

ANALYSIS OF THE FINANCIAL AND ECONOMIC ACTIVITY OF THE "THERMAL ELECTRICAL STATIONS" JSC ENTERPRISES

<https://doi.org/10.5281/zenodo.11165911>

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In recent years, large-scale reforms aimed primarily at the rapid development of all sectors of the economy, increasing investment attractiveness and business activity, and expanding the production and service sectors have been implemented in our country. At the same time, insufficient use of the available opportunities and potential in the electric power industry hinders the effective implementation of the intended reforms and rapid development of the country. The absence of a healthy competitive environment, the existence of a significant quasi-state sector, the incompatibility of the tariff policy with the principles of the market economy lead to excessive regulation by the state and the conflict of state and commercial interests.

The low level of introduction of resource and energy-saving technologies, the slow pace of updating the relevant infrastructure lead to the increase of technological losses and regular interruptions in the supply of electricity, especially in places.

The bureaucratized system of management of network enterprises and inefficient use of labor resources reduce the efficiency and effectiveness of their work and lead to an increase in costs not related to production ²⁰.

Electric power industry has been considered one of the leading and main sectors in digitalization of our country's economy. Because ensuring stable development rates, increasing labor productivity, improving the well-being and standard of living of the population is largely unrelated to the prospects of this industry. The existing energy potential of Uzbekistan and effective state management can create an opportunity for optimal use of energy and water resources and hydrocarbon chemical substances in our country, to fully meet the demand for electricity.

In such a situation, thermal energy remains the main source of electricity production in our country, and efficient operation of this direction using energy-saving technologies ensures the stable development of the energy system of the entire country.

²⁰ Decision No. PQ-3981 of the President of the Republic of Uzbekistan dated October 23, 2018

Table 1

2023 year to the situation in use electricity stations²

T/r	The name of the stations	It was the first year of its launch	Installed capacity , MW	Relative weight , %
TPS (coal, gas)				
1	" Angren I E S " JSC	1957 year	393	2.6
2	"Yangi Angren IES " JSC	1985	2100	13.9
TPP (gas, fuel oil)				
3	"Tashkent IES" JSC	1963	2230	14.1
4	" Na v oi IES " JSC	1964 year	2068	13.1
5	" Tahiatosh IES " JSC	1967 year	910	5.7
6	" Syrdarya IES " JSC	1972	3165	20
7	"Tolimarjon IES" JSC	2004 year	1700	10.7
8	"Toragorgon IES" JSC	2019 year	900	5.7
Total IES			13 466	85.0
TPC (gas, fuel oil)				
1	" Tashkent IE M" JSC	1934 year	57	0.33
2	" Fergana IE M" JSC	1956	312	2
3	" Mubarak IE M" JSC	1985	60	0.37
Total IEM			429	2,7

Currently, approximately 0.33% of the available electricity production capacity in the territory of our republic belongs to JSC "Toshket Thermal Electric Center". This process, JSC "Tashkent Thermal Electric Center" performs the role of producer and provides electricity and thermal energy in specified volumes in order to satisfy the needs of the digitized economy of our country and a large number of residents.

JSC "Tashkent Thermal Electric Center", which belongs to JSC "Heat Power Stations", is the production of electricity and thermal energy.

Table 2

Key production indicators of "Tashkent IEM" JSC over the years³

Indicators / Years	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2023 as a percentage of 2013
Installed power , MW	30	57	57	57	57	57	57	57	57	57	57	190.0
Electrician - giya work release , million kWh	201.2	368.4	347.6	376.7	402.4	363.6	392.2	327.2	323.0	349.1	340.5	169.3
Heat energy work output , thousand , Gkal	1681.5	1767.1	1734.2	1599.6	1607.9	1696.2	1690.5	1852.2	1842.6	1673.7	1531.6	91.1
Private needs for electricity energy expenditure , thousand kWh	4634.6	13768.3	10385.5	12623.0	12563.3	1094.8	12293.8	10039.9	10984.6	12674.4	12031.2	259.6
Private needs for heat energy expenditure , thousand kWh	58420.2	60529.0	64085.7	57447.5	52714.6	8889.4	57232.6	65233.3	62783.4	60827.6	55625.6	95.2

Currently, a total of 11 thermal power plants and centers are operating in the country. The largest installed capacity in our country belongs to Sirdarya IES. Fergana IEM is the leader in thermal power centers with 312 MW of installed capacity. However, it

should be noted that the Fergana IEM is currently undergoing reconstruction and restoration of the existing facilities of the center.

