

CLASSIFICATION **CONFIDENTIAL**  
 SECURITY INFORMATION  
 CENTRAL INTELLIGENCE AGENCY

50X1-HUM

REPORT   
 INFORMATION FROM  
**FOREIGN DOCUMENTS OR RADIO BROADCASTS** CD NO.

COUNTRY USSR  
 SUBJECT Economic - Technological, electrical industry, construction projects  
 HOW PUBLISHED Daily newspapers  
 WHERE PUBLISHED USSR  
 DATE PUBLISHED 26 May - 6 Jul 1951  
 LANGUAGE Russian

DATE OF INFORMATION 1951  
 DATE DIST. 27 Nov 1951  
 NO. OF PAGES 5  
 SUPPLEMENT TO REPORT NO.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF ESPIONAGE ACT 50 U.S.C. 31 AND 32, AS AMENDED. ITS TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

SOURCE Newspapers as indicated.

COMPLETE FIRST HYDROGENERATOR, TURBINE FOR TSIMLYANSKAYA GES;  
 BUILD TRANSFORMERS, GENERATORS FOR PROJECTS

COMPLETE FIRST TSIMLYANSKAYA HYDROGENERATOR -- Moscow, Vechernyaya Moskva, 1 Jun 51

Yesterday, the Leningrad Elektrosila Plant imeni S. M. Kirov completed the first 40,000-kilowatt hydrogenerator for the Tsimlyanskaya GES project. The umbrella-shaped hydrogenerator is superior to foreign models and has a coefficient of efficiency up to 0.97. The plant will build two more powerful hydrogenerators for the Tsimlyanskaya project in the second half of 1951.

Moscow, Trud, 2 Jun 51

N. Shevchenko, director of the Leningrad Elektrosila Plant, made the following statements regarding the completion of the first hydrogenerator for the Tsimlyanskaya GES project:

"The hydrogenerator was completed in 2½ months, which is a record. Aggregates of this power formerly took 4-5 months to build. Designers of the Elektrosila Plant worked in close cooperation with designers of the Leningrad Metal Plant imeni Stalin in planning the generator.

"The second generator will be ready in July, and the third in August."

Leningradskaya Pravda, 8 Jun 51

The Leningrad Elektrosila Plant has started shipping units of the first hydrogenerator to the Tsimlyanskaya GES project. The largest unit of the machine, the oil tank, has already been shipped. The shaft of the hydrogenerator is at the Leningrad Metal Plant imeni Stalin, and it will be shipped to the project after it is coupled with the turbine shaft.

CLASSIFICATION **CONFIDENTIAL**

STATE	<input checked="" type="checkbox"/> NAVY	<input checked="" type="checkbox"/> NSRB																	
ARMY	<input checked="" type="checkbox"/> AIR	<input checked="" type="checkbox"/> FBI																	

**CONFIDENTIAL**CONFIDENTIAL

50X1-HUM

The rotor shaft for the second hydrogenerator was machined in 102 hours instead of the 230 hours allotted by the norm. Assembly of the rotor spokes has started.

ORDEPS FOR PROJECTS WOULD TAKE 9 YEARS AT PRESENT RATE -- Leningradskaya Pravda, 14 Jun 51

Five years ago, the Leningrad Metal Plant imeni Stalin assembled the first high-pressure 100-kilowatt turbine of its kind. Electric power machine building is the leading industrial activity in Leningrad, which is the largest center of skilled machine builders in the USSR. The leading plants in the electric power machine building industry in Leningrad are the Metal Plant imeni Stalin and the Elektrosila Plant.

The Metal Plant imeni Stalin has developed improved machines in the past 5 years, and has organized the production of a whole series of high-pressure turbines; a 50,000-kilowatt turbine, a 25,000-kilowatt heating turbine, and a single-cylinder 25,000-kilowatt turbine with two regulating steam bleeders -- industrial and heating. Each of these machine types is a new achievement both in USSR and in world steam turbine building practice.

In the postwar period, the Elektrosila Plant has designed and produced dozens of new machines: powerful hydrogenerators and turbogenerators with hydrogen cooling, high-frequency contactors, magnetic stations, and motors for earth-digging machines and for the coal, petroleum, and metallurgical industries. At present, the Elektrosila Plant is producing four times as many machines as it did before the war.

