

JSC “ELECTRICITY SYSTEM COMMERTIAL OPERATOR”

***ACTIVITY REPORT
YEAR 2017***



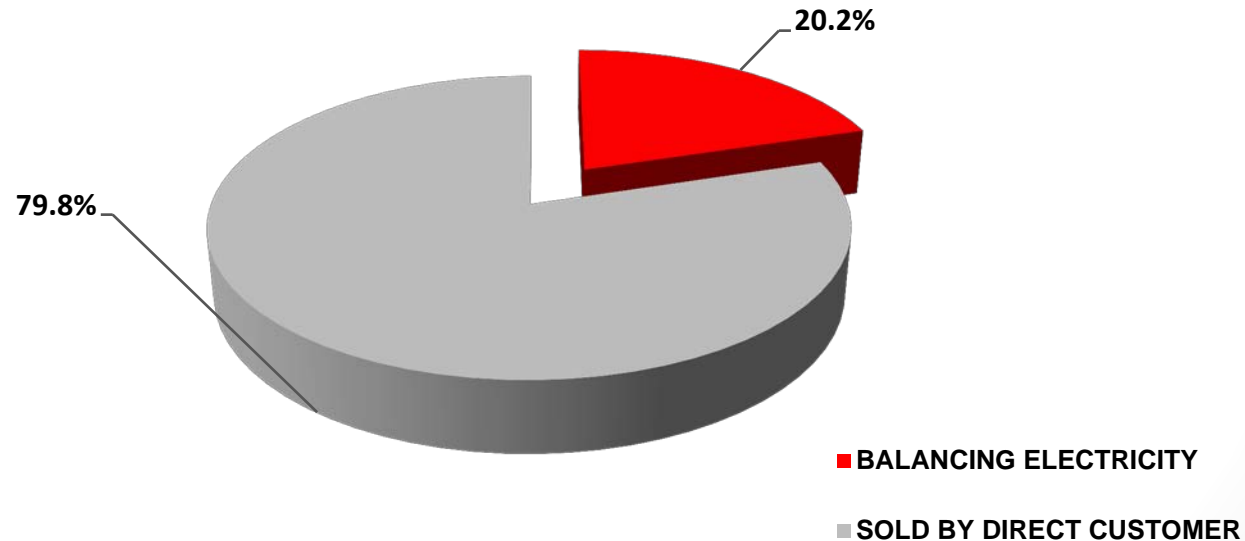
MAIN DIRECTIONS OF THE ACTIVITY

- **BALANCING ELECTRICITY TRADE**
- **GUARANTEED CAPACITY TRADE**
- **ELECTRICITY IMPORT AND EXPORT**
- **SUPPORT OF CONSTRUCTION OF NEW HYDRO POWER PLANTS**
- **METERING CONTROL**



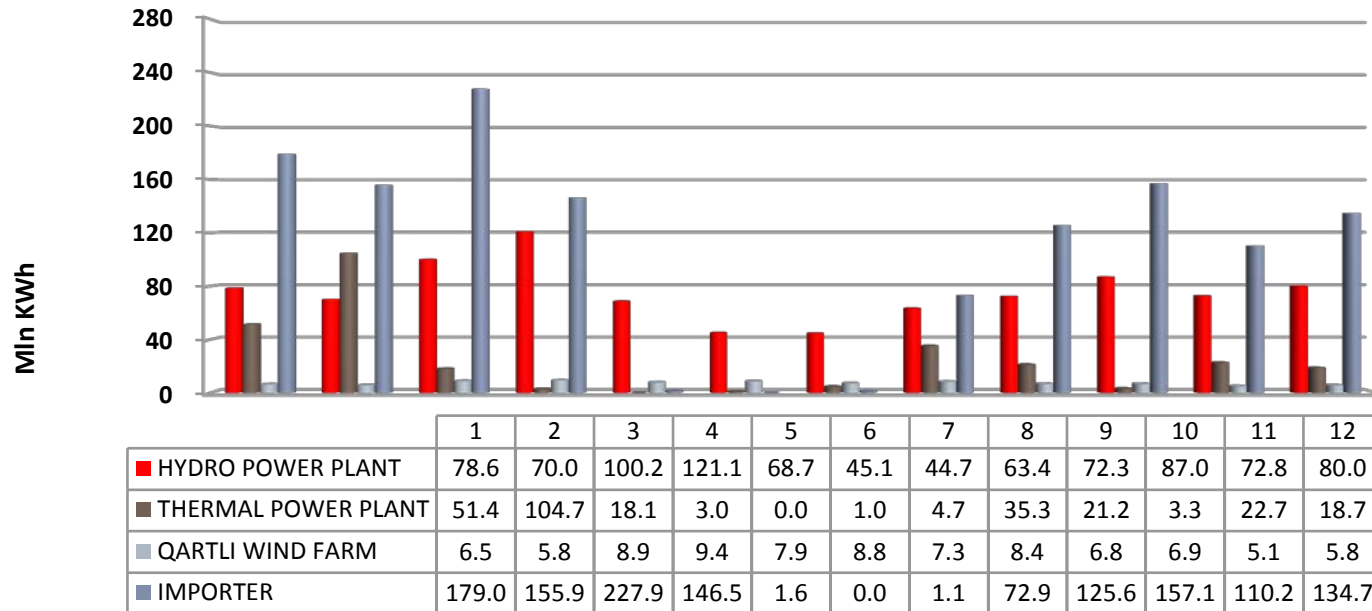
BALANCING ELECTRICITY TRADE

- **BALANCING ELECTRICITY TRADE REMAINS AS ONE OF THE MAIN DIRECTIONS OF ESCO'S ACTIVITIES;**
- **IN 2017, THE SHARE OF BALANCING ELECTRICITY IN THE WHOLESALE TRADE WAS 20.2%.**



