Overview of Energy Security in Tajikistan for the period of autumn –winter of 2011-2012

Azimov Tohir,
Member of the Working Group under SMRO
Ministry of Energy and Industry of RT
January 19
REACT Meeting

Relevance

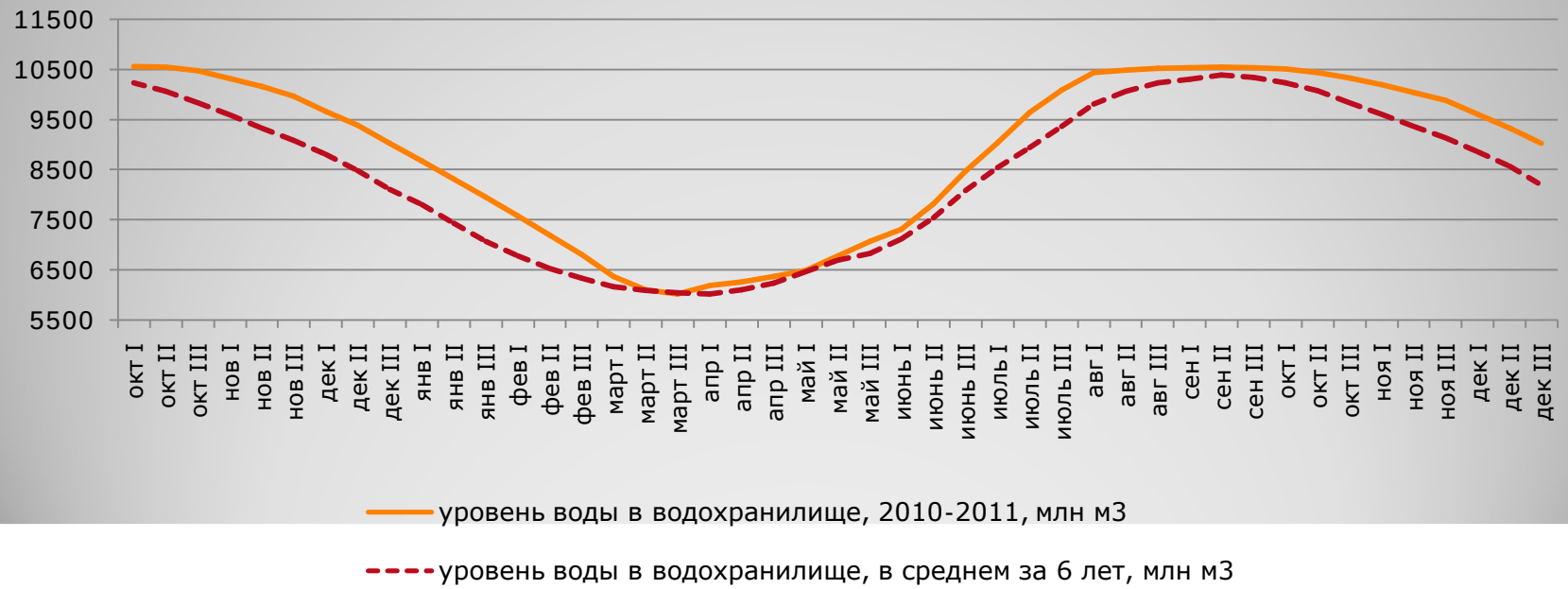
- Seasonal monitoring of hydro resources in Vahsh river;
- Active monitoring phase of energy security commences in autumn-winter period;
  - Generation of electricity;
  - Coal Mining;
  - Natural gas import.

HPS Nurek

- Generates 65% of electricity in the country;
- Spring-summer period (Mar-Sep) and water reserve used for autumn-winter period (Oct – Feb);
- Water consumption during the period of autumn-winter should be rationally used in order to avoid shortage of water until the month of March of the current year.

