

Security of Supply CG- 4th Meeting of Sub-Group for Electricity

KOSOVO*

Content



General note: *Main activities of the electricity sector during the period were not facing any unusual issue in terms of SoS, except the imbalances occurred from TSO (explained in next slides).*

Generation (1)

- Due to long process of expropriation of the village's in land of mining and generation, coal reserve were insufficient in the beginning of winter season of 2018. Hence new coal exploitation were necessary. This situation was resolved in the beginning of the year 2018, whereas during winter season Generation of Electricity from PP was regular.
- Steady coal exploration and energy production is continuing.

| Lignite prod/cons Jan-Dec 2017 | | | | | | | | | | | | | |
|--------------------------------|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lignite prod/cons | TOTAL | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| Lignite prod. (t*1000) | 7,575 | 682 | 623 | 799 | 623 | 710 | 619 | 501 | 655 | 643 | 672 | 474 | 572 |
| Lignite cons. (t*1000) | 7,645 | 859 | 601 | 860 | 590 | 678 | 763 | 530 | 552 | 664 | 727 | 368 | 451 |

| Lignite prod/cons Jan-Dec 2018 | | | | |
|--------------------------------|--------------|-----|-----|-----|
| Lignite prod/cons | TOTAL | Jan | Feb | Mar |
| Lignite prod. (t*1000) | 1,980 | 648 | 606 | 727 |
| Lignite cons. (t*1000) | 2,100 | 590 | 688 | 823 |

~95% of electricity is produced from PP

Generation (2)

Electricity generation in 2017

| Generator MWh | Total | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------------------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| PP Kosova A | 1,826,881 | 158,561 | 147,395 | 190,063 | 177,596 | 175,522 | 170,339 | 191,637 | 183,157 | 165,863 | 121,068 | 90,860 | 54,821 |
| PP Kosova B | 3,294,175 | 363,558 | 283,184 | 357,574 | 230,453 | 335,444 | 342,087 | 206,037 | 183,129 | 248,395 | 351,574 | 184,840 | 207,898 |
| RES in TSO level | 136,308 | 10,286 | 10,100 | 20,745 | 18,631 | 22,404 | 14,508 | 8,662 | 5,161 | 4,356 | 4,707 | 6,172 | 10,575 |
| RES in DSO level | 42,951 | 1,602 | 3,217 | 4,984 | 6,153 | 8,395 | 5,314 | 1,949 | 1,196 | 1,004 | 1,362 | 2,243 | 5,532 |
| Total | 5,300,315 | 534,006 | 443,896 | 573,366 | 432,833 | 541,765 | 532,249 | 408,286 | 372,643 | 419,618 | 478,712 | 284,115 | 278,826 |

Electricity generation in 2018 (Jan-Mar)