BALANCING ELECTRICITY SUPPLIERS

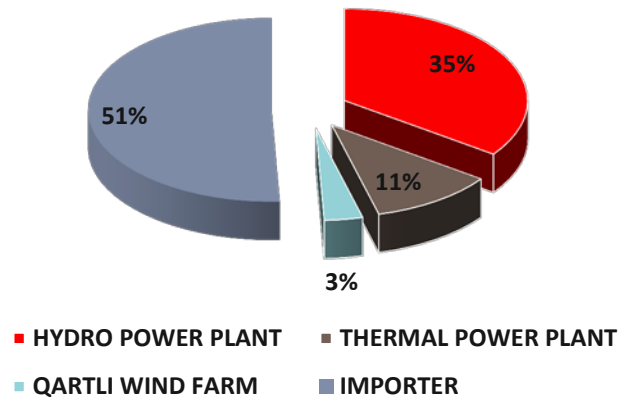
IN 2017, THE BALANCING ELECTRICITY, PURCHASED BY ESCO CONSISTED OF THE ENERGY, GENERATED BY THE THERMAL, HYDRO POWER PLANTS AND QARTLI WIND FARM AS WELL AS THE ELECTRICITY, IMPORTED BY ESCO. THEIR QUANTITATIVE INDICATOR (BY MONTHS) IS GIVEN IN THE DIAGRAM.



PARTICIPATION OF ELECTRICITY SUPPLIERS IN BALANCING ELECTRICITY FORMATION

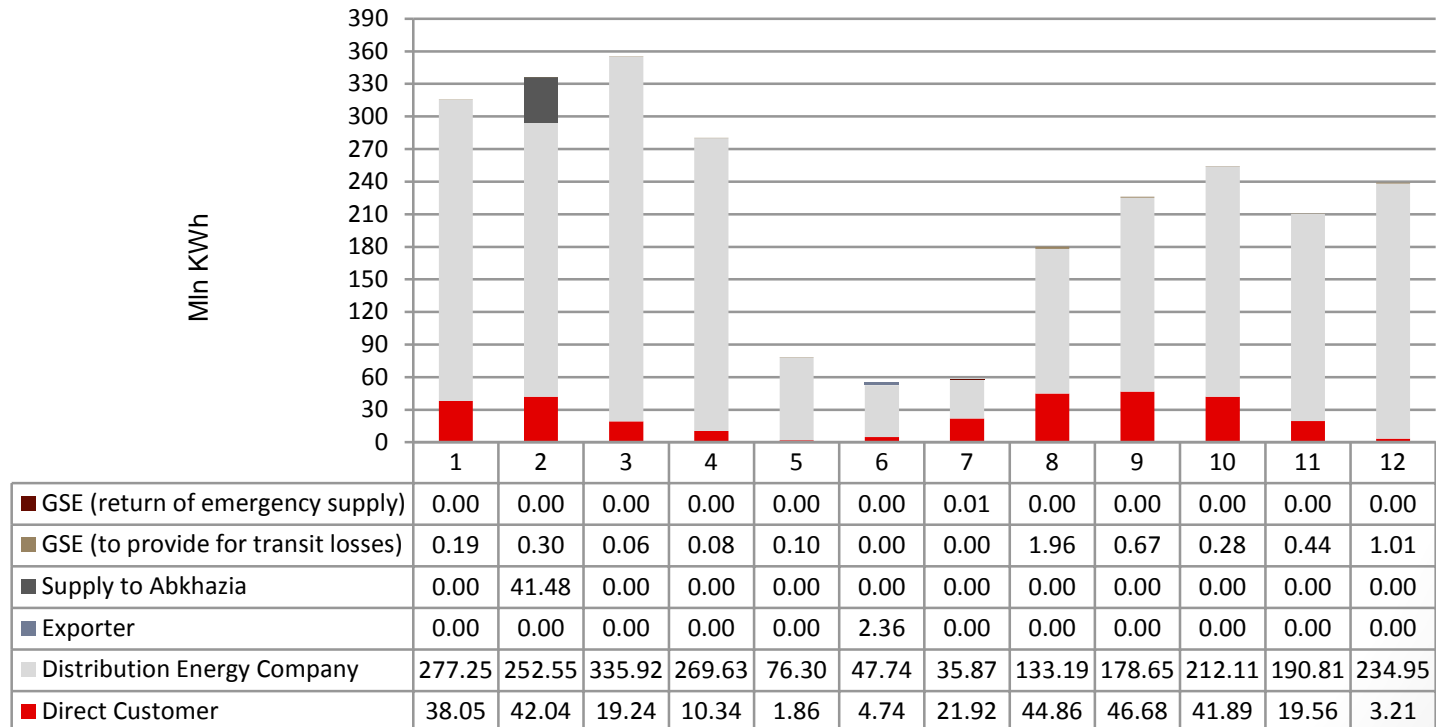
ELECTRICITY SELLERS	YEAR 2017	
	KWH	SHARE, %
HYDRO POWER PLANT	903 882 547.8	35%
THERMAL POWER PLANT	284 017 645.2	11%
QARTLI WIND FARM	87 688 799.1	3%
IMPORTER	1 312 690 405.9	51%
TOTAL	2 588 279 398	100%

**SHARE OF HPPS, TPPS, QARTLI WIND FARM AND IMPORTS IN
BALANCING ELECTRICITY, IN 2017**



BALANCING ELECTRICITY BUYERS

- IN 2017, DISTRIBUTION ENERGY COMPANIES, DIRECT CUSTOMERS AND EXPORTERS WERE THE MAIN BUYERS OF BALANCING ELECTRICITY FROM ESCO. BESIDES, IN 2017, THE DISPATCH LICENSEE HAS BOUGHT THE LOSSES TO PROVIDE FOR THE TRANSIT. ITS SHARE IN THE PURCHASE OF BALANCING ELECTRICITY IS 0.2%;
- THE QUANTITATIVE INDICATORS (BY MONTHS) OF BALANCING ELECTRICITY BUYERS ARE GIVEN IN THE DIAGRAM.

