



Can Ukraine secure enough gas for the winter? A scenario analysis

- September update -

Georg Zachmann

Berlin/Kyiv, September 2014

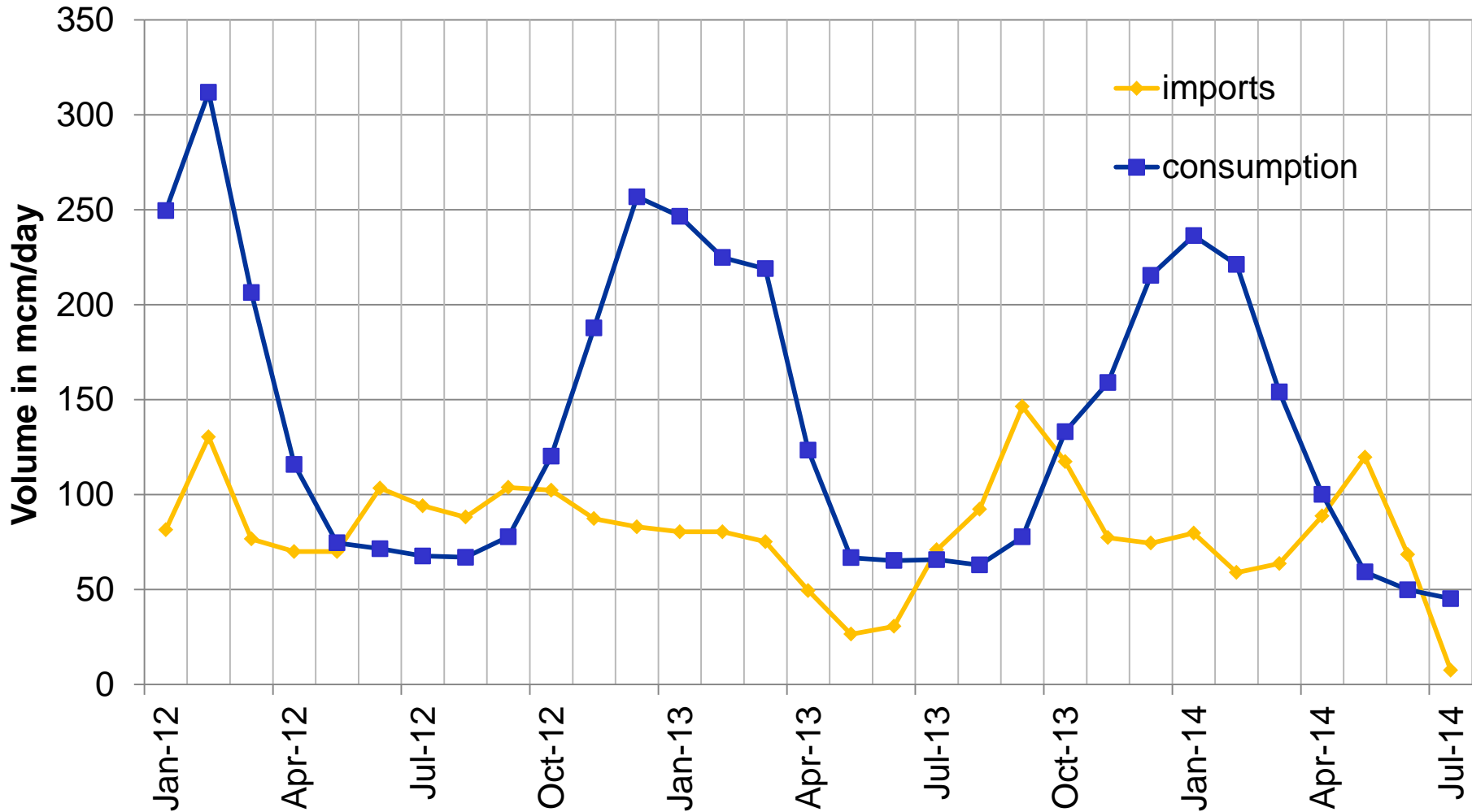


Key messages

- Whether Ukraine will be able to get over the winter depends on gas consumption and amount of reverse flows
- Demand has to be at least 20% below 2013 values and some imports from Slovakia are crucial
- Otherwise, Ukraine will have to re-start imports from Russia in the second half of January 2015 in order to avoid a short-fall at the end of the winter
- An interruption in gas transit would reduce the ability and willingness of the western neighbours to provide reverse flows and is thus not in the interest of Ukraine



