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AC/89-WP/237/1

SUB-COMMITTEE ON SOVIET ECONOMIC POLICY

THE ENERGY PROBLEMS IN THE COMMUNIST COUNTRIES

Comments by the United States Delegation on AC/89-WP/237

NATO Working Paper AC/89-WP/237 is an interesting compilation of data largely contained in papers published previously. The following comments are designed to bring the data up to date.

Page 3, para. 1, 2nd sentence

Revise as follows: "Only 13% of the total reserves of hydrocarbon fuels and hydropower are located in the European USSR and the Urals-Volga region," where the.....

Page 3, para. 2, table

Change entry for 1970 planned production of natural gas from 225-240 to 215 and that of electrical energy from 800-810 to 800. Also actual coal production in 1966 was 586 million tons.

Page 3, footnote

Substitute for the first line of the footnote: "This total, which does not include hydroelectric power, is divided up as follows:"

Page 4, para. 4, sentences 2 and 3

Recent estimates (World Oil, 15 Aug 67 and Oil and Gas Journal, 25 Dec 67) indicate proved oil reserves in the USSR to be about 34 to 38 billion barrels. (This information may be inserted if desired; no detailed study is available, however, to present a revised estimate of Soviet oil reserves.)

Page 4, para. 5, 1st sentence (3rd line)

Substitute North Caucasus for Azerbaidjan.

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Page 4, para. 5, 3rd, 4th and 5th sentences

Substitute the following: "New oilfields are being opened up in Byelorussia, which should be producing 10 million tons in 1970, and - much more important - in Western Siberia and Mangyshlak both of which began operating so recently that their output is not yet significant. By 1970, new fields in West Siberia are expected to produce 20-25 million tons and those in Mangyshlak 15-20 million tons."

Page 5, para. 6, last sentence

Delete the last sentence. Despite the fact that the over-all quality of Soviet oil products is below that of Western standards, there is no evidence that products shipped to Free World nations have not met specifications of the importing countries.

Page 6, para. 10, 2nd sentence

Revise as follows: "Because of shortages of equipment for the production, distribution, and consumption of gas, production has failed to meet goals since 1963. The target for 1970 recently was reduced from 225-240 milliard cu.m. to 215 milliard cu.m., implying an annual average increase of about 10% during 1966-70."

Page 6, para. 12, 1st sentence

Change Soviet Zone to Soviet Union.

Page 6, para. 12, last sentence

Change penultimate word in next-to-last line from has to was.

Page 7, para. 16, 1st sentence

Change the production figure for the United States from 1,248 milliard kwh to 1,325 milliard kwh. The higher production figure is gross production in the U.S. and corresponds to the Soviet figure which is also gross output. The lower U.S. figure is for net production.

Page 7, para. 17

Data for 1966 are as follows:

- a) total production - 544.6 milliard kwh
- b) thermal power output (including nuclear) - 452.8 milliard
kwh
- c) hydropower output - 91.8 milliard kwh
- d) The total capacity of Soviet power stations reached 125 (not 123) million kw at the end of 1966.

Page 8, para. 18, 2nd sentence and tabulation

Revise as follows: "At the end of 1966 the total capacity of Soviet nuclear powerplants was approximately 1 million kw, allocated as follows :

Obninsk	-	.005	million kw
Novo Voronezh (1st section)	-	.240	" "
Beloyarsk (1st section)	-	.100	" "
Melekess	-	.070	" "
West Siberia	-	.600	" "
		<hr/>	
Total		1.015	million kw

Delete the last sentence of this paragraph.

The following data on recent completions and construction plans can be inserted if desired :

In December 1967 the second section of the Beloyarsk nuclear powerplant, with a capacity of 200,000 kw, went into operation. The second section of the Novo Voronezh nuclear powerplant is to be in operation in 1968 with a capacity of 375,000 kw. Total nuclear power capacity by the end of 1968 will total about 1.6 million kw.

Three additional nuclear powerplants are now under construction in the Soviet Union. The BN-350 dual purpose reactor, being built at Shevchenko on the Mangyshlak Peninsula, is to be in operation in 1969. It will have a capacity of 150,000 kw of electricity and will distill 120,000 cu.m. of water a day. The Bilibino nuclear powerplant, on the Chukotsk Peninsula, is expected to be in operation in 1970, and will have a capacity of 48,000 kw. Construction has recently begun on a nuclear powerplant near Murmansk, the capacity of which is believed to be 800,000 kw.

Page 8, para. 20, 2nd sentence

Correct to read as follows : "The first tidal powerplant, with a capacity of 1,000 kw, has been assembled near Murmansk, and will be floated to its permanent site on Kislaya Bay, on the Barents Sea, in the summer of 1968."

Page 8, para 21, 2nd through 6th sentences

An updating of the information in these sentences follows : "At the end of 1966 the USSR had high-voltage transmission lines, 35 kv to 800 kv, totalling 334,133 kilometers.

A unified power network in the European part of the USSR was created by joining the power systems of the Center, the North-west, the South, the Volga, the Urals, and the North Caucasus. This network had a capacity of 68.4 million kw at the end of 1966. In addition the USSR has established inter-connection facilities with the power systems of Poland, Hungary, Rumania, Bulgaria and Czechoslovakia.

Two direct current (dc) transmission lines of 1.5 million volts are to be constructed to transport current to the European part of the USSR which is deficient in energy sources. In the present five-year plan work is to begin on the first of these lines, stretching 2,500 kilometers from Ekibastuz in North Kazakhstan to Tambov in the Center Region. Between 1972 and 1974 work is to begin on the second dc line which will extend over 3,000 kilometers, from Itat in Siberia to the Center Region."

Page 9, para. 22

Replace the last sentence of this paragraph with the following: "Additional nuclear powerplants are planned to be built in the European part of the USSR in an attempt to ease the energy shortage. Another solution that has been proposed is improvement of the social environment of Siberia to encourage establishment of new industry in the area."

Page 11, para. 29

The following revisions should be made in the table:

Soviet Zone of Germany	- Total by 1975	- 570
Total	- Planned 1970	- 230
	- Total by 1975	- 3,140-3,240
	- Capacity 1980	- 9,800-10,000

The figure for Soviet Zone of Germany is revised because of a change in plans for the second East German nuclear powerplant, now scheduled to be built at Lubmin, near Greifswald. The second powerplant was originally scheduled to have two reactors with a capacity of 210 mwe each, but it has been reported recently that it will have a capacity of 500 mwe. The totals have been changed to agree with the sum of figures shown for individual countries.

OTAN/NATO,
Brussels, 39.