However, everything accomplished by these plants is only a fraction of what remains to be done, for the hydroelectric and canal construction projects pose graver and more complex problems for the plants. The Leningrad plants must, in an unprecedentedly short time, plan and build machines hitherto unknown to the electric power machine building industry.

The accomplishment of the Elektrosila Plant in constructing the first hydro-generator for the Tsimlyanskaya GES project in an unprecedentedly short time, and the achievement of the Leningrad Metal Plant in machining and assembling the first turbine for the project show what can be done. Such initiative should be promptly encouraged and supported.

At the Leningrad Metal Plant, special sections, such as the rotor section, the diaphragm section, the hydraulic section, and others, were organized, thus opening new horizons for innovators.

However, it is obvious that the existing technology of production in many sections where turbines and hydrogenerators are being constructed has become outmoded in the face of the problem of building machines for the construction projects. Under existing conditions, it would take the Leningrad Metal Plant 9 years to make all the turbines for the Kuybyshev GES project, but they must be completed in 4-5 years. The same can be said of the Elektrosila Plant.

Engineers, technicians, and workers must take all possible measures to mechanize labor-consuming tasks, and must adopt high-speed metal-cutting methods more rapidly.

MECHANIZE TASKS IN HYDROGENERATOR PRODUCTION -- Leningradskaya Pravda, 22 Jun 51

Many technological improvements have been introduced in the insulation shop of the Leningrad Elektrosila Plant. Formerly, the pressing of stator cores was a labor-consuming task. The copper cores, assembled and insulated in packs of

- 2 -

CONFIDENTIAL**CONFIDENTIAL**

**CONFIDENTIAL**CONFIDENTIAL

50X1-HUM

various sizes, had to be pressed by hand on screw presses. The mechanization shop built a three-block steam-hydraulic press which greatly lightened the task of the insulation shop. Then a whole series of these presses were put out, not with three, but with 15 blocks. The winding cores of the first hydrogenerator for the Tsimlyanskaya GES project were pressed on the new machines.

The mechanization shop is now working on a special machine tool for putting the frame insulation on core windings of hydrogenerators. This machine tool will be put into operation in July. The shop has also constructed a straightening-bending roller press for making sheet steel parts for hydrogenerators. Installation of one of these presses in the hydrogenerator building is now being completed. A copper-bending press will also be set up in this building.

#### SHELVING INNOVATIONS AT ELECTRICAL PLANT -- Leningradskaya Pravda, 6 Jun 51

The Leningrad Elektroapparat Plant saved more than one million rubles in the first 4 months of 1951 by adopting innovations. However, some innovations have been shelved for years because the innovator was not given help in making sketches and models. A proposal made by A. Sobolevskiy in March 1951 that would have saved many screws, nuts, and bolts and many man-hours of labor has not yet been acted upon.

Innovations are not circulated and publicized, even though the plant has a Technical Information Bureau. Sometimes improvements adopted in one shop are not known in the next shop. For instance, shop No 13 built a cart for lifting, conveying, and mounting heavy dies, which enables one man to handle the job; but in the machine shop, it takes four men to do the same job.

The plant management and the party bureau do not devote enough attention to innovations and inventions, and should make greater demands on the Bureau of Innovations and Inventions and the Technical Division.

#### DEVELOPS NEW EQUIPMENT -- Moscow, Pravda, 9 Jun 51

The Elektroapparat Plant is making experimental models of instrument transformers, disconnecting switches, switches, and other equipment.

#### SHIPS TRANSFORMERS TO PROJECTS -- Yerevan, Kommunist, 26 May 51

The Yerevan Electrical Machine Building Plant shipped 69 transformers to the projects on 25 May.

The plant is organizing the output of new, more powerful transformers, which it will ship to the Volga-Don Canal and Stalingrad GES projects during the third quarter.

Moscow, Izvestiya, 24 Jun 51

The Yerevan Electrical Machine Building Plant has shipped five consignments of transformers to the projects this year, all ahead of time.

Yerevan, Kommunist, 5 Jul 51

The Yerevan Electrical Machine Building Plant has completed its half-year plan for the projects ahead of time. The plant has shipped dozens of transformers to the Kuybyshev GES, Stalingrad GES, and Volga-Don Canal projects on third and fourth quarter orders. The plant has shipped the first consignment of TM-560/6 power transformers to the Tsimlyanskaya GES project.