Stop of gas deliveries from Russia



Source: Own illustration based on Ministry of Energy and Coal



Will Ukraine come over the winter?

- Storage volume: 16 bcm
- Imports from West 2013: 2 bcm/y
- Domestic production in 2013: 21 bcm/y
- Consumption in 2013: 50 bcm/y

-> How much more can be imported?

-> Which share of the stored volumes can be used?

-> (Can production be increase?)

-> By how much can consumption be reduced?

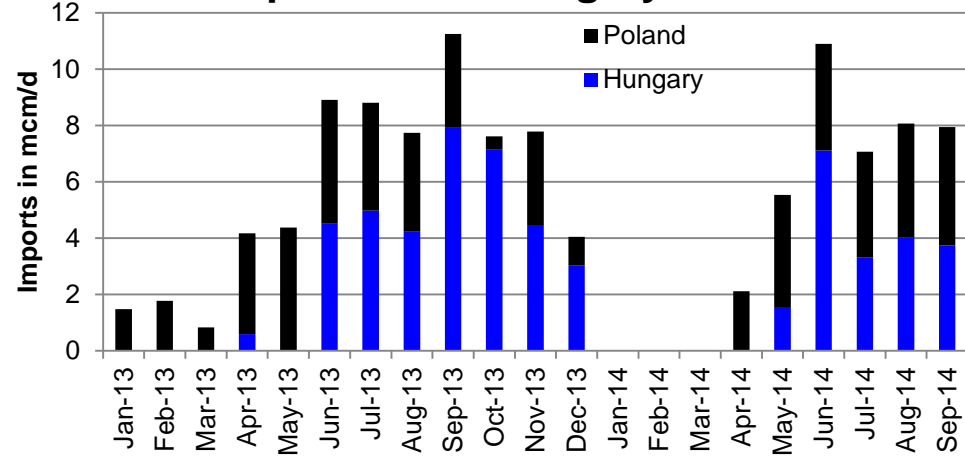
-> Could the gas made available; when and where it is needed?



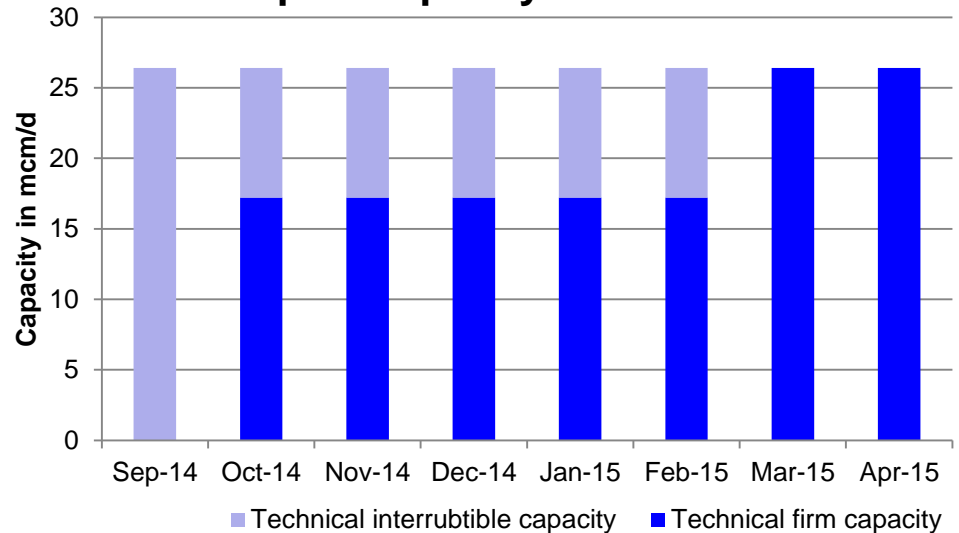
How much more can be imported?