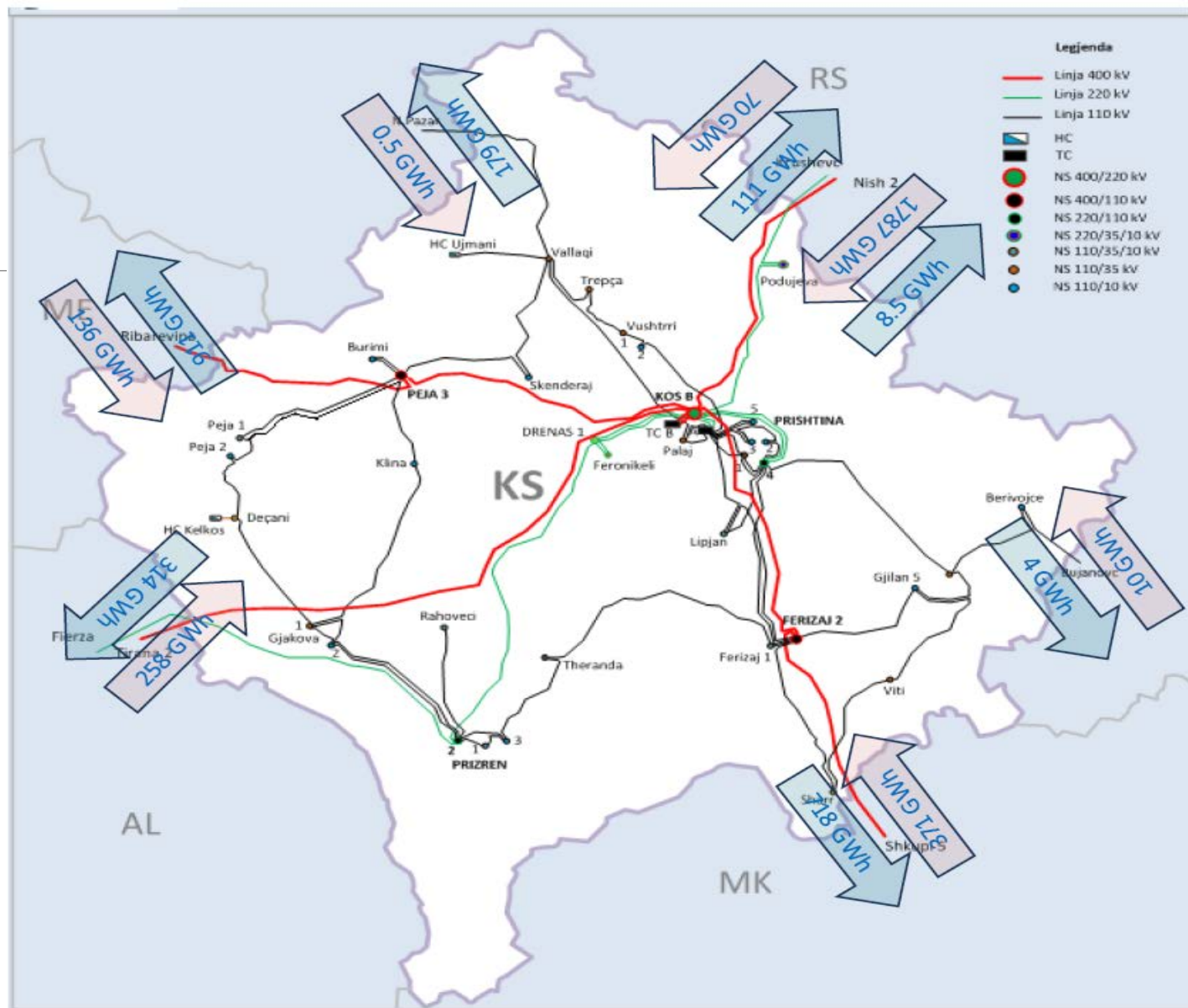
| Generator MWh | Total | Jan | Feb | Mar |
|---------------|------------------|----------------|----------------|----------------|
| PP Kosova A | 456,589 | 104,936 | 149,458 | 202,195 |
| PP Kosova B | 1,059,996 | 378,071 | 328,328 | 353,598 |
| Total | 1,516,586 | 483,007 | 477,786 | 555,792 |

In comparison with the electricity balance for 2017, the generation has been realized with only around 90.96 %, mainly due to problems with new mining (coal supply).

In the beginning of 2018, as resolve of expropriation issues, generation is continuing in regular manner as foreseen in energy balance.

Transmission (1)

