

GENERATING ASSETS OF CAEPCO, JSC HAVE BEEN 54.9% UPDATED

In 2016, electric power generation over the group of companies of Central-Asian Electric Power Corporation JSC (CAEPCO JSC) was 7036 billion kWh. Growth of electric power generation increased share of the Corporation in the field from 7.2% to 7.7% in comparison with values of 2015. According to results of 2009-2016, generating assets of CAEPCO, JSC have been 54.9% updated, which is one of high indicators over Kazakhstan.



Over 12 months of 2016, total net electricity supply from buses of power plants of the Corporation increased by 8.4% in comparison with 2015. At that, total electric power generated over 2016 increased by 7.8%. Increase in generation in 2016 is associated with

commissioning of two turbine units at the Pavlodar CHP-3 in June and November of 2015, and three turbine units at the Petropavlovsk CHP-2 in September and October of 2015 and December of 2016.

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RESULTS OF INVESTMENT PROGRAM FOR 2016

PAVLODAR CHP-3 (540 MW):

- MODERNIZATION & RECONSTRUCTION

UPDATED ON

54.9%

to be completed in 2018, is under implementation; modernization of boiler unit #5 with the equipping with APCS. of generating capacity

PETROPAVLOVSK CHP-2 (541 MW):

commissioning of new turbine unit #5 with increase electric capacity by 62 MW. after reconstruction commissioning of boiler unit #12

with increase of steam productivity by 50 tons/hour;

project of turbine unit #6 modernization, which is planned

ash emissions are REDUCED

3.0%

capacity

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- 62 MW (5,4%) installed electricity
- 507.3 mln kW/h installed heating electric energy generation

GROWTH

35 Gcal/h

(1,2%)

capacity

199.5 thous. Gcal (3,2%) heat energy generation

modernization of turbin unit #2;

Plans

reconstruction of unloading device.

AMBITIOUS PROJECTS CAEPCO JSC IN 2017

SEVKAZENERGO JSC

Petropavlovsk CHP-2

PAVLODARENERGO JSC Pavlodar CHP-3

- reconstruction of boiler unit #4;
- construction of 3rd stage of the ash dump.

PAVLODARENERGO JSC **Ekibastuz CHP**

- construction of 2nd stage of the ash dump;
- reconstruction of boiler unit #8.

PAVLODARENERGO JSC Pavlodar CHP-2

• construction of 3rd stage of the ash dump.

Electric distribution companies

- construction of HVL 35-110 kV 43.4 km;
- reconstruction of VL 35-110 kV (replacement of ground wire and porcelain insulation to a glass) - 476,52 km;
- reconstruction of substation 10-220 kV -19 pcs.

Heating network companies

- construction of heat main pipelines with use of pre-insulated pipes -32.56 km:
- rehabilitation of heat insolation with use of PPU shell - 6,74 km.

KEY FIGURES CAEPCO JSC

1 203 MBT - installed electricity capacity

2 953 Gcal/h - installed heating capacity

(7,8%)

тел: 8 727 2590863, e-mail: pr@energy.kz

Generating assets of CAEPCO, JSC have been 54.9% updated

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Total heat energy produced by CAEPCO JSC increased by 3.2% in comparison with 2015 and was amounted to 6472.3 ths. Gcal. According to results of 2016, the installed electric power of the Corporation increased by 5.4% up to 1203MW, heat power — by 1.2% to 2953Gcal/h in comparison with 2015.

«Growth of electric and heat power output in 2016 became possible due to the implementation of projects under the investment program of reconstruction and modernization of plant assets commenced in 2009. Modernization facilitates the growth of energy efficiency of the Corporation's generating assets, which shows an outrunning growth of total net electricity supply from buses in comparison with total generation», — has told Yerkyn Amirkhanov, President of CAEPCO JSC. Summing up the

Within the investment program of 2016, ADEC, JSC implemented projects on modernization of power facilities, overhaul repair of power-generating equipment and power transmission lines, construction of ($K\Pi$) 110-35kV aerial line, and modernization of metering devices. The investment program was implemented in time.