- At best
 - HU: 8 mcm/d
 - PL: 4 mcm/d
 - SK: 26 mcm/d
- => 38 mcm/d [~ 14 bcm/y]

Past Imports from Hungary and Poland

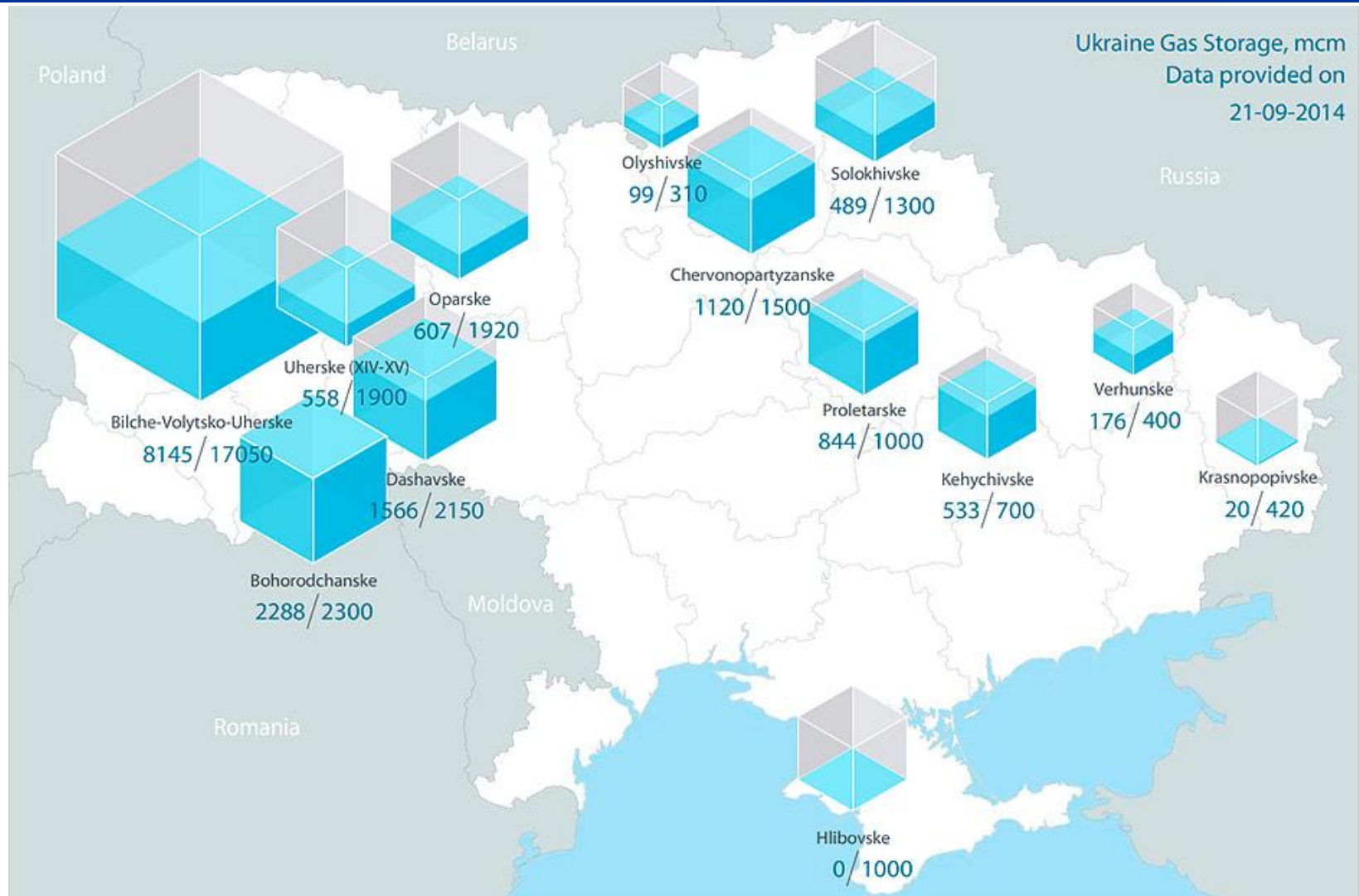


