

# Armenia's energy system is in crisis

by Vigen Akopyan

*In his last article (see EIR, June 23, p. 14), Vigen Akopyan demonstrated that, contrary to the claims of Armenian President Levon Ter-Petrossian that "in 1994 the growth of wages surpassed the growth of consumer prices," the standard of living of Armenians has fallen substantially. Here, he analyzes the production of energy in Armenia.*

The current situation in Armenia's fuel and energy system is largely defined by the fact that the country is importing much of its fuel and energy sources into the country. The only source within the country for generating electric power is water (of course, not taking into account potential undiscovered natural resources).

Before 1989, Armenia's fuel and energy system was comprised of three parts: hydroelectric power, thermoelectric power, and nuclear energy. It is of no small importance, that the Armenian fuel and energy system was a component part of the unified fuel and energy system of the Transcaucasus.

It should be noted at once, that non-traditional energy sources, such as solar power and wind power, practically are not being used. For the optimal use of water resources, the republics, starting in 1960, concentrated on building a large number of low-power hydroelectric stations (GES). In 1988, the GES in Armenia were generating 1.5 billion kilowatt-hours (kwh) of electricity.

However, water resources are not inexhaustible. Evidence of this is the lowering by a whole 19 meters of the level of Lake Sevan, the pearl of Armenia.

Because of this, special attention has also been given to the development of thermal power engineering, which, however, depends completely on the ability to import fuels from abroad.

Thermal power engineering, which was practically nonexistent before 1965, by the beginning of the 1980s, provided the country 1,900 megawatts of electric energy capacity, and in 1988 these stations generated nearly 8 billion kwh of electric energy.

The Armenian nuclear station, which began to be operated at the beginning of the 1970s, until its closing (due to the catastrophic Spitak earthquake) in 1989, had an electrical

energy-generating capacity of 800 MW. In Armenia in 1980, some 10.9 billion kwh of electrical energy was generated; in 1985, some 12 billion kwh; in 1988, the best year, 15.3 billion kwh of electrical energy was generated.

## Decline in production

Beginning in 1989, the production of electrical energy began to fall. In 1994, only 37% of the amount of electrical energy produced in 1988 was generated. At the end of five years, in this area of the economy, Armenia has been thrown back 40 years, sinking to the level of the beginning of the 1960s.

The significantly higher level of production of energy by the hydroelectric stations in 1992-94 was due merely to the fact that in former years, they worked at full power only during the irrigation season. Also, now, for political reasons (blockades, explosions of gas mains), the main load has shifted to the hydroelectric stations and has significantly increased their role.

So-called "losses of electrical energy," i.e., natural technological losses as well as non-payment by consumers for consumption of electrical energy, have reached catastrophic proportions. Of course, there were losses of electrical energy in the country's best economic years (in 1988, about 11%), but such losses never approached the current situation (in 1992, about 40%). Here it is important to note, that these are the fruits of the current government of Armenia's economic policy of the total liberalization of everything, in which it has obediently executed all the recommendations of the bosses from the International Monetary Fund (IMF).

## The effects of decontrol

As a result of the decontrol of prices on electricity (the cost for 1 kilowatt of electrical energy has risen tenfold since Dec. 1, 1994), practically the entire population of Armenia has become unable to afford electricity. If we add to this the virtual economic bankruptcy of enterprises, then it becomes clear that the situation, with the "losses" of energy, will be unlikely to improve in the near term.

On the other hand, it is difficult not to agree, as well, with the statements of several political opposition leaders, that 40% losses are just not possible, and that the whole secret is that that amount of fuel is being illegally sold abroad, instead of being imported into the republic. The government has not denied such allegations.

The most important parameter of the economic condition of any country is the index of its production of energy per capita. Even under current difficult conditions, this index is four times higher in Armenia than in India, and 2.6 times higher than in China, whatever you might say about the economic situation as a whole in those countries. Thus, even the current condition of the fuel and energy system, with appropriate structural and programmatic changes, could be the basis for a significant turnaround in this sector.