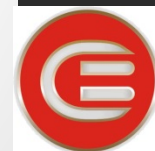
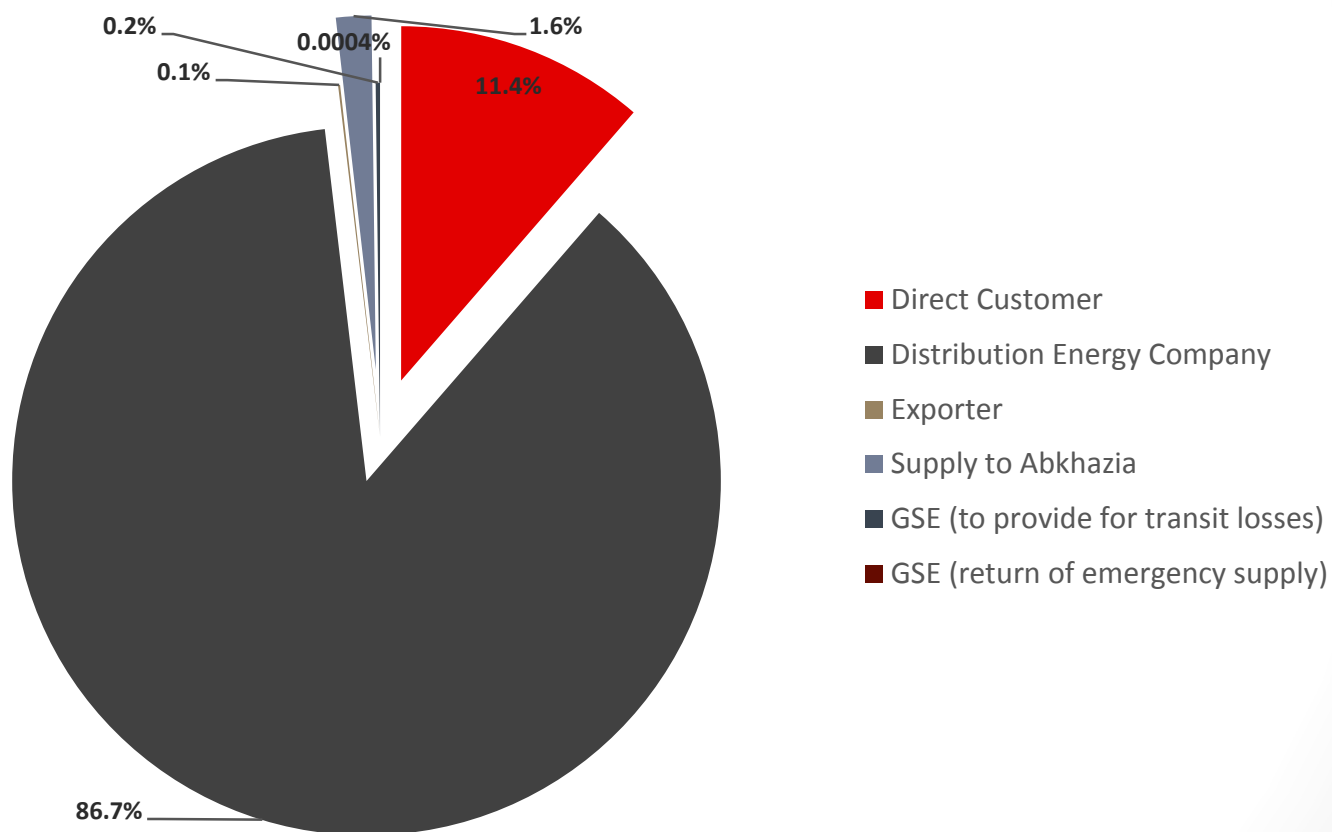


PARTICIPATION OF ELIGIBLE ENTERPRISES IN THE PURCHASE OF BALANCING ELECTRICITY

ELECTRICITY BUYERS	YEAR 2017	
	kWh	Share, %
DIRECT CUSTOMER	294 389 374	11.4%
DISTRIBUTION ENERGY COMPANY	2 244 955 788	86.7%
EXPORTER	2 362 539	0.1%
SUPPLY TO ABKHAZIA	41 478 170	1.6%
GSE (TO PROVIDE FOR THE TRANSIT LOSSES)	5 084 418	0.2%
GSE (RETURN OF THE EMERGENCY SUPPLY)	9 109	0.0004%
TOTAL	2 588 279 398	100%