Future import capacity from Slovakia





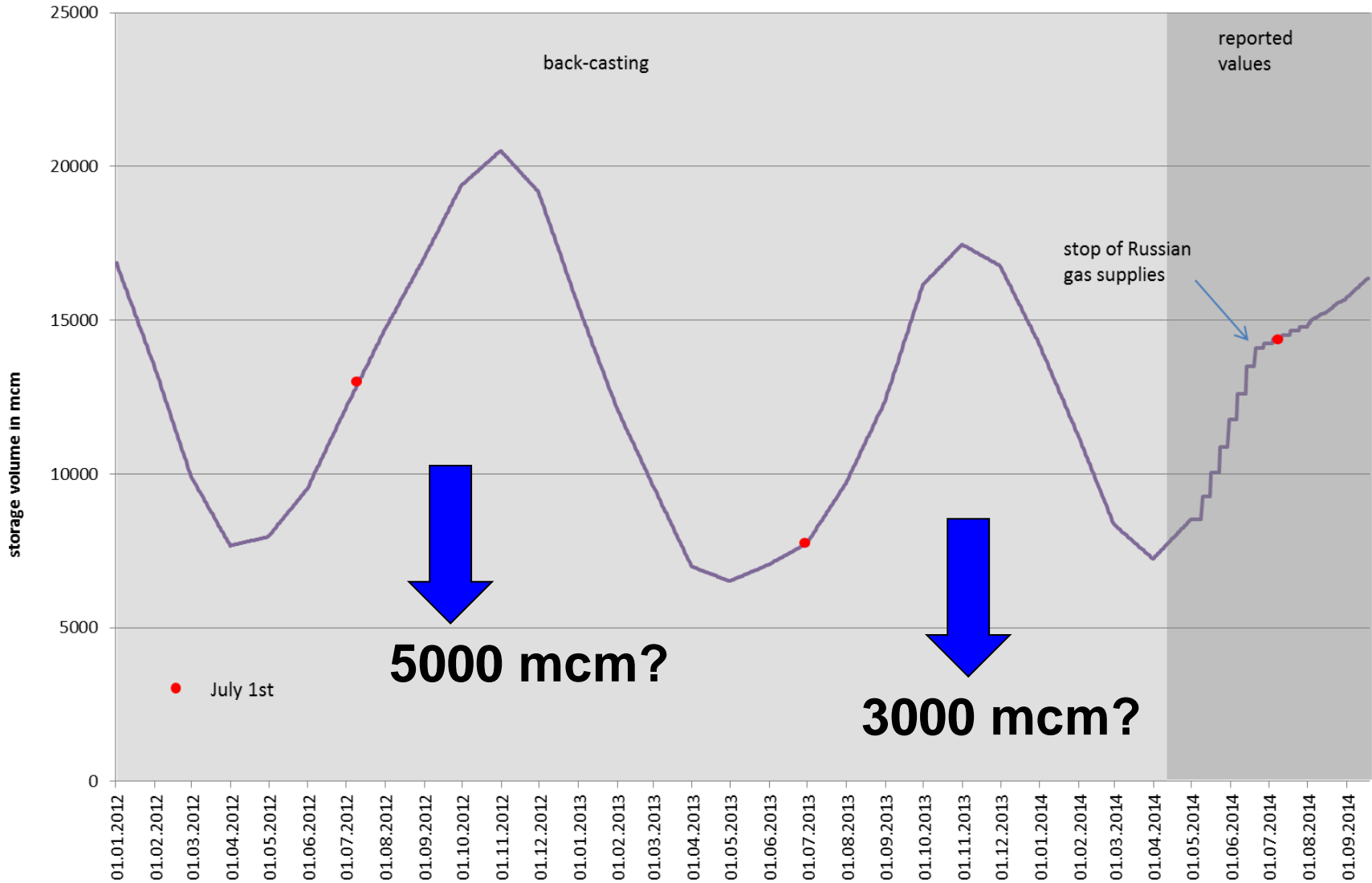
How much gas is accumulated in the storages?