- 3 -

CONFIDENTIAL**CONFIDENTIAL**

**CONFIDENTIAL**CONFIDENTIAL

50X1-HUM

PLANT COMPLETES 6-MONTH PLAN, SETS NEW GOALS -- Riga, Sovetskaya Latvija,  
6 Jun 51

The Yerevan Electrotechnical Plant has completed its half-year plan ahead of time. The plant has organized additional output of generators for the South Ukrainian and North Crimean Canal projects from materials saved.

Yerevan, Kommunist, 6 Jul 51.

The Yerevan Electrotechnical Plant has increased labor productivity 17.7 percent and reduced production cost of finished products 28.6 percent. By saving raw materials, electric power, and auxiliary materials, the plant has accumulated 1,103,000 rubles above the plan and improved the quality of its products. It has organized the production of I-10/4 and I-11/4 electric motors. All orders for the South Ukrainian and North Crimean Canal projects have been filled ahead of time.

Entering into socialist competition with the Baku Electrical Machinery Plant, plant workers have assumed the following obligations:

To fill all orders for the projects ahead of time and with high-quality production.

To create a stockpile for the projects, and save enough basic and auxiliary materials, electric power, and fuel each quarter to make ten generators.

To fulfill the 1951 production plan by 7 November, and to make a considerable quantity of electric motors and transformers above the plan.

TO SERIES-PRODUCE TRANSFORMER, MOTOR -- Yerevan, Kommunist, 26 Jun 51

The Baku Electrical Machinery Plant is preparing to series-produce TM-50 transformers and AO 51/4 electric motors in addition to its regular production.

SHIPS EQUIPMENT TO PROJECTS -- Moscow, Trud, 6 Jun 51

The Baku Electrical Machinery Plant has shipped its first consignment of electric motors to the Volga-Don Canal project. The plant recently shipped 14 transformers to this project. Large consignments of transformers have been shipped to the Kuybyshev and Stalingrad GES projects, and electric motors have been sent to the Main Turkmen Canal project.

Moscow, Izvestiya, 26 Jun 51

The Baku Electrical Machinery Plant has shipped 22 consignments of powerful transformers and electric motors to the projects, and has four more consignments ready for shipment. These consignments are part of the fourth quarter 1951 production.

Yerevan, Kommunist, 5 Jul 51

The Baku Electrical Machinery Plant has considerably exceeded the half-year plan for orders for the projects. The order for the Volga-Don Canal project was exceeded by 178.2 percent, the order for the Stalingrad GES project by 122.6 percent, and the order for the South Crimean Canal project by 210 percent. The plant exceeded plans for the projects by an average of 44 percent. It is successfully organizing the production of TM-50 transformers and AO-51/4 electric motors.

- 4 -

CONFIDENTIAL**CONFIDENTIAL**

**CONFIDENTIAL**

CONFIDENTIAL

50X1-HUM

SEIPS LARGE TRANSFORMERS TO PROJECTS -- Leningradskaya Pravda, 13 Jun 51

The Moscow Transformer Plant has shipped a 20,000-kilowatt transformer to the Volga-Don Canal project, and is preparing to send a similar transformer to the Stalingrad GES project.

Moscow, Vechernyaya Moskva, 2 Jul 51

The Moscow Transformer Plant has shipped three power transformers to the Volga-Don Canal project, and has started shipment of 40 transformers to the Tsimlyanskaya GES project.

DEVELOP NEW TRANSFORMER SUBSTATIONS -- Kiev, Pravda Ukrainy, 9 Jun 51

The Khar'kov Electrical Installation Equipment Plant makes transformer substations which are used on the Volga-Don Canal project. Plant engineers and designers are working on a modernized substation which uses 20-25 percent less metal than the present model. The knife-switch block and the fuses will be designed more efficiently, thus cutting the consumption of nonferrous metals in half. An experimental model of the substation will be ready in July 1951. Distributing apparatus will be adapted so that 20 welding machines can be connected to the substation simultaneously.

- E N D -

- 5 -

CONFIDENTIAL

**CONFIDENTIAL**