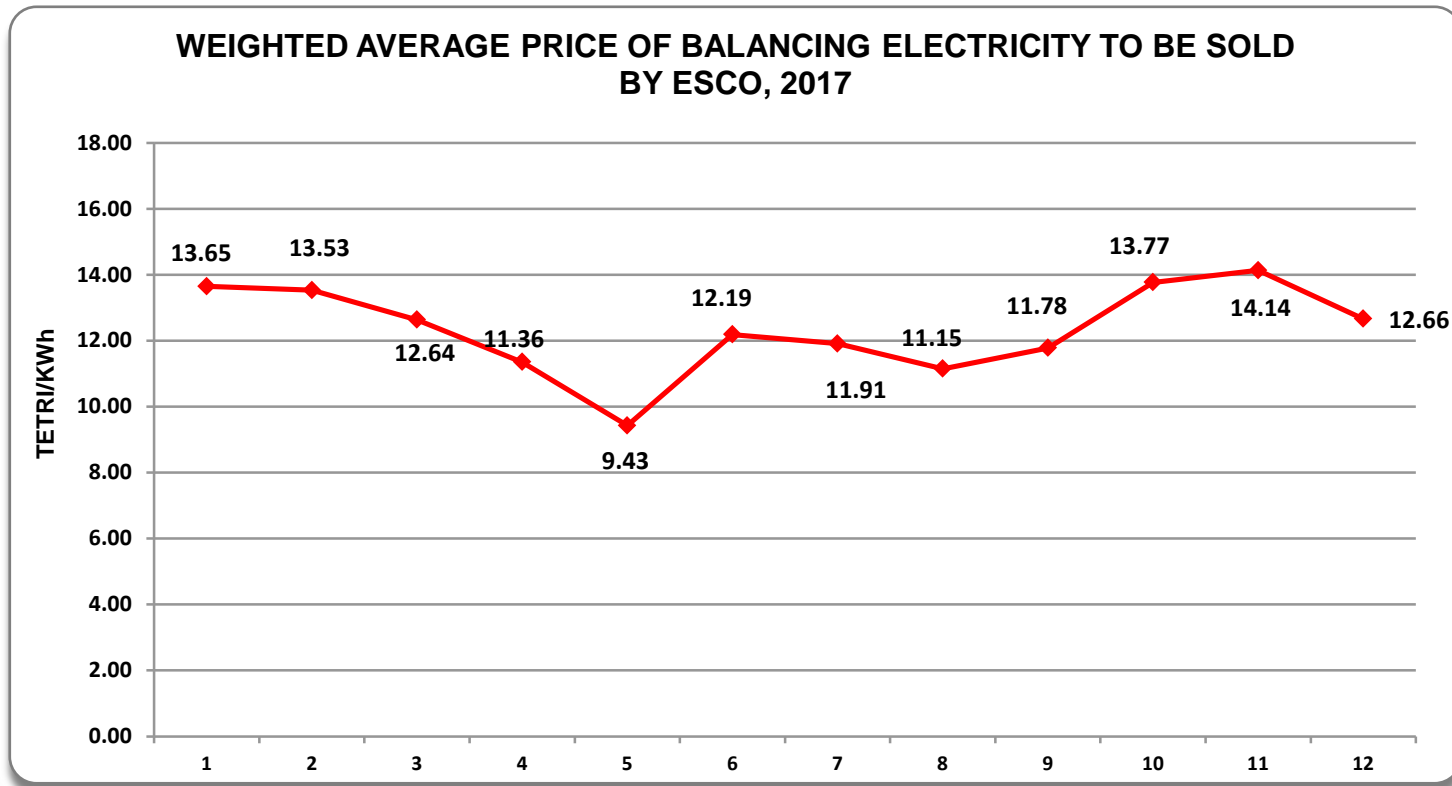


EQUITY ENDICES OF DIRECT CUSTOMERS, DISTRIBUTION LICENSEES AND EXPORTERS IN BALANCING ELECTRICITY PURCHASE, 2017



PRICE FORMATION OF BALANCING ELECTRICITY FOR SALE

THE PRICE OF BALANCING ELECTRICITY FOR SALE (THAT ESCO HAVE PURCHASED) SHALL BE FORMED BASED ON **THE WEIGHTED AVERAGE PRICE.**



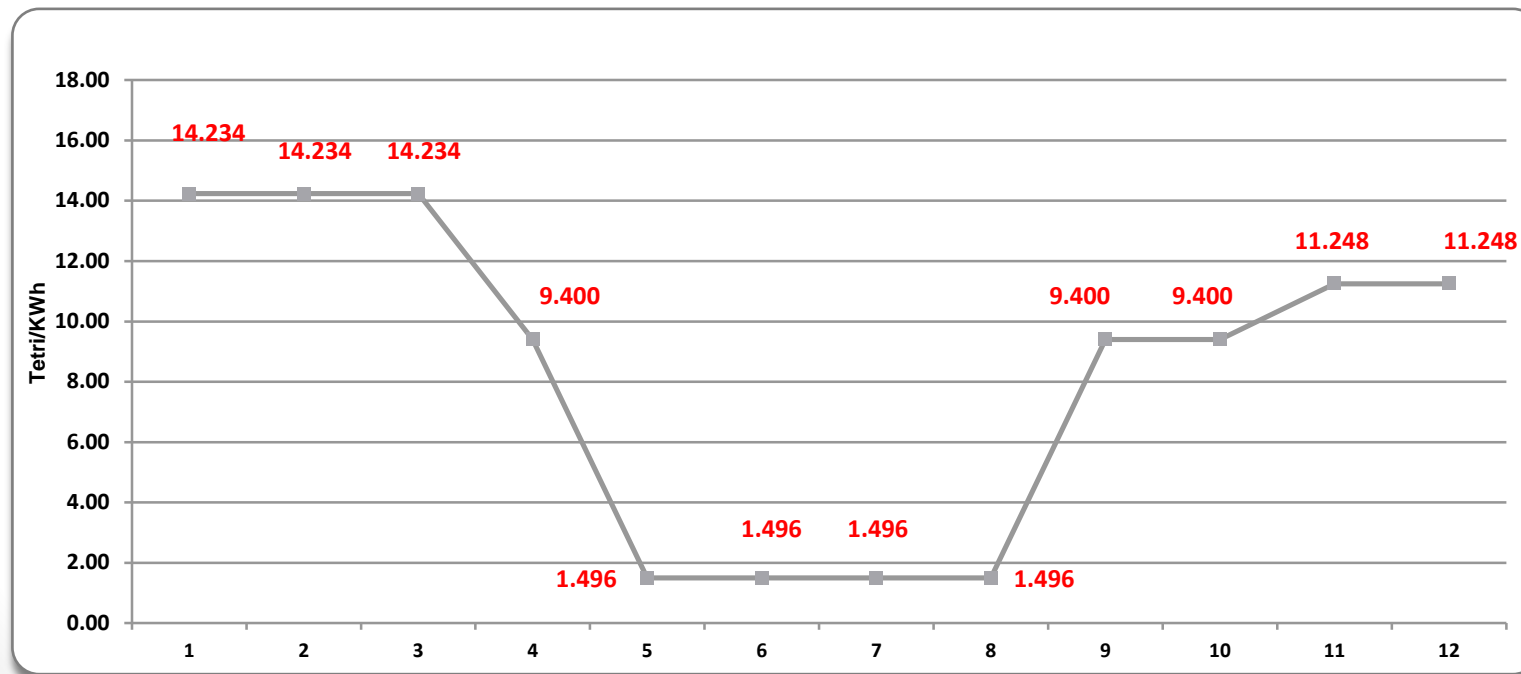
BALANCING ELECTRICITY PRICE OF DEREGULATED SMALL CAPACITY POWER PLANTS, 2017

According to the legislation, in January-March 2017, ESCO purchased the Balance Electricity from small capacity deregulated power plants, at the upper margin of the tariff for thermal power plant, for which the Commission had established the highest tariff. Accordingly, The tariff was Tetri 14.234 for the above-mentioned months.