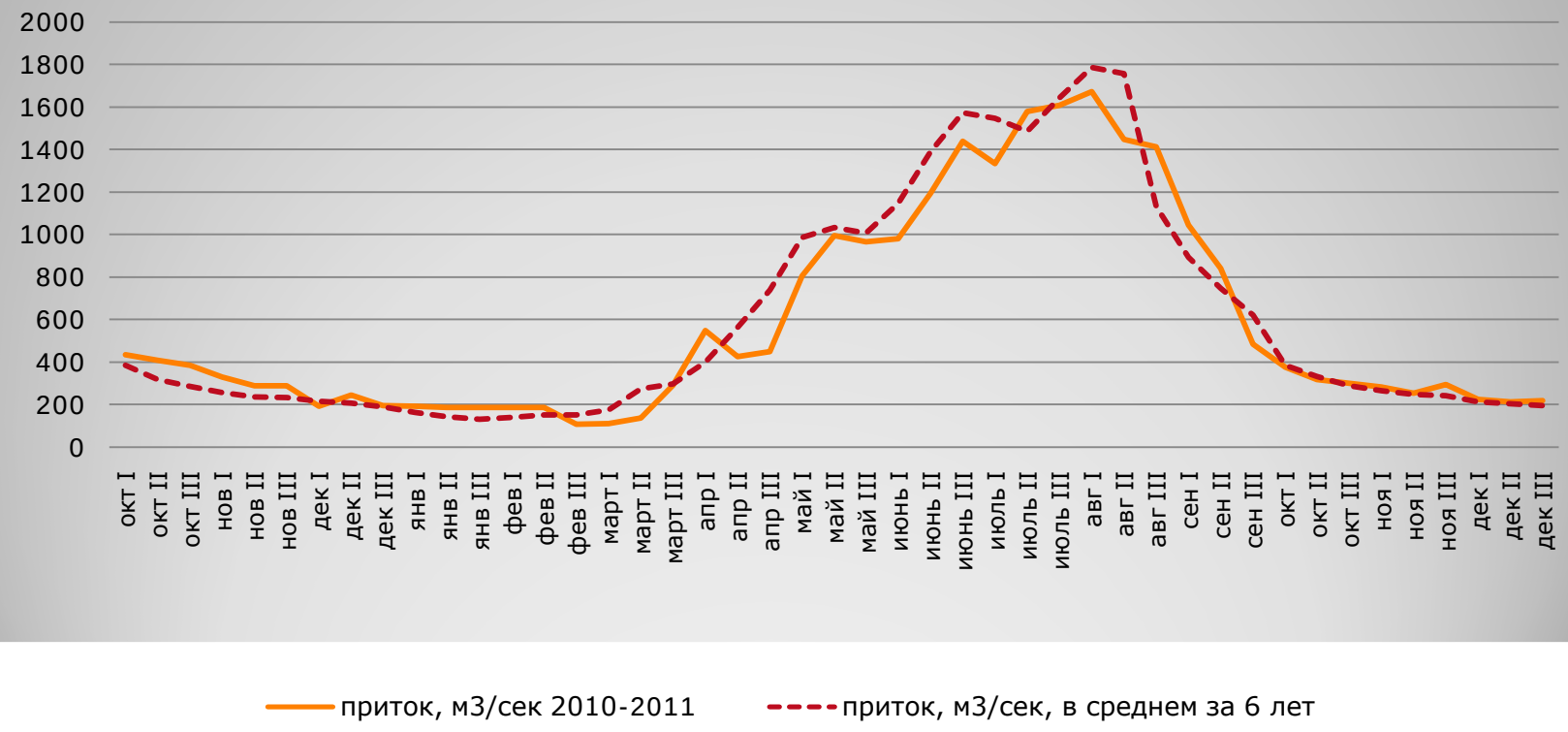
Water volume at HPS Nurek

- At the end of December 2011: 9029 million m3 (9802.47 million m3 in 2010);
- Volume above the average for the last 6 years (8188 million m3);
- The water level at the end of December 2011: 899.77 m above (42.77 m above the critical level 857 m).



Water Inflow into HPS Nurek

- At the end of December 2011: 219 m3/sec;
- Inflow below the average for the last 6 years (195.6 m3/sec);
- Inflow was reduced from 294 m3/sec in November to 219 m3/sec in December.