85 percent of the total electricity production capacity in the republic is generated by thermal power plants, 2.7 percent by thermal power centers, and the rest by hydroelectric power plants and renewable energy sources.

Analyzing the data in Table 2.7, which presents the main production indicators of JSC "Tashkent IEM" by year, the installed capacity has not changed since 2014, and additional capacities have not been commissioned. The volume of electricity production in 2023 will be 340.5 mln. kWh was equal, and compared to 2022, 97.5 percent of electricity was produced 8.5 million kWh less.

The amount of thermal energy production in 2023 is 1531.6 thousand. It has decreased by almost 9% compared to 2013. Electricity consumption for private needs reached 12031.2 thousand kWh in 2023, and it was achieved to reduce this consumption by almost 645 thousand kWh compared to 2022. In 2023, heat energy consumption for private needs was reduced by 5200 thousand kWh or 8.6% compared to 2022. This figure is 95.2 percent compared to 30 MW capacity in 2013. With this, it can be said that the consumption of heat and electricity for private needs of the society has been sharply reduced in recent years, and modern heat-saving and electricity-saving technologies are being used in the society.

Table 3

The main financial and economic indicators of "Tashkent IEM" JSC⁴

№	Indicators	2014	2015	2016	2017	2018	2019	2020	2021	In 2021 for 2014 in % relative to
1	A social of means initial value (billion soum.)	161.6	161,6	177,4	178,4	255,7	292,3	292,9	291.8	180.6
2	Volume of long-term investments, (billion soums)	61 3	61 3	61 3	613	621.6	614,7	614,7	614,7	100.3
3	Volume of inventories (billion soums)	4,19	4,97	4,97	5,13	6,76	8,06	5,94	8.25	196.9
4	Amount of receivables (billion soums)	45,37	69,13	69,13	28,59	49,93	62,58	16,89	10,72	24.7
5	Volume of undistributed profit (billion soums)	-6,77	-2,57	-2,56	-2,65	0,65	0,53	2,19	4,29	163.4
6	Current liabilities (billion soums)	90.50	112,66	112,65	72,05	83,67	55,06	135,75	89,36	98.7
7	Net profit volume (billion soums)	1,46	4,43	4,43	0,14	3,33	0,27	1,71	0,17	11.6

It can be seen from Table 2.8 of the main financial and economic indicators of JSC "Tashkent IEM" that the initial value of fixed assets in 2021 is 291.8 billion. is equal to soums and decreased by 0.4% compared to 2020. The volume of long-term investments did not change significantly during the observed period and amounted to 615 bln.

remained in the amount of soum. In 2021, the volume of inventory in "Tashkent IEM" JSC will increase by 1.4 times compared to 2020 to 8.25 billion. reached soum.

Table 3

Analysis of financial indicators of "Tashkent IEM" JSC⁵

No	Indicator name	The norm	Years							
			2014	2015	2016	2017	2018	2019	2020	2021
1. Property status										
1.1.	Total assets in the composition main of means share	High positive indicator to be need	0.79	0.7	0.73	0.88	0.87	0.75	0.65	0.47
1.3.	Depreciation coefficient	-	0.06	0.08	0.07	0.09	0.1	0.14	0.26	0.39
1.4.	Eligibility coefficient	-	0.94	0.92	0.93	0.91	0.9	0.86	0.74	0.61
			0.94	0.92	0.93	0.91	0.9	0.86	0.74	0.61
2. Payment and liquidity the ability										
2.1.	Payability coefficient	from 2 high to be need	2.26	2.04	2.17	2.81	3.51	2.52	1.91	1.45
2.2.	Current liquidity coefficient	above 2 to be need it's not	0.56	0.7	0.7	0.55	0.89	1.51	1.31	1.32
2.3.	Quick liquidity coefficient	higher than 1 to be need it's not	0.51	0.62	0.06	0.07	0.72	1.18	1.25	1.21
2.4.	Absolutely liquidity coefficient	0.2-0.5	0.01	0.01	0.01	0.01	0.03	0.04	0.01	0.01
2.5.	Reserves in coverage own of funds share	-	-9.5	-6.87	-6.87	-6.34	-1.21	3.48	7	3.48
2.6.	Pure circulation of funds share	-	-0.19	-0.15	-0.14	-0.16	-0.03	0.07	0.09	0.05
2.7.	Own circulation of funds turnover	-	-0.02	-0.02	-0.02	-0.03	-0.25	0.08	0.02	0.03
2.8.	Reserves stayed own circulation of funds share	-	-9.5	-6.87	-6.87	-6.34	-1.21	3.48	7	3.48
2.9.	Cover coefficient	0.1-0.3	0.56	0.7	0.7	0.55	0.89	1.51	1.31	1.32
2.10.	Reserves to cover coefficient	higher than 1 to be need it's not	21.4	2.85	23	14.29	13.8	2.38	17.2	23,34
2.11.	Debt of debts rotation coefficient	positive indicator to be must	1.8	1.24	1.24	3.04	1.74	1.79	1.17	2.17
2.12.	Debt debts of collection average term	-	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.001
3. Financial stability status										