As from April 2017, the regulations related to the reimbursement of Balancing Electricity of the deregulated small capacity power plants had changed, ESCO bought the Balancing Electricity from the deregulated small capacity power plants for the remaining reporting periods (April-December):

- DURING THE PERIOD OF SEPTEMBER – MAY, THE UPPER MARGIN OF THE TARIFF OF THOSE HPPS, FOR WHICH THE COMMISSION HAS ESTABLISHED THE HIGHEST TARIFF, SHALL APPLY;

-DURING THE PERIOD OF MAY- SEPTEMBER , THE REGULATED FIXED TARIFF OF THOSE HPPS, FOR WHICH THE COMMISSION HAS ESTABLISHED THE LAWEST TARIFF, SHALL APPLY;

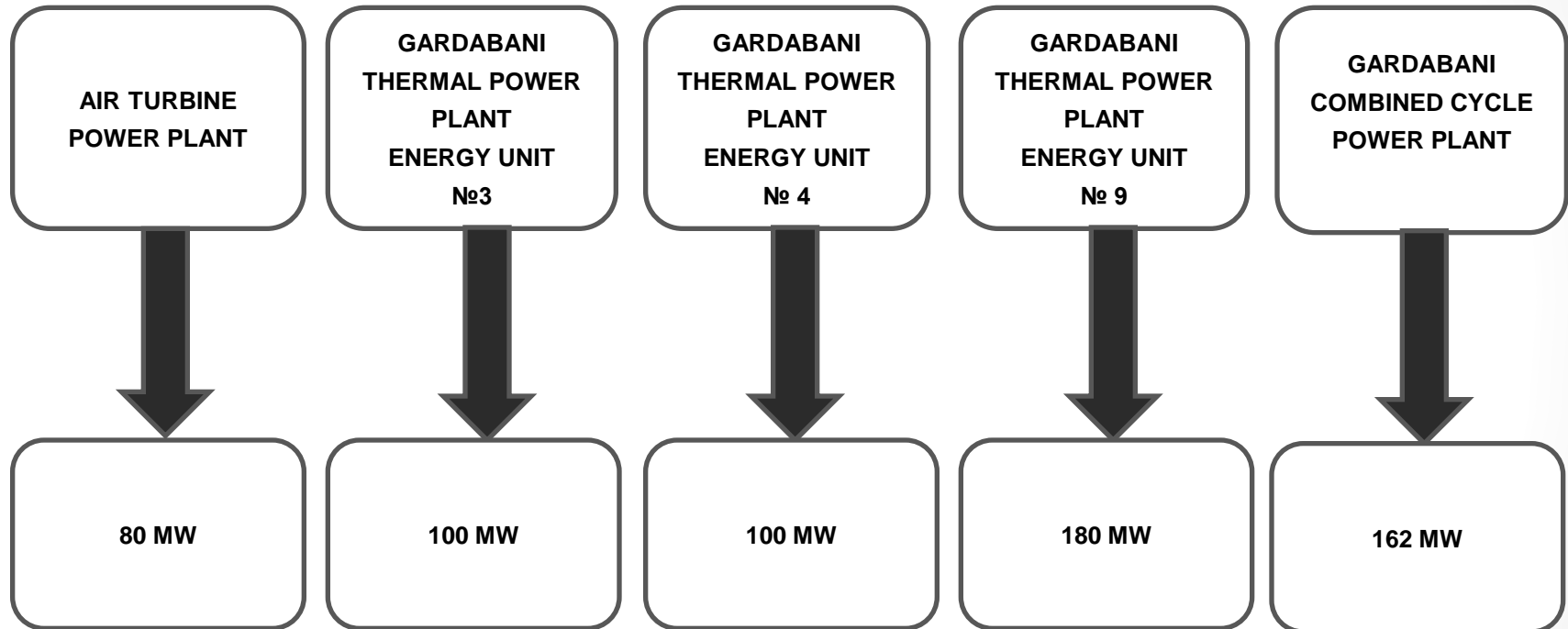


GUARANTEED CAPACITY

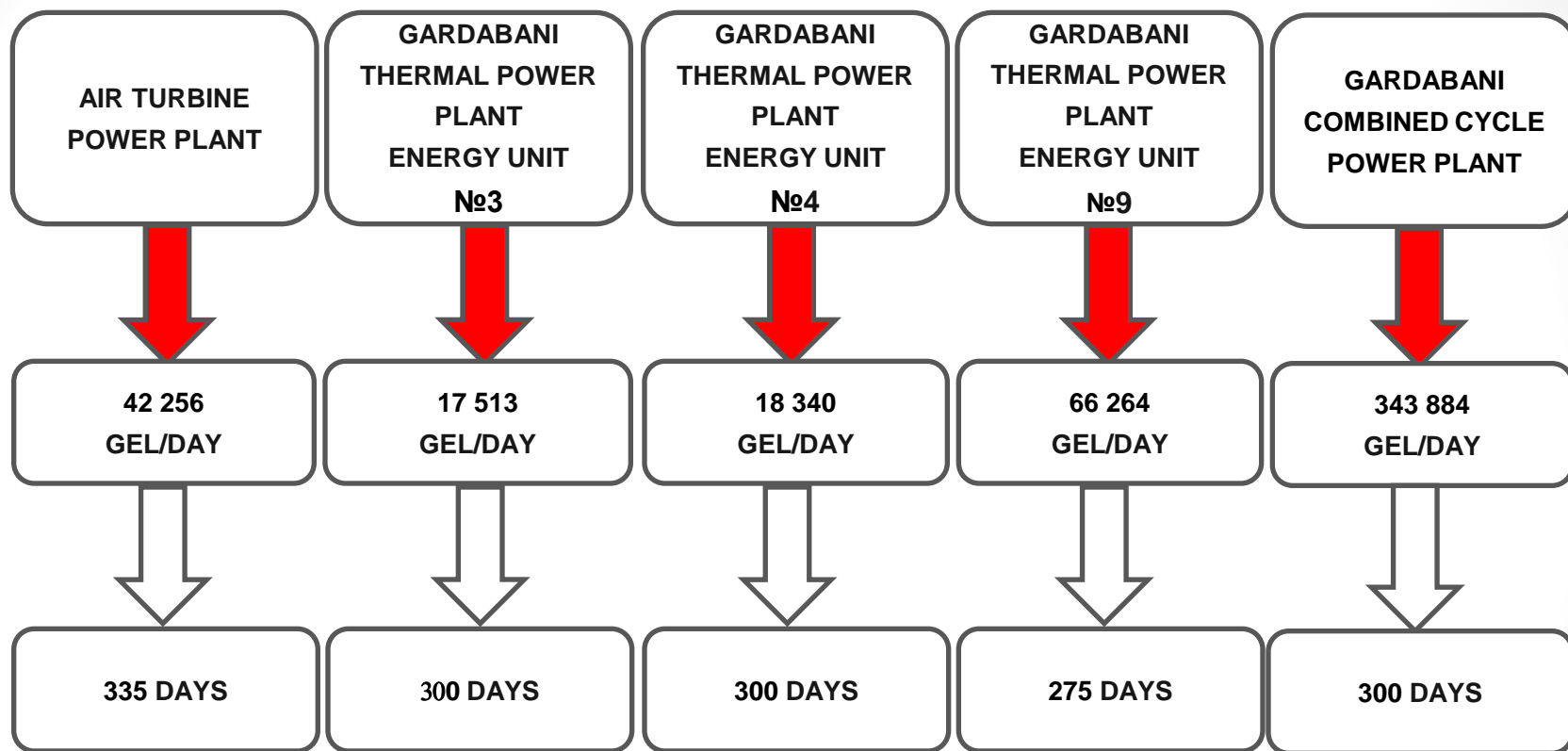
- *GUARANTEED CAPACITY SERVES TO THE STABILITY, SAFETY AND RELIABLE FUNCTIONING OF THE COUNTRY'S UNIFIED ENERGY SYSTEM;*
