

Determination of normative indicators of electricity losses for the regulatory period

Elmar Gulaliyev

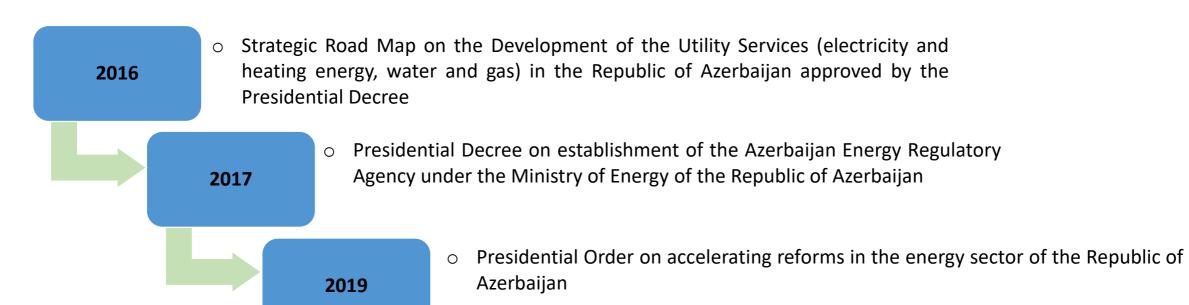
Senior specialist | Strategic Planning and Innovations Division elmar.gulaliyev@regulator.gov.az

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Reforms in the electricity sector





2021

- "Azerbaijan 2030: National Priorities on socio-economic development" approved by the Presidential Order
- Presidential Order "On measures to establish a "green energy" zone in the liberated territories of the Republic of Azerbaijan"
- Law "On the use of renewable energy sources in electricity generation"
- Law "On the efficient use of energy resources and energy efficiency"



Acceleration of Reforms in the Energy Sector



- Law "On the use of renewable energy sources in electricity generation" № 339-VIQ, dtd. 31.05.2021
- Law "On the efficient use of energy resources and energy efficiency" No 359-VIQ, dtd. 09.07.2021
- New draft of the law "On Energy"
- New draft of the law "On Electricity"
- Draft law "On Regulator in Energy and Public Utility Services"
- New draft of the law "On Gas Supply"

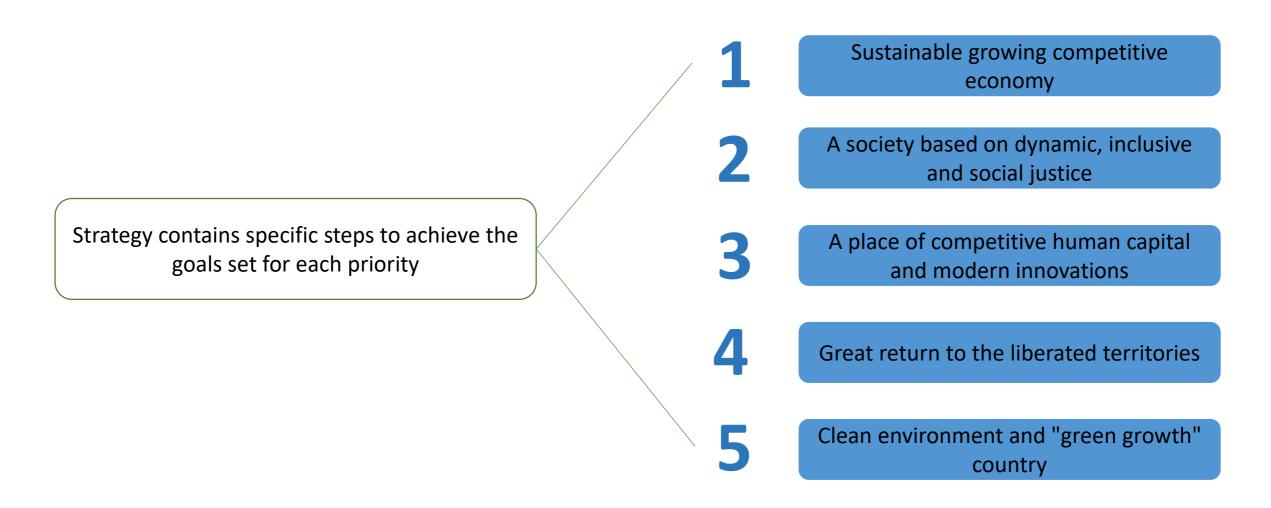


A new stage of reforms in the energy sector



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Presidential Order № 3378 dtd. 22.07.2022 on approving the "Socio-economic development strategy for 2022-2026 of the Republic of Azerbaijan"