Source: <http://naftogaz-europe.com/article/en/yio9p90>



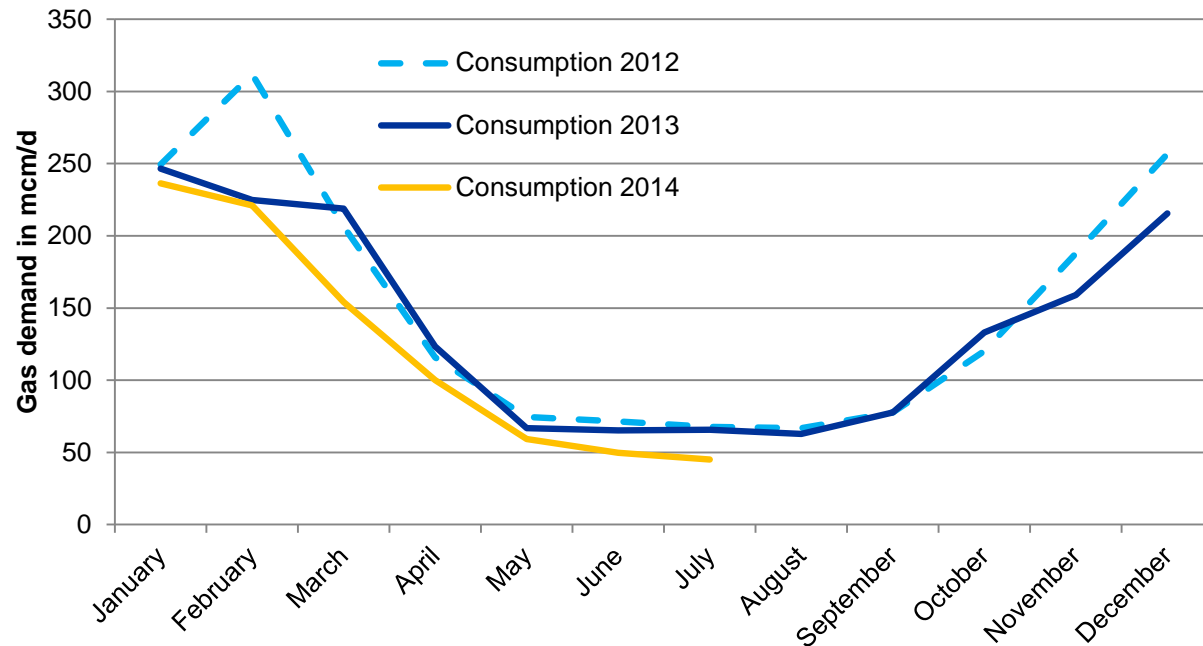
Which share of the stored volumes can be used?





By how much can consumption be reduced?