- **GEORGIAN GOVERNMENT DETERMINES THE GUARANTEED CAPACITY SOURCE AND MINIMUM QUANTITY OF GUARANTEED CAPACITY, FOR EACH GUARANTEED CAPACITY SOURCE;**
- *GEORGIAN NATIONAL ENERGY AND WATER REGULATORY COMMISSION DETERMINES THE PROVISION PERIODS AND THE PRICE OF GUARANTEED CAPACITY, FOR EACH GUARANTEED CAPACITY SOURCE, ON DAILY BASIS;*
- *GUARANTEED CAPACITY TRADE IS TAKING PLACE ONLY THROUGH ESCO, BASED ON THE STANDARD CONDITIONS OF DIRECT CONTRACT.*



GUARANTEED CAPACITY SOURCES AND MINIMUM QUANTITY OF GUARANTEED CAPACITY, DETERMINED BY THE GOVERNMENT OF GEORGIA, 2017



THE PRICE AND PROVISION PERIODS FOR GUARANTEED CAPACITY SOURCES DETERMINED BY THE NATIONAL REGULATORY COMMISSION



ACCORDING TO THE REGULATORY COMMISSION RESOLUTION, THE PROVISION PERIODS (NUMBER OF DAYS) FOR THE GUARANTEED CAPACITY SOURCES WERE DETERMINED FROM JANUARY 1, 2017 TILL (INCLUDING) DECEMBER 31, 2017 (12 MONTHS), BASED ON THE CALENDAR YEAR.