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1.4.	Eligibility coefficient	-	0.94	0.92	0.93	0.91	0.9	0.86	0.74	0.61
			0.94	0.92	0.93	0.91	0.9	0.86	0.74	0.61
2. Payment and liquidity the ability										
2.1.	Payability coefficient	from 2 high to be need	2.26	2.04	2.17	2.81	3.51	2.52	1.91	1.45
2.2.	Current liquidity coefficient	above 2 to be need it's not	0.56	0.7	0.7	0.55	0.89	1.51	1.31	1.32
2.3.	Quick liquidity coefficient	higher than 1 to be need it's not	0.51	0.62	0.06	0.07	0.72	1.18	1.25	1.21
2.4.	Absolutely liquidity coefficient	0.2-0.5	0.01	0.01	0.01	0.01	0.03	0.04	0.01	0.01
2.5.	Reserves in coverage own of funds share	-	-9.5	-6.87	-6.87	-6.34	-1.21	3.48	7	3.48
2.6.	Pure circulation of funds share	-	-0.19	-0.15	-0.14	-0.16	-0.03	0.07	0.09	0.05
2.7.	Own circulation of funds turnover	-	-0.02	-0.02	-0.02	-0.03	-0.25	0.08	0.02	0.03
2.8.	Reserves stayed own circulation of funds share	-	-9.5	-6.87	-6.87	-6.34	-1.21	3.48	7	3.48
2.9.	Cover coefficient	0.1-0.3	0.56	0.7	0.7	0.55	0.89	1.51	1.31	1.32
2.10.	Reserves to cover coefficient	higher than 1 to be need it's not	21.4	2.85	23	14.29	13.8	2.38	17.2	23,34
2.11.	Debt of debts rotation coefficient	positive indicator to be must	1.8	1.24	1.24	3.04	1.74	1.79	1.17	2.17
2.12.	Debt debts of collection average term	-	0.002	0.002	0.002	0.001	0.002	0.002	0.002	0.001
3. Financial stability status										

3.1.	Own of capital concentration coefficient	from 0.5 high to be need	0.56	0.51	0.54	0.64	0.72	0.6	0.48	0.31
3.2.	Total funds in the composition loan of capital share	-	0.44	0.49	0.46	0.36	0.25	0.4	0.52	0.69
3.3.	Financial dependency coefficient	of the indicator decreased to go positive is considered	1.79	1.96	1.85	1.55	1.4	1.66	2.1	3.22
3.4.	Own of mabla g' turnover coefficient	0.2-0.5	0.44	0.67	0.6	0.3	0.3	0.35	0.83	0.61
3.5.	Attractive done and own of funds relationship	-	0.79	0.96	0.85	0.55	0.34	0.66	1.1	2.22
3.6.	Investment funds in the composition long term of debts share	-	0.0	0.0	0.0	0.0	0.0	0.3	0.32	0.64
3.7.	Long term deposits composition coefficient	-	-	-	-	1.8	-	3.07	2.72	1.48
4. Profitability status										
4.1.	Own of funds profitability (ROE — Return on Equity)	indicator decreased if it goes good not grow if it goes good situation is considered	0.01	0.04	0.03	0.0	0.0	0.01	0.0	0.0
4.2.	Investments in return assets profitability (ROI — Return on Investments)	indicator decreased go railway transport for good situation is considered	0.007	0.019	0.018	0.001	0.000	0.008	0.001	0.0
4.3.	Expenses profitability	indicator grow up if it goes good not , decreased if it goes good situation is considered	0.020	0.062	0.062	0.002	0.0	0.033	0.00	0.00
4.4.	Trade profitability	indicator grow up if it goes good not , decreased if it goes good situation is considered	0.018	0.052	0.052	0.002	0.002	0.030	0.001	0.0
4.5.	Trade of the margin norm	-	0.118	0.171	0.171	0.094	0.094	0.086	0.052	0.011
5. From assets use efficiency										
5.1.	Foundation return	indicator decreased if it goes good not grow if it goes good situation is considered	0.53	0.57	0.52	0.53	0.38	0.36	0.72	0.47