- First months of 2014: warm weather
- Mid-2014: reduction of industrial output
- Since mid-2014: some rationing



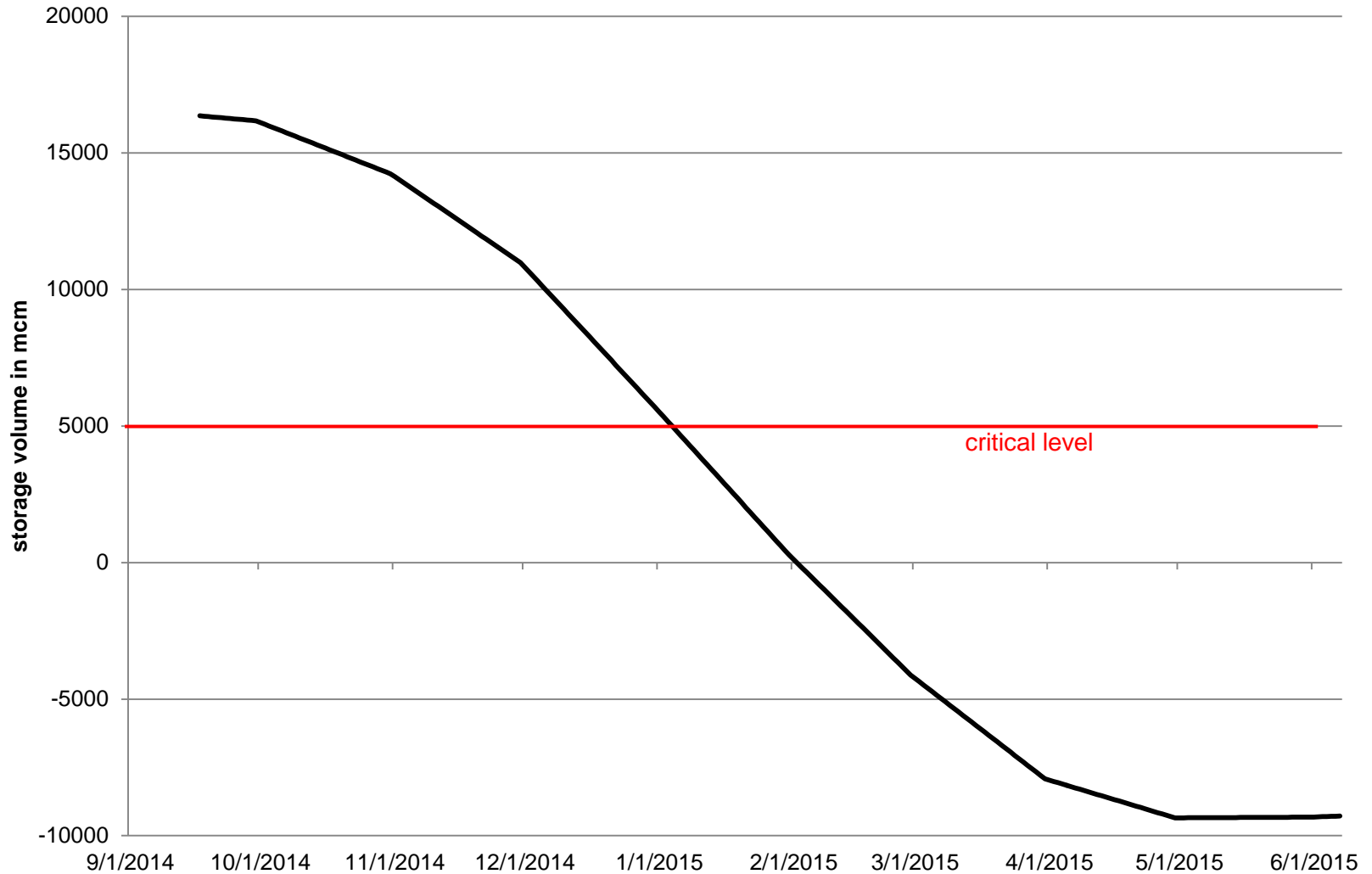


Scenarios

	0% demand reduction	20% demand reduction
Only limited reverse flows from HU & PL (8 mcm/d)	Scenario 1	Scenario 4
100% from HU and PL and 50% of interruptible capacity from SK (25.3 mcm/d - 38.3 mcm/d)	Scenario 2	Scenario 5
100% from HU, PL and SK (38.3 mcm/d)	Scenario 3	Scenario 6