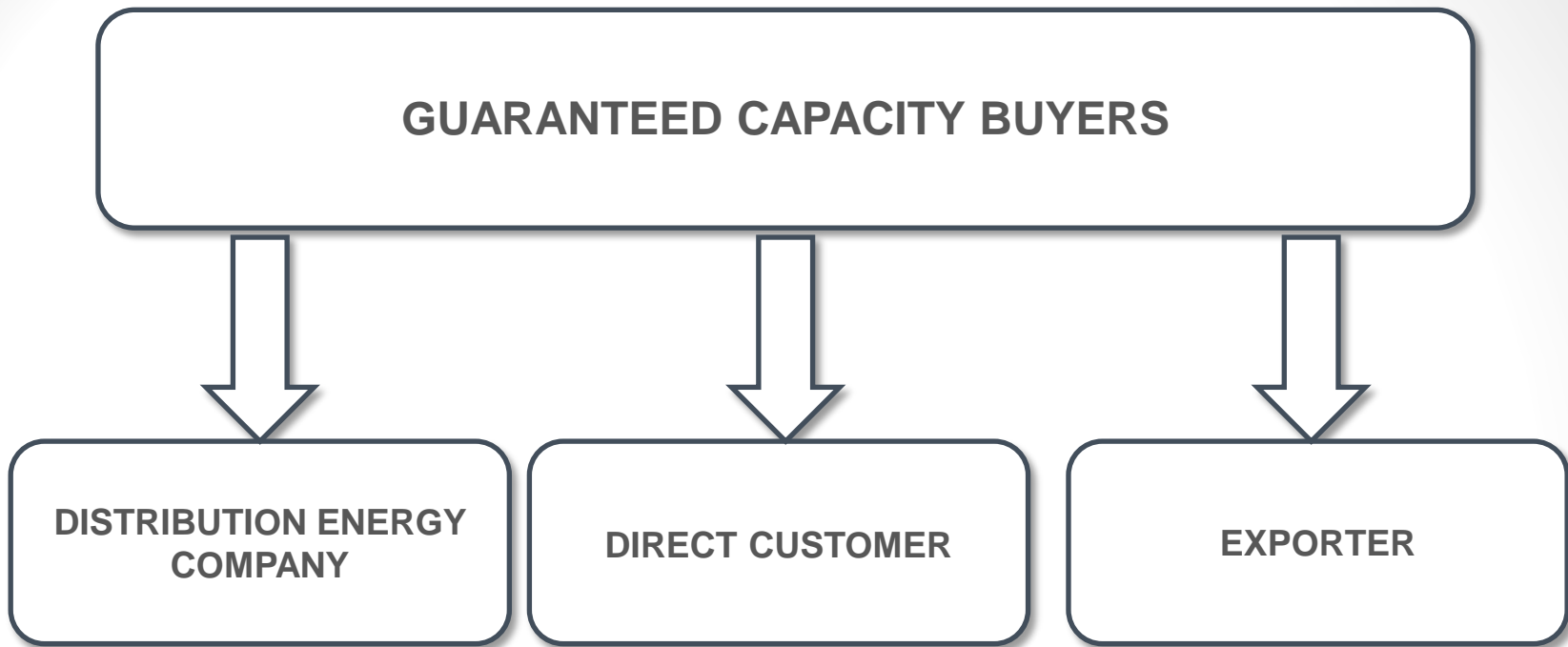


FUNDS RECEIVED FOR THE GUARANTEED CAPACITY PROVIDED BY THE SOURCES, 2017

ESCO COMPENSATES THE COST OF GUARANTEED CAPACITY ONLY TO THOSE SOURCES OF GUARANTEED CAPACITY, READINESS AND STANDBY PERIOD OF WHICH IS CONFIRMED BY THE DISPATCH LICENSEE.

COST OF PROVIDED GUARANTEED CAPACITY, 2017	LTD "MTKVARI ENERGY"	LTD "GEORGIAN INTERNATIONAL ENERGY CORPORATION"		LTD "G-POWER"	LTD "GARDABANI TPP"
	ENERGY UNIT №9	ENERGY UNIT №3	ENERGY UNIT №4	AIR TURBINE POWER PLANT	COMBINED CYCLE POWER PLANT
PROVISION PERIOD (NUMBER OF DAYS)	275	300	300	335	300
GUARANTEED CAPACITY COST (M GEL)	18.22	5.25	5.50	14.16	103.17

