District Heating in the Republic of Armenia

Ministry of Energy and Natural Resources of RA

Head of the Energy Saving and Technical Norms Department

Grachya Tsugunyan
A. Situation with district heating (DH) in Armenia.

- Before the breakdown of the USSR district heating (DH) in Armenia reached 35% of the total housing fund and 90% in apartment blocks and in the public sector.
- About 35% of DH came from large CHPs and district strong boiler installations.
- About 65% of DH came from boiler houses of small and medium capacity.
- Starting with 1992, after termination of gas supply to Armenia and shutting down the Armenian nuclear power plant, DH in Armenia practically ceased to exist.
- Starting with 1996, when gas supply and electricity supply were resumed, DH also resumed, but not in full volume.
- Later on, as income of the population declines, DH also decreased because of non-payments from consumers, and, finally, in 2004, DH in Armenia terminated all together.
B. Organization of DH now.

- Then the process of restoration of DH began.
- Ownership for all newly established DH - private.
- New DH are single circuit ones and cover not more than 4-5 houses, or even only 1-2 houses.
- District heating enterprises (DHE) serve the whole system up to consumers.
- There is practically no competition in this market;
C. DH Sector Management.

- DH policy is implemented by the Ministry of Energy and Natural Resources and by the Public Services Regulatory Commission (PSRC), by laws <<On Energy>>, <<On Energy Saving and Renewable Energy Sources>>, by decisions of the Government and other normative and legal acts of PSRC.
- Quality of DH is regulated by normative and legal acts of PSRC and by agreements between the supplier and consumer. Mostly old Soviet standards are applied. There are no quality laboratories except for the ones for fuel.
- Territories for DH are planned at the stage of development of general plans for cities and localities.
- Tariffs for boiler houses with heat capacity under 5.8 MW according to the law are not subject to regulation, and in case of boiler houses with higher capacity PSRC takes care of tariffs.

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D. Economic Conditions of DH

- In Armenia, at CHPs, natural gas is used as main fuel, the share of it in the cost of output of CHP is at least 60%, and it gradually grows, with growing prices for natural gas.
- A legal and normative act of PSRC establishes that for consumers of natural gas that consume more than 10,000 m³/month, the tariff is approximately by 30% lower than for other consumers.
- The principles of tariff setting methodology is set by the <<Law on Energy>> of RA, where in addition to justified expenses also reasonable profit is included.
- Recently the level of collection of payments for heat and services became rather high, as all consumers have heat meters and there is a possibility to disconnect each consumer separately.
- Social assistance to low income consumers, as well as subsidies and donations PTS are not given for DH by the Government.

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In 2005, the decision of the Government of RA launched a pilot program in one of the districts of Yerevan on restoration of DH on the basis of cogeneration systems. Initially, the range of DH had to include 218 multistory apartment blocks. At present, only 72 blocks are included and the plant was put into operation in December 2009. This decision envisions that all electricity generated at this plant is subject to mandatory buy out for 5 years at the maximal tariff (in terms of output) for this year in the energy system. It is also envisioned to determine the impact of a cogeneration plant on modes of operation of the whole grid. The goal of the pilot program is to carry out monitoring and elaborate proposals.