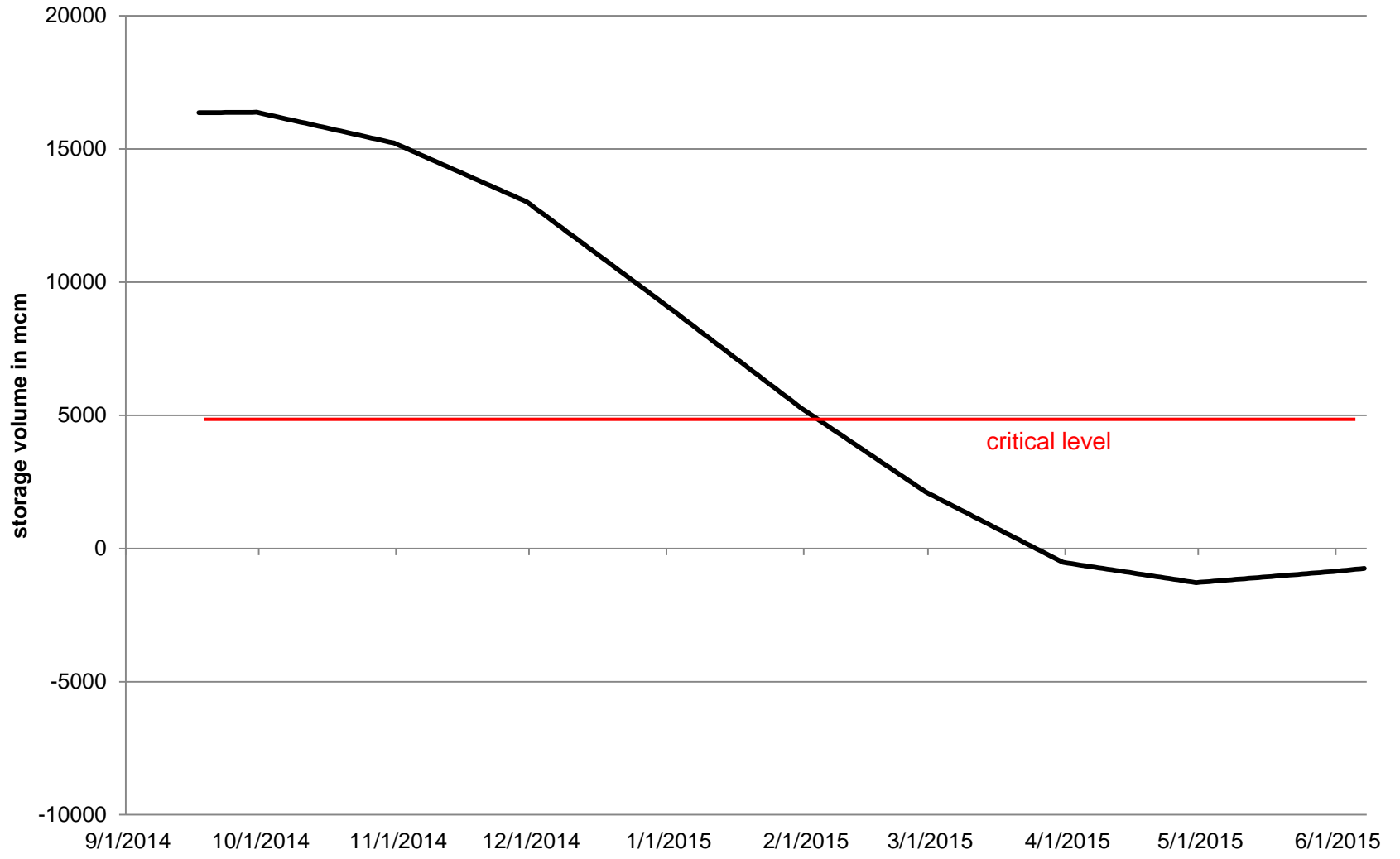


Scenario 1: No change compared to 2013