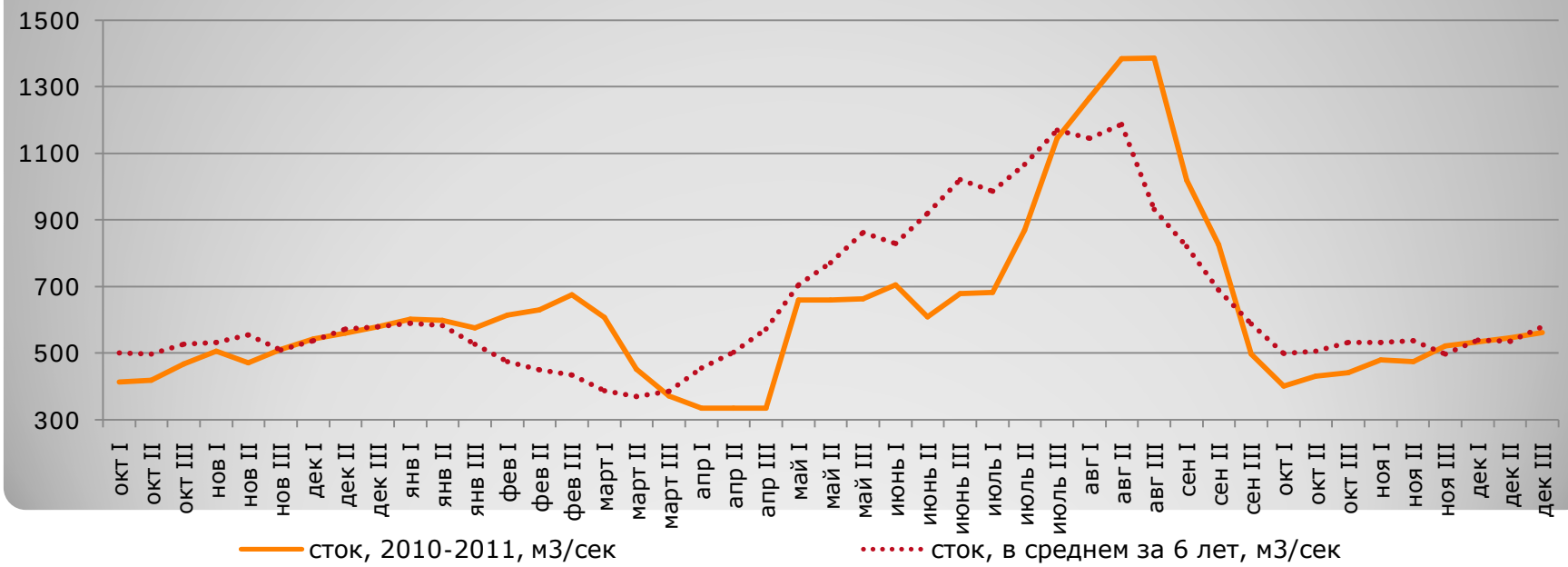


Water Outflow at HPS Nurek

At the end of December 2011. 563 m3/sec;

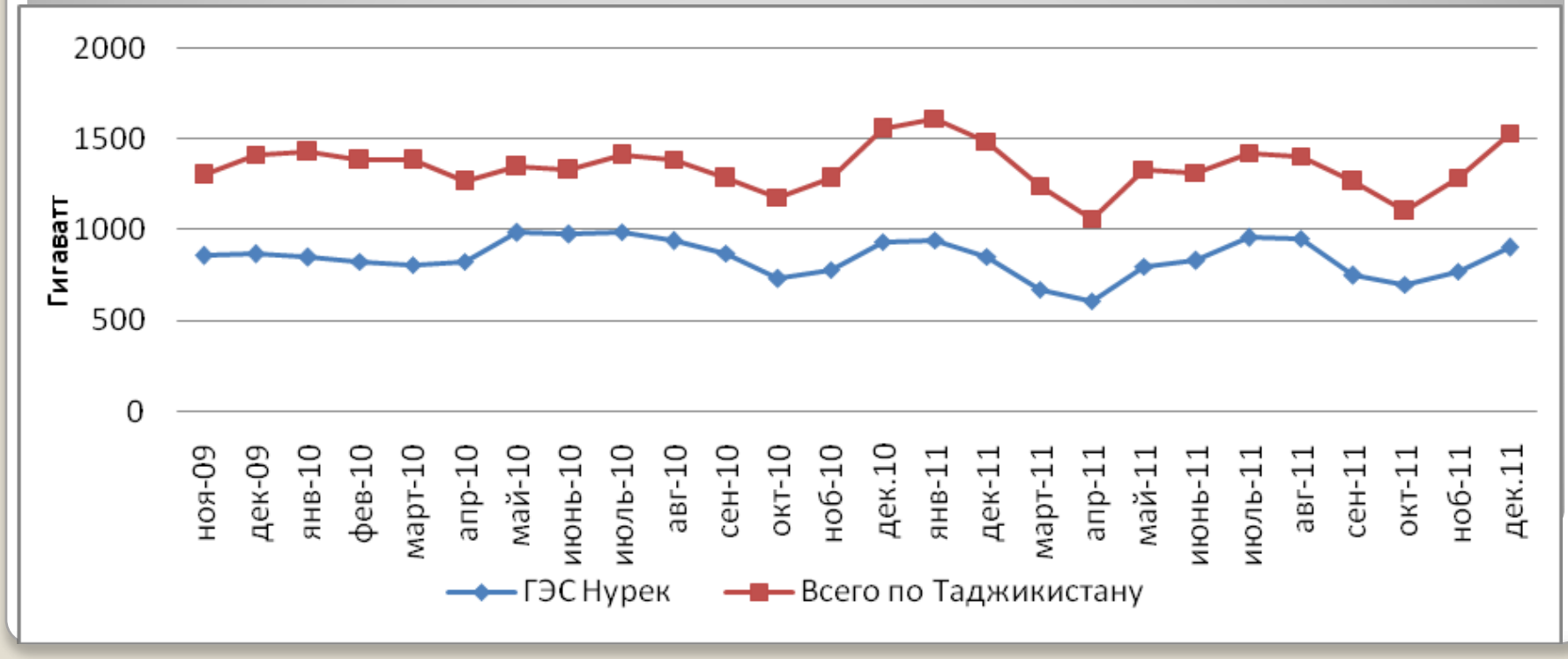
Outflow below the average for the last 6 years (580.1 m3/sec);