Over 12 months of 2016, specialists of the Company modernized approximately 73 kilometers of aerial and cable power transmission lines of various voltage rating, 11 substations, and 30 PTSs (package transformer substations).

Modernization of 0.4/10kV distribution networks of 15km long in Zhaksy settlement of Zhaksy district completed preliminary results of 2016, President of the Corporation has noted that actual implementation of the investment program measures was amounted to 25.8 billion tenge. The Corporation increased its operating income by 13.1%; operating profit increased by 36%.

CAEPCO JSC continues the work on improvement of heat supply in Pavlodar, Ekibastuz, and Petropavlovsk.

In 2016, the European Bank for Recon-

struction and Development, Ministry of National Economy of the Republic of Kazakhstan, and CAEPCO JSC signed a trilateral agreement on implementation of

projects on heat supply sys-

tems modernization. The projects are to be implemented under the state program of infrastructure development «Nurly Zhol». Total amount of investments from 2016 to 2020 will be 25.95 billion tenge; 4.02 billion tenge was already spent for reconstruction of pipelines and replacement of heat insulation in 2016.

Pursuant to the Strategy for 2016–2020, the Corporation will continue implement

Acon- «Modernization facilitates the growth of energy efficiency of the Corporation's generating assets, which shows an outrunning growth of total net electricity supply from buses in comparison with total generation»

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the investment program of equipment modernization aimed at the increase in generation, reduction in losses during transmission of electric and heat power, and improvement of environmental attributes of assets of the Corporation. Share of the CAEPCO JSC's updated capacity will be 65% in

three years.

HIGH RATES IN TIME

the replacement of 0.4/10kV distribution networks in all regional servicing centers of the Yessil' interdistrict power networks, which facilitated significant reduction in the number of emergency outages in that district. A new construction of VL-35kV «Zavodskaya–Kolokolovks» aerial line of 24km long was completed; construction of VL-35kV «Vozdvizhenka-Maksimovka-Farforovy» aerial line of 42.5km is at the completion stage.

Only in Atbassar district, 8 505km of 0.4kV networks, one PTS, and 4 high-voltage substations: PS 220/110/35/10kV «Tselinnaya», PS 110/35/10kV «named after Maksim Gorky», PS 110/35/10kV «Marinovskaya», PS 110/10kV «Krasny



Mayak» were modernized within the investment program of 2016. In Shortandy district, two substations PS 220/110/35/6kV «Zholymbet» and PS 110/35/10kV «Shortandy» commissioned in 1964 are long since overage. In 2016, they were modernized, which allowed considerably improving operation of the facilities.

In Tselinograd district, PS 110/35/10kV «Vozdvizhenka» was modernized under the investment program. In the same district in Kosshi settlement, 2 500 electricity meters integrated into the automated meter reading and control

system of AEDC, JSC were installed under the investment program.

Modernization was also referred to PS 110/35/10kV «Vesselovskaya» of Sandyktau district, PS 110/35/10kV «Zhanteke» of Korgalzhy district, and PS 110/35/10kV «Krasnoznamyonka» of Yegindykol district. For example, the «Krasnoznamyonka» substation feeds nine 35/10kV substations in Astrakhan and Yegindykol districts. 110kV oil circuit breaker was replaced there with VB-110kV SF 6 circuit-breaker, which ensured transit of electricity via 110kV line to «Urman» and «Kurgal'dzhino» substations.

In Arshaly district, PS 35/10kV «Yubileinaya», that feed consumers of Zhibek Zholy settlement, was modernized. Implementation of all projects facilitated not only increase the reliability of power supply of the whole region, but also allowed increasing the level of liquid cost and reducing the degree of fixed assets depreciation.

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ALL QUESTIONS – IN BLOG!

On the initiative of General Director of PAVLODARENERGO, the personal blog on the corporate website has been working in a new format for the third month. As of today, more than 77 addresses concerning activity of the Company have been received by this information platform.