5.3.	of assets turnover	-	0.40	0.37	0.35	0.43	0.30	0.29	0.44	0.38
6. Marginal analysis										
6.1.	Deficiency point (natural in appearance)	High positive to the indicator aspiration must	0.99	0.81	0.81	1.36	1.36	1.25	1.89	7.18
6.2.	Deficiency point (value in the form of) billion soums	-	80.6	69.2	69.2	118.5	118.5	139.8	372.0	1670.8
6.3.	Marginal of income coefficient	High positive to the indicator aspiration must	0.118	0.171	0.171	0.094	0.094	0.086	0.052	0.011
6.4.	Financial durability reserve	from 10% high to be must	1.4	19.2	19.2	-36.4	-36.4	-25	-88.7	-618.2
6.5.	Deficiency index	-	1.4	23.7	23.7	-26.7	-26.7	-20	-47	-86.1
6.6.	Operation lever (Operation leverage)	Not less than 1 in case decreased to go good condition is considered	-1.42	-5.67	-5.7	-3.09	12.6	18.25	4.65	0.61

The amount of receivables in 2021 will be 10.7 billion. is equal to soums and decreased by 4 times compared to 2014 and 6 times compared to 2019. The situation of current liabilities also changed in a positive direction, in particular, in 2021, a reduction of 44.2% compared to 2020 was achieved. The decrease in current liabilities has also led to a decrease in the amount of profit, and in 2021 it will be 170 mln. equal to soum.

As can be seen from Table 3, the share of fixed assets in total assets was 47% in 2021, which decreased by 18% compared to 2020. This indicates that the state of wear and tear of the devices in the thermal power center is increasing. However, the deficit point has risen and reached 1.7 trillion soums in 2021, which is almost 5 times more than in 2020. The turnover ratio of own funds was also equal to 0.61 in 2021, a reduction of 22% was achieved compared to 2020, and it was close to the marginal normative indicator. The current liquidity ratio was equal to 1.32 in 2021 and did not exceed the normative limit of

The capital with stable heat and electricity, two gas turbines with a capacity of 32 MW are being built at Tashkent IEM JSC.

The processes organized by JSC "Heat Power Stations" and their intended purpose are aimed at expanding the measures of the ongoing work in the field of energy, in particular, the provision of continuous electricity and thermal energy to the capital cities.

A number of investment projects related to the energy system are being implemented at the Tashkent Thermal Power Center. Tashkent heat electricity in the center common worth 115 million US dollars to the dollar equal to investment project from them is one .

Meanwhile Uzbekistan Republic President of October 23 , 2018 PQ decision No. 3981 performance within every one's capacity is 32 MW has been two gas turbine to build project according to affairs hot continue is doing The project is in 2024 the first in the quarter to work fall planned is the present to the day until construction and installation works 97 percent done

This project The main contractor is the Turkish company "Calik Enerji " . based on done is increasing . Now of work good quality and own on time fulfillment provide in order to construction from 600 people on the platform more than local and foreign specialists and about 50 techniques is working

It is noteworthy on the ground In the Japanese company "Mitsubishi". work issued two gas turbine and From Turkey two pot devices take come installed . The most modern and energy efficient devices application as a result less fuel by spending more electricity energy work release opportunity is created .

Project done increase as a result of , the center by per year an additional 515.6 million kilowatts hour electricity and 690.3 thousand Gkal heat energy work is issued. High in that thrifty modern technologies in return 219 thousand per year cube meter natural gas economy will be done .

The environment being released a pollutant substances for 200.5 tons to decrease is achieved . This gas turbine devices to work lowering as a result , electricity center by more than 40 new the work place is created .

Also in the enterprise this affairs according to the building and structures heat energy with provide in order to common capacity is 3400 liters has been 17 pieces in total the sun water heating devices , capacity 505.6 kW equal to the sun photoelectric station that's it done Internal and external regions autonomous lighting to the system transfer in order to 160 pcs the sun paneled lighting lights , 70 pcs touch motion sensors and electric motors at optimal loads work provide at the expense of excess electricity energy spending prevention get for 2 pcs frequency switch devices installed. This installed the sun panels and water heating on devices work released " green energy " of the center own needs is being directed .

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