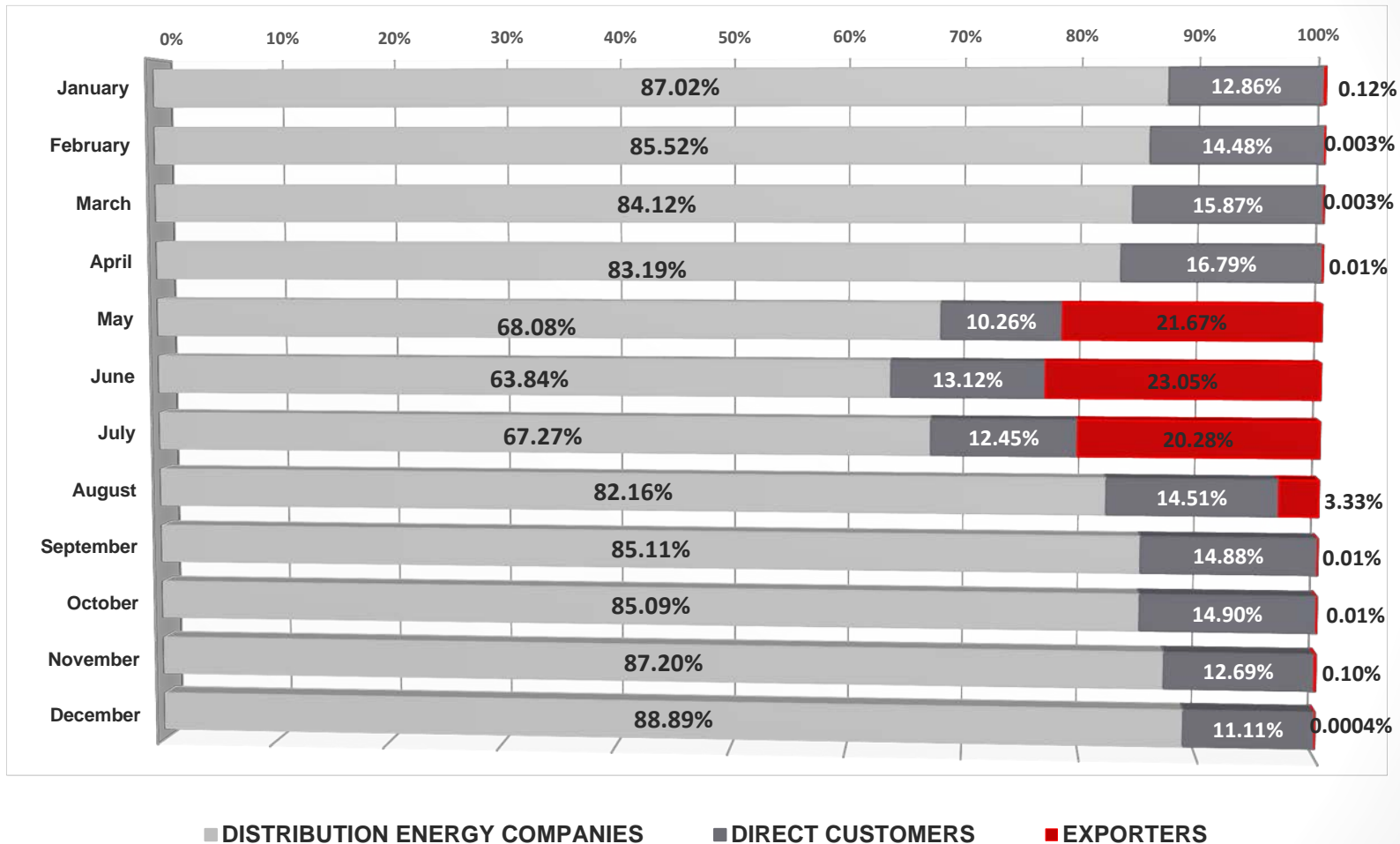




THE GUARANTEED CAPACITY BUYER ELIGIBLE ENTREPRICE IS LIABLE FOR THE COMPENSATION OF GUARANTEED CAPACITY COST, IN PROPORTION WITH ITS ACTUAL SHARE OF CONSUMPTION AND EXPORT IN TOTAL ACTUAL CONSUMPTION OR EXPORT.



PURCHASE SHARE OF GUARANTEED CAPACITY BUYER ELIGIBLE ENTREPRICES IN TOTAL PURCHASE, 2017



IMPORT AND EXPORT CARRIED OUT BY ESCO

- **IN 2017, THE QUANTITY OF ELECTRICITY IMPORTED BY ESCO WAS 1 489.97 M KWH, WHICH IS 99.5% OF THE ENERGY TOTALLY IMPORTED (1 497.2 M KWH) INTO THE COUNTRY. THE ELECTRICITY WAS IMPORTED FROM THE RUSSIAN FEDERATION (445.0 M KWH), THE REPUBLIC OF AZERBAIJAN (917.6 M KWH) AND ARMENIA (127.4 M KWH). SIGNIFICANT SHARE IN THE IMPORT CARRIED OUT BY ESCO WAS THROUGH THE ELECTRICITY TRANSMISSION LINES, CONNECTED WITH THE REPUBLIC OF AZERBAIJAN.**
- **IN 2017, ESCO EXPORTED 367.7 M KWH OF ELECTRICITY, WHICH IS 53.6% OF ACTUAL EXPORT (685.7 M KWH) FROM THE COUNTRY. THE EXPORT WAS CARRIED OUT TO FOUR NEIGHBOURING COUNTRIES: THE RUSSIAN FEDERATION (261.9 M KWH), TURKEY (27.0 M KWH), THE REPUBLIC OF AZERBAIJAN (1.7 M KWH) AND ARMENIA (77.1 M KWH).**



MONITORING OF METERING SYSTEMS

- In 2017, the auditors of Electricity Metering Control Department, in cooperation with the parties concerned (according to the approved schedule), inspected 1050 electricity settlement metering nodes to monitor the electricity settlement metering points. They drew up the inspection act per each wholesale (commercial) metering node;
- When registering an eligible enterprise or amending its registration, as a participant of wholesale trade, the Commission inspected and put into service 59 new settlement metering nodes (intended for the wholesale trade) and drew up the inspection acts of metering nodes that will be used in wholesale trade;
- A business trip was organized together with the representatives of JSC “Georgian State Electricity System” to the Substations of “Khopa-220”, “Batumi-220”, “Borchkha-400” and “Akhaltsikhe-500”, for the purpose of inspecting the electricity metering nodes Georgian-Turkish transborder transmission lines. Another business trip to the Republic of Armenia was organized jointly with the representatives of JSC “Georgian State Electricity System”, to attend the meter replacement process of 220 kW ETL “Alaverdi” at “Alaverdi” Substation;
- JSC “Electricity System Commercial Operator” reacted to all the shortcomings revealed during the inspection in accordance with legislation;
- The unified database of metering nodes to be used for wholesale trade has been renewed.



SUPPORT OF CONSTRUCTION OF NEW POWER PLANTS

IN 2017, COMMENSURATE TO THE MEMORANDUMS, CONCLUDED BETWEEN THE GOVERNMENT AND THE INVESTOR, 16 CONTRACTS WERE SIGNED ON THE OBLIGATORY POWER PURCHASE BETWEEN THE MARKET OPERATOR AND THE INVESTOR:

- *GOVERNMENT – ESCO – LTD “C-POWER”*
- *GOVERNMENT – ESCO – LTD “ADJAR ENERGY 2007”*
- *GOVERNMENT – ESCO – JCS “SVANETI HYDRO” (HPP MESTIACHALA 1)*
- *GOVERNMENT – ESCO – JCS “SVANETI HYDRO” (HPP MESTIACHALA 2)*
- *GOVERNMENT – ESCO – LTD “BUGATO ENERGY”*
- *GOVERNMENT – ESCO – LTD “HYDROENERGY”*
- *GOVERNMENT – ESCO – LTD “HYDRO DEVELOPMENT COMPANY”*
- *GOVERNMENT – ESCO – LTD “AE-SGI ENERGY I”*
- *GOVERNMENT – ESCO – LTD “AQUAHYDRO” (IFARI HPP)*
- *GOVERNMENT – ESCO – LTD “AQUAHYDRO” (KHELRA HPP)*
- *GOVERNMENT – ESCO – LTD “AQUAHYDRO” (NAKRA HPP)*
- *GOVERNMENT – ESCO – LTD “AQUAHYDROENERGY” (HPP LAJANURI 1)*
- *GOVERNMENT – ESCO – LTD “AQUAHYDROENERGY” (HPP LAJANURI 2)*
- *GOVERNMENT – ESCO – LTD “AQUAHYDROENERGY” (HPP LAJANURI 3)*
- *GOVERNMENT – ESCO – LTD “SUPSA ENERGY” (HPP BARAMIDZE)*
- *GOVERNMENT – ESCO – LTD “ALAZANI ENERGY” (HPP KHADORI 3)*



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