Every day, residents of Pavlodar, Ekibastuz, Aksu, and district of the region address their questions to Oleg Vladimirovich Perfilov. The major part of raised topics relates to heat supply.

Also, consumers ask questions about repairs, heat and electricity meters, tariffs, obtainment of specifications, and payment methods. As a rule, these are complaints and questions, to which Oleg Vladimirovich replies in person in a competent manner and in details. If we will analyze all complaints concerning the heat supply of houses, we will find out a fact that complaints, which are addressed to Pavlodar services in the blog, are directly referred to quality of preparation of houses for heating season by apartment owners' cooperatives de facto.

Format of communication with consumers in blog provides possibility to respond to problems in an expeditious manner. Gratitude of General Director of the Company for solution of problems is left also in the blog.

It is important to note, that a part of questions lies beyond the direct responsibilities of the Company, however, consumers receive qualified consultation and assistance in the blog.

БЛОГ ПЕРВОГО РУКОВОДИТЕЛЯ

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WELCOME, YOUNG PEOPLE

In 2016, more than 400 students passed on-the-job training at industrial sites of the group of companies of CAEPCO, JSC; 65 young specialists were employed in various divisions of the holding. CAEPCO is the first place of work for many yesterday's students of the enterprise.



For many years, CAEPCO group of companies has been successfully developing cooperation with higher education institutions and secondary specialized colleges of Astana city, Akmola, North-Kazakhstan, and Pavlodar regions. Enterprises take part in fairs of graduates, hold briefings with final-year students, and arrange familiarization tours at industrial facilities. For years, technical managers of enterprises take part in examination boards, presentation of graduation theses and projects.

In order to involve talented and creative students, encourage and support research activity, the group of companies is implementing the PROFENERGY program. Focus of attention is on 3-4-year students of industry-oriented specialties, for whom payment of on-the-job training and temporary employment are provided for. Also, competitions of students' research papers, which winners receive personal scholarship for one academic year, are arranged in the holding within the PROFENERGY program. At the present time, such competition is holding among students of Pavlodar educational institutions: 11 students are taking part in it.

It is important to note that such initiatives held for the purpose of popularization of a blue-collar job are useful not only for CAEPCO enterprises, but also for power industry in whole.



NETWORK INPUTS

In February of the current year, SEVKAZENER-GO registered a corporate page in Facebook social network, and PAVLODARENERGO celebrates its three year anniversary in the social year with more than 300 followers this year.

Popularity of social networks grows: with respect to level of influence on reputation and corporate image they gradually become comparable with conventional mass media. It can be possible to follow news, become aware of projects and people working with enterprises in regions at the corporate pages of SEVKAZENERGO and PAVLODARENERGO in social network.

Since 2014, PAVLODARENERGO, JSC's page proved itself as an effective anti-crisis communication channel during PREDC network fault caused by hurricane, fire outbreak at heating main, emergency outages of heat energy and other events.

Consumers, newsmen, market experts, partners look into pages of companies. All, who are interested in electric and thermal power industry in Pavlodar and Petropavlovsk, welcome to Facebook!

HOUSING FOR POWER ENGINEERS

During the celebration of the 55th anniversary of Petropavlovsk CHP-2 and Power Engineers Day on December 22, 2016, a smallfamily common accommodation with 90 flats for employees and residents of the city of Petropavlovsk was solemnly presented. The implementation of the project became possible by a public-private partnership of SEVKAZENERGO JSC and Akimat of North-Kazakhstan region. The presence of a common accommodation on balance of the Company will attract young and promising industry workers to energy enterprises.

90 small apartments, 80 of which are single-room and 10 – tworoom, are arranged at the floor area of more than 4 thousand square meters. Each apartment provides for a separate kitchen and sanitary arrangements. Thanks to the implementation of project, SEVKAZENERGO, JSC will partially solve the problem of provision of company housing to employees, who do not have their own living space, and involve promising specialists in the Company. In the hostel, apartments will be also provided to 18 families of Petropavlovsk on the waiting list.