handle sand, gravel and other materials has started. It is estimated that during the next 3 years the ropeway will transport 12 million tons of building materials.(13)

On 20 April 1953, the builders of the Stalingradskaya GES made a pledge to complete the 1953 plan 25 days early and to save one million rubles by introducing rationalistic work methods.(14) Construction of cofferdams, reinforced with steel sheet piling to protect excavations from spring flood waters, was nearing completion in April, when the work on the site was in progress day and night.(15)

Kuybyshev-Moscow Power Transmission Line

Altogether, 700,000 cubic meters of earth are to be excavated on the entire length of the Kuybyshev-Moscow power transmission line.(16) On 21 August 1952, 400 concrete foundations for steel towers and 50 towers had been completed; it was expected to raise these figures by the end of 1952 to 600 and 500, respectively.(17)

The section of the line which crosses Kuybyshevskaya Oblast between the Kuybyshevskaya GES site and Sveltloye Lake is 120 kilometers long and will have 550 towers.(16)

About 7 kilometers of the section of the line which crosses Ul'yanovskaya Oblast have been completed and wires have been installed.(18)

The Moskovskiy Construction and Installation Trust is building the 250-kilometer section of the line which runs through Vladimirskaya and Moskovskaya Oblasts. The length of the line crossing Vladimirskaya Oblast is 200 kilometers.(19) In Gor'kovskaya Oblast the line runs from the Oka River at the border of Vladimirskaya and Gor'kovskaya oblasts through Lyakhovskiy, Melenkovskiy, Selivanorskiy and other rayons.(20)

Other Power Transmission Lines

Construction of over 10,000 kilometers of rural power transmission lines is planned in Trans-Volga regions, where one million hectares of land are to be irrigated.(21)

A project to connect the Ust' Kamenogorskaya GES with other electric power stations of the Kuzbass and Altayskiy Kray in a single power system was in preparation at the end of 1952.(22)

The length of high-voltage transmission lines built in Soviet Central Asia during the last 10 years is considerable. Reconstruction of old lines and construction of new lines is now progressing at a rapid rate. The

- 2 -

CONFIDENTIAL

CONFIDENTIAL

50X1-HUM

majority of the lines are located in flat country, 300 to 600 meters above sea level. About 63 percent of the 35-kilovolt lines are installed on wooden poles and the rest on steel ones. Some 110-kilovolt lines which were put in operation in 1949 increased the total length of lines in Central Asia by 90 percent. One 110-kilovolt line, 72.5 kilometers long, is installed on wooden poles. (23)

Electric Power Systems

At the outbreak of World War II, the USSR had seven large electric power systems (Moskovskaya, Leningradskaya, Ural'skaya, Donetsko -Pridneprovskaya, Gor'kovskaya, Ivanovskaya, and Bakinskaya), each with an annual output of over one billion kilowatt-hours.

In 1940, the Ukrainian SSR produced about 25 percent of the total USSR electric power output. It was expected that in 1950 it would produce only one sixth of the total output for that year.

In 1940 the Urals, Western Siberia, and Kazakhstan produced about 9 billion kilowatt-hours. In 1945, the output of these regions increased to 40 percent of the total USSR output. The output in 1950 was expected to be one third of the total. (24)

SOURCES

1. Vil'nyus, Sovetskaya Litva, 27 Jan 53
2. Moscow, Vechernyaya Moskva, 21 Jan 53
3. Petrozavodsk, Leninskoye Znamya, 23 Apr 53
4. Baku, Bakinskiy Rabochiy, 6 May 53
5. Ashkhabad, Turkmenskaya Iskra, 3 Jan 53
6. Sovetskaya Litva, 25 Apr 53
7. Ibid., 29 Apr 53
8. Frunze, Sovetskaya Kirgiziya, 9 Jan 53
9. Ibid., 17 Mar 53
10. Moscow, Elektricheskiye Stantsii, No 3, Mar 53
11. Yerevan, Kommunist, 25 Jan 53
12. Moscow, Moskovskaya Pravda, 25 Feb 53
13. Kommunist, 27 Feb 53
14. Leninskoye Znamya, 21 Apr 53
15. Alma-Ata, Kazakhstanskaya Pravda, 5 Apr 53
16. Moscow, Izvestiya, 17 Jan 53
17. Moscow, Komsomol'skaya Pravda, 21 Aug 52
18. Moscow, Pravda, 3 Jun 53

- 3 -

CONFIDENTIAL

CONFIDENTIAL

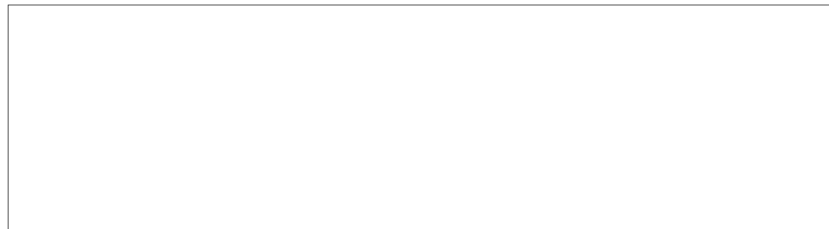


50X1-HUM

19. Ibid., 7 Sep 52
20. Vladimir, Prizyv, 7 Sep 52
21. Pravda, 23 Mar 53
22. Tashkent, Pravda Vostoka, 25 Dec 52
23. Elektricheskiye Stantsii, No 5, May 53
24. Moscow, Geografia Promyshlennosti SSSR (Industrial Geography of USSR), by P. N. Stepanov, Uchpedgiz, 1950



- E N D -



50X1-HUM

- 4 -

CONFIDENTIAL