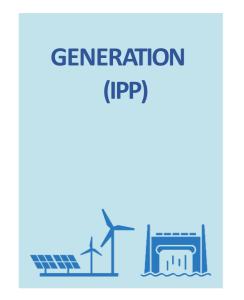
Existing structure of the electricity market

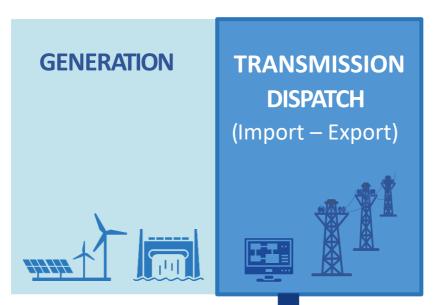






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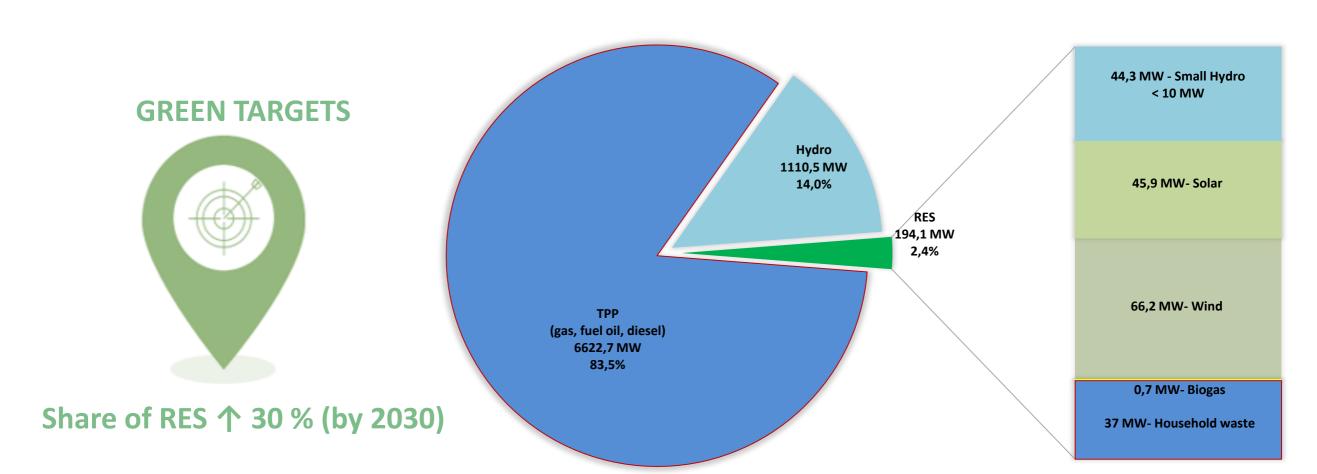
SUPPLY CONSUMERS





Installed capacities



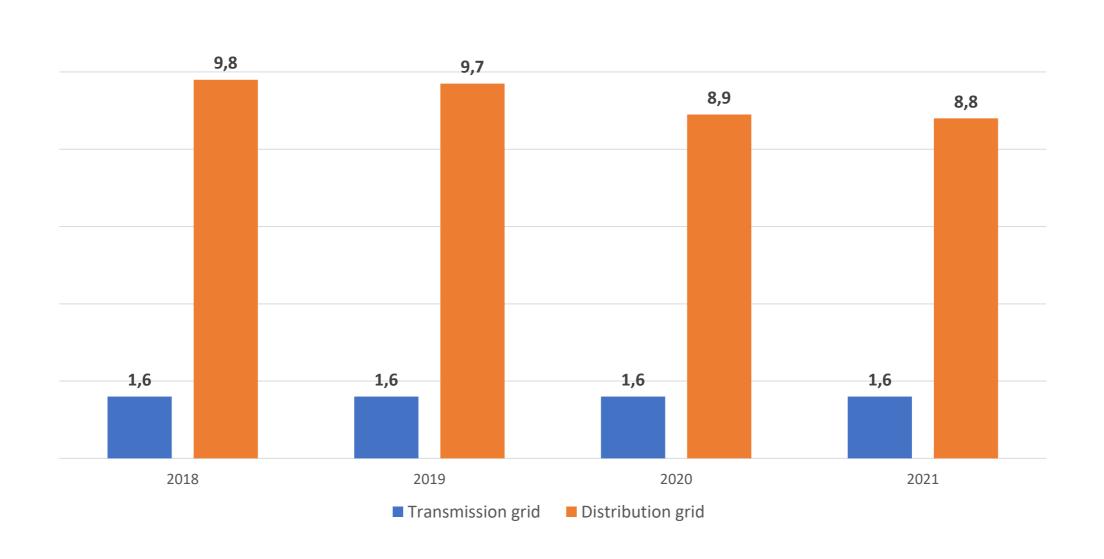


Greenhouse gas emissions ↓ 40 % (by 2050)