Outflow increased slightly compared to November from 522 m3/sec to 563 m3/sec.



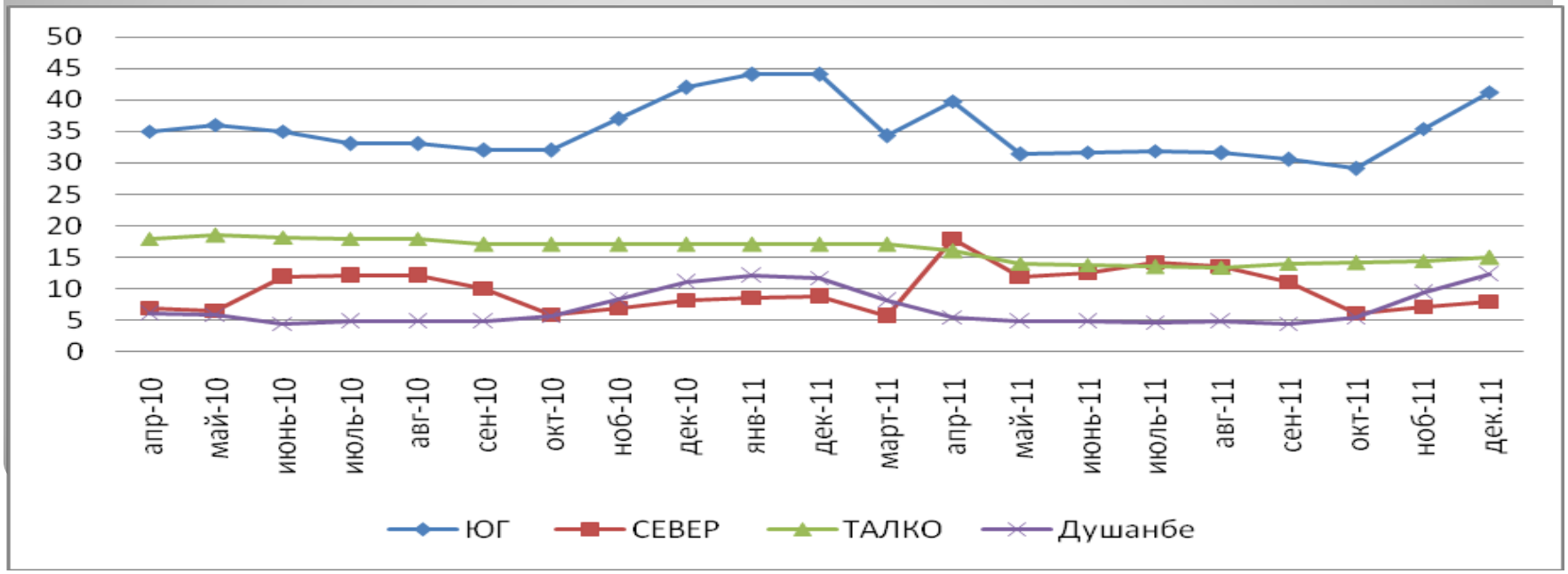
Electricity Generation

- Total for December 2011: 1.5 billion kW / h electricity was generated;
- Generation of electricity for December increased to 15,5% 0,2 million kW/hour compared to November of 2011.