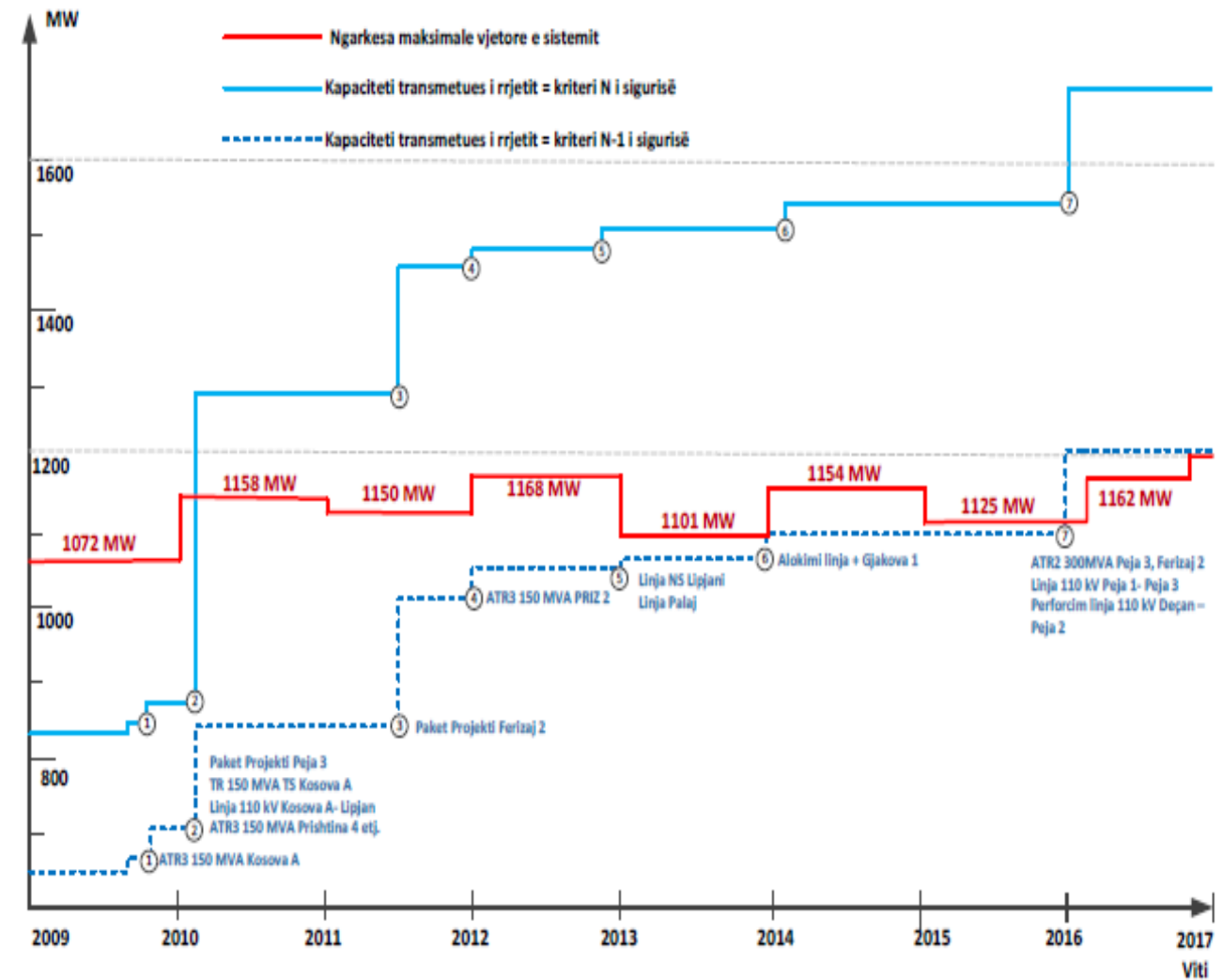
Electricity transit through Kosovo network is very high, about 26% compared to the consumption.



Transmission (2)

KOSTT operation facts:

- KOSTT has incurred imbalances due to the north supply, which unfortunately is still unsolved issue due to political reasons (disrespect of the agreements reached in Brussels from Serbian side).
- This situation could be repeated again at the end of August if no action is taken to resolve the problem.
- Kosovo Assembly has approved Resolution (Nr.06-R-008), by including main stakeholders to propose a solution regarding north supplies.
- The Agreement signed for secondary regulating frequency/power between KOSTT and OST in Albania also remains unimplemented since KOSTT has not yet begun to operate as a regulated area/block within ENTSO-E.
- Capacity allocation is also a problem for KOSTT to ensure the purchase of tertiary reserve from neighboring countries with special emphasis from Albania
- Operation of KOSTT as control area/control block is crucial for regional and European market integration.