Electricity losses for 2018-2021 (%)



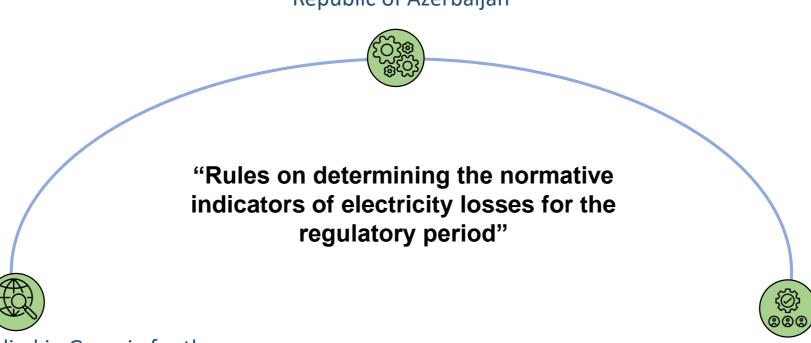




Process of preparation of draft rules



Developed within the II phase of the EBRD project on "Support for the functioning of the newly established Energy Regulatory Agency in the Republic of Azerbaijan"



The approach applied in Georgia for the calculation of losses was considered more appropriate in terms of its implementation in the country

The rules were agreed with the experts involved within the II of the EU4Energy project