Electricity Consumption

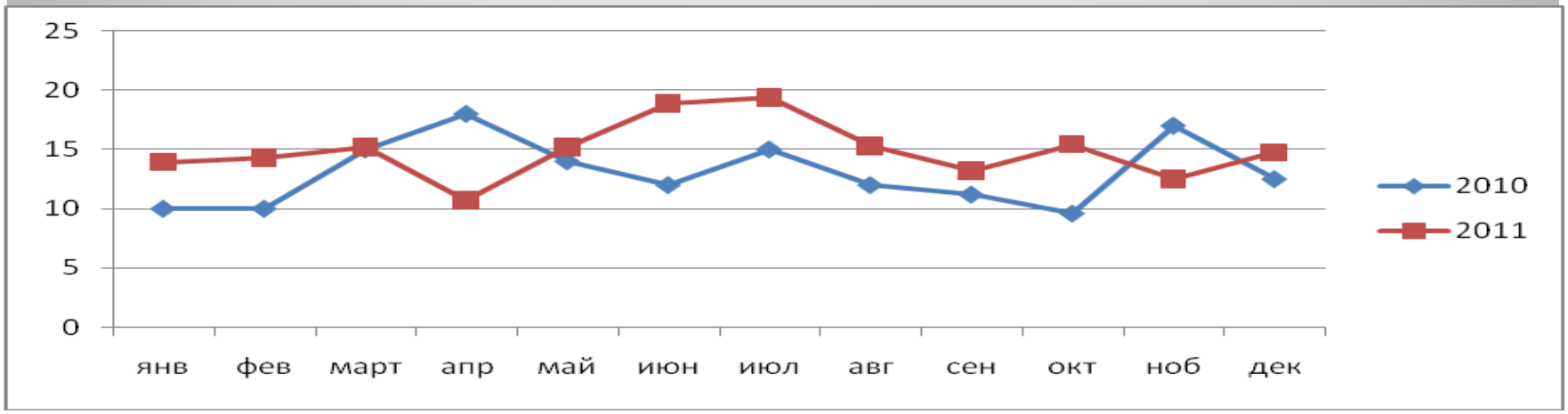
- Total for December 2011: 1,5 billion kW/h;
- Electricity consumption in December was 249 million kW/hour more than in November 2011 due to increased production, which led to an increase in supply to consumers. Electricity consumption increased on the northern and southern regions of the country, in Dushanbe and slightly inTALCO.



Natural Gas

- Import of natural gas to Tajikistan for the period of January - December 2011 constitute 178,95 million m3 (average 15 million m3 per month);
- This result is 22,65 million m3 more than total supply of natural gas in 2010 and 1,05 million m3 less than planned supply for 2011 (180 million m3)

Year	2004	2005	2006	2007	2008	2009	2010	2011	*2012 (Plan)*
Million м3	622.5	629	635	644.7	512.7	216.7	156.3	180	*200*



Coal Mining

- Total for December 2011: 7875 tons of coal produced;
- Coal production in December decreased due to the seasonal nature of the obstruction and location in the mountains of coal mines;
- Total amount of coal produced in 2011 constitutes 233 853 tons (33 000 more than in 2010).

Mini - HPS

- Total of 30 mini - hydro power stations have been built in 2011 with the capacity of 7339 kW/h, which supplies 2266 households and 40 social building with electricity:

  - Khatlon region– 11 mini - HPS;
  - Sughd region – 7 mini - HPS;
  - DRD – 9 mini - HPS;
  - GBAO – 3 mini - HPS;

Conclusion

Despite the increase in electricity production, natural gas, coal mining and mini – HPS, the population of Tajikistan still experiences the lack of electricity in autumn – winter periods.

Solution:

- To increase the production of electricity in the above mentioned objects and their effective usage.

Thank you for Attention

Questions???