Distribution

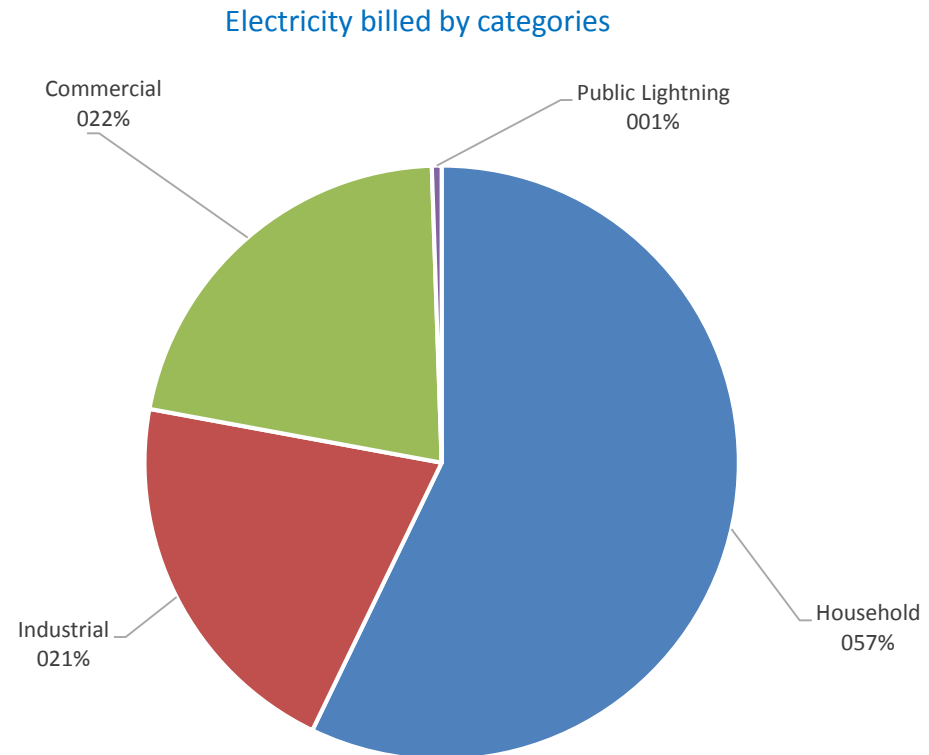
Electricity consumption in distribution in 2017 is carried out in the amount of 4.997 GWh, while in 2016 was 4.807 GWh, which represents an approximate increase by 3,95%.

| Month | Demand | Billed energy | Technical losses | | Commercial Losses* | | Total losses | |
|-----------|-----------|---------------|------------------|-------|--------------------|-------|--------------|-------|
| | MWh | MWh | MWh | % | MWh | % | MWh | % |
| January | 609,683 | 365,942 | 82,497 | 13.53 | 161,244 | 26.45 | 243,741 | 39.98 |
| February | 460,175 | 301,617 | 58,512 | 12.72 | 100,045 | 21.74 | 158,557 | 34.46 |
| March | 434,080 | 294,440 | 53,687 | 12.37 | 85,953 | 19.80 | 139,640 | 32.17 |
| April | 393,256 | 274,433 | 47,532 | 12.09 | 71,291 | 18.13 | 118,823 | 30.22 |
| May | 351,467 | 268,131 | 38,793 | 11.04 | 44,543 | 12.67 | 83,336 | 23.71 |
| June | 318,235 | 253,303 | 33,457 | 10.51 | 31,474 | 9.89 | 64,932 | 20.40 |
| July | 338,162 | 273,958 | 36,201 | 10.71 | 28,003 | 8.28 | 64,204 | 18.99 |
| August | 348,849 | 283,692 | 38,958 | 11.17 | 26,199 | 7.51 | 65,157 | 18.68 |
| September | 322,605 | 256,515 | 35,479 | 11.00 | 30,611 | 9.49 | 66,090 | 20.49 |
| October | 400,784 | 280,788 | 45,629 | 11.38 | 74,367 | 18.56 | 119,996 | 29.94 |
| November | 465,518 | 318,398 | 58,622 | 12.59 | 88,498 | 19.01 | 147,120 | 31.60 |
| December | 553,824 | 361,099 | 84,202 | 15.20 | 108,522 | 19.60 | 192,725 | 34.80 |
| Total | 4,996,637 | 3,532,316 | 613,570 | 12.28 | 850,751 | 17.03 | 1,464,321 | 29.31 |

**Commercial losses includes north unbilled supplies (political losses ~ 5 %)*

Supply

- Electricity supply during 2017 is provided by the supplier bearing the **universal service obligation**.
- Appointment of the Supplier of Last Resort, to exercise temporary obligation of SLR.



Thank you for your attention!