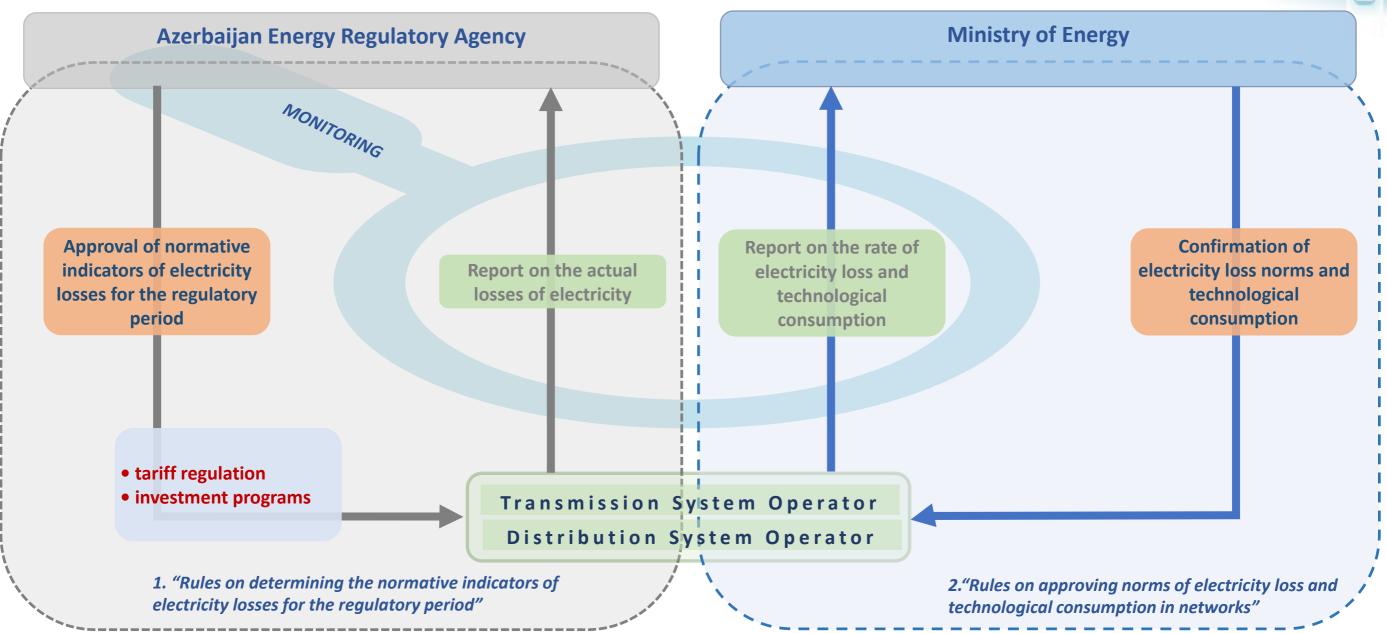


Electricity losses BLOCK DIAGRAM





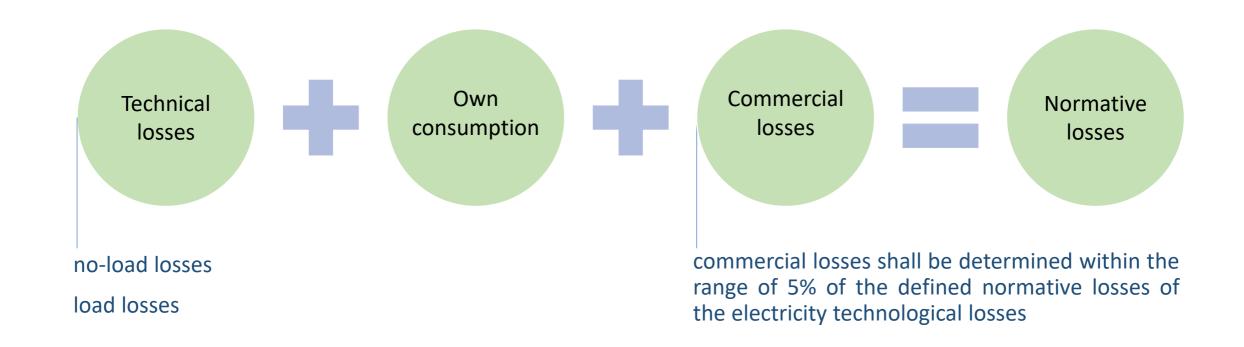






Loss components





If the data on the actual losses in the electricity networks for the previous regulatory period are not available, the amount of the technological losses increased by 5% (maximum allowed commercial losses for the regulatory normative losses) is approved as electricity normative losses



Algorithm of calculating normative electricity losses for the regulatory period







Indicators	Base years of the tariff regulatory period				Current year when	Years of the Tariff Regulatory Period			
	3 years before the base year of the tariff regulation			Base year of the tariff regulation	calculation of regulatory normative losses for <i>i</i> tariff regulatory period is madet	Year of tariff regulation	f 3 years after the year of tariff regulation		
j- year of i- period of tariff regulation- t ⁱ , years	$t^i_{\scriptscriptstyle b ext{-}3}$	t ⁱ _{b-2}	<i>t</i> ⁱ _{b-1}	t ⁱ _b	t ⁱ o	t ⁱ ,	t ⁱ _{r+1}	<i>t</i> ⁱ _{r+2}	t ⁱ _{r+3}
	2018	2019	2020	2021	2022	2023	2024	2025	2026
Approved normative losses of the electricity technological losses for j years - ΔE_{jN} , %	10,0%	10,0%	10,0%	10,0%	10,0%	9,5%	9,4%	9,3%	9,2%
Commercial losses of the electricity for j years - ΔE^{i}_{jk} , %	2,5%	3,0%	1,9%	1,8%	1,6%	1,6%	1,5%	1,3%	1,1%
Actual losses of the electricity for j base years of l tariff regulatory period - ΔE_{jt} , %	12,5%	13,0%	11,9%	11,8%					
Forecasts of the expected actual losses of the electricity for current year in which calculation of regulatory normative losses for i tariff regulatory period is made, $\Delta \mathbf{E^i}_0$, %					11,6%				
Average annual trend indicator of actual losses for j base reporting years of i -tariff regulatory period - $\Delta \bar{\mathbf{e}}^i_{jt}$ %					-1,9%				
Approved electricity normative losses for j years of i tariff regulatory period - ΔE_p %						11,1%	10,9%	10,6%	10,3%
Average annual loss indicator of electricity losses for i tariff regulatory period - $\Delta \bar{\mathbf{e}}^{i}_{jr}$ %						-3,8%	-2,2%	-2,6%	-2,9%





THANK YOU FOR YOUR ATTENTION

Contact details

Adress: «Chinar Plaza» Business Center,

Heydar Aliyev ave.152, AZ1029, Baku, Azerbaijan

Phone: (+994 12) 598-16-53/54/55

Fax: (+994 12) 566 09 40

E-mail: office@regulator.gov.az