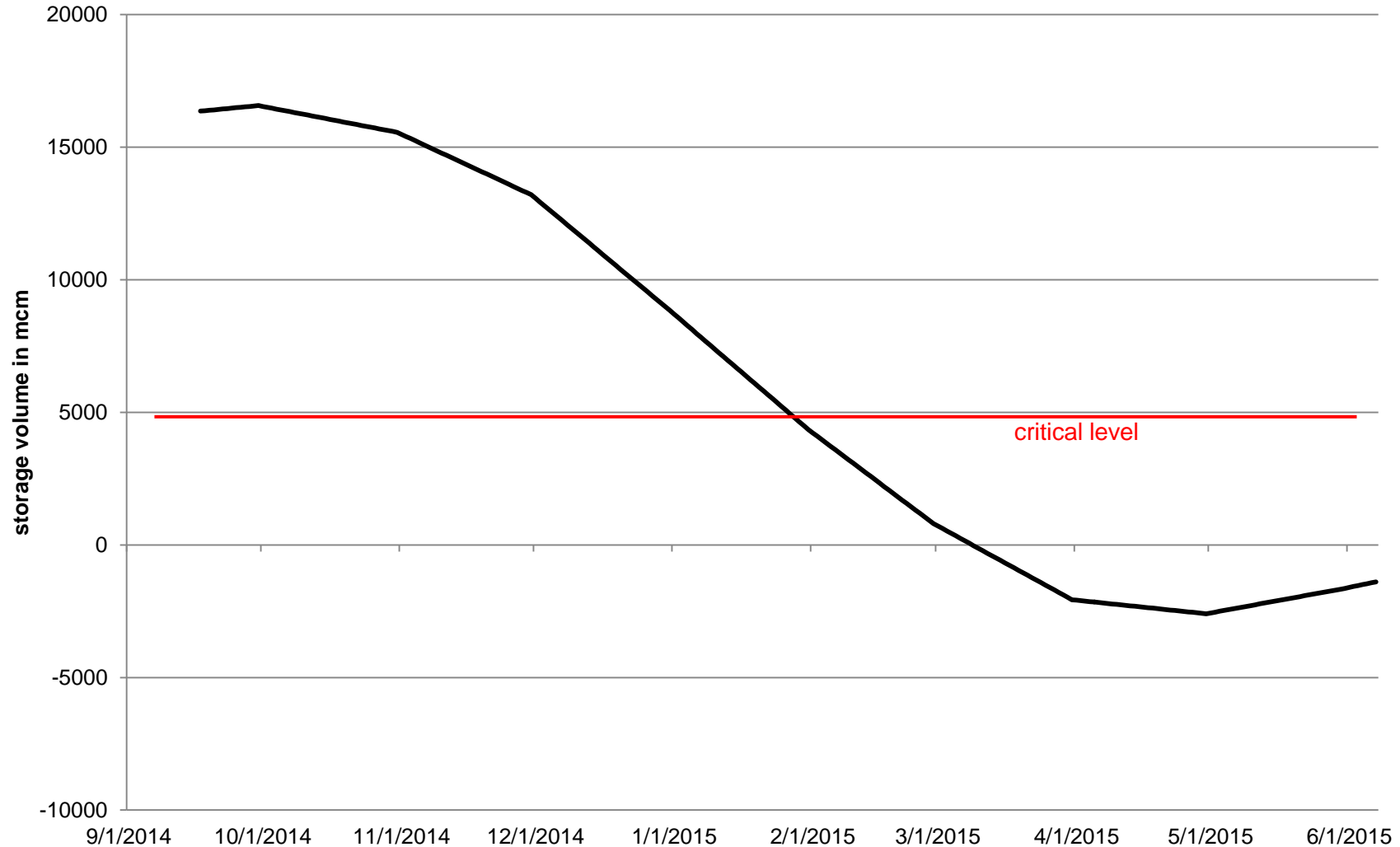


Scenario 4: 20% demand reduction + 8 mcm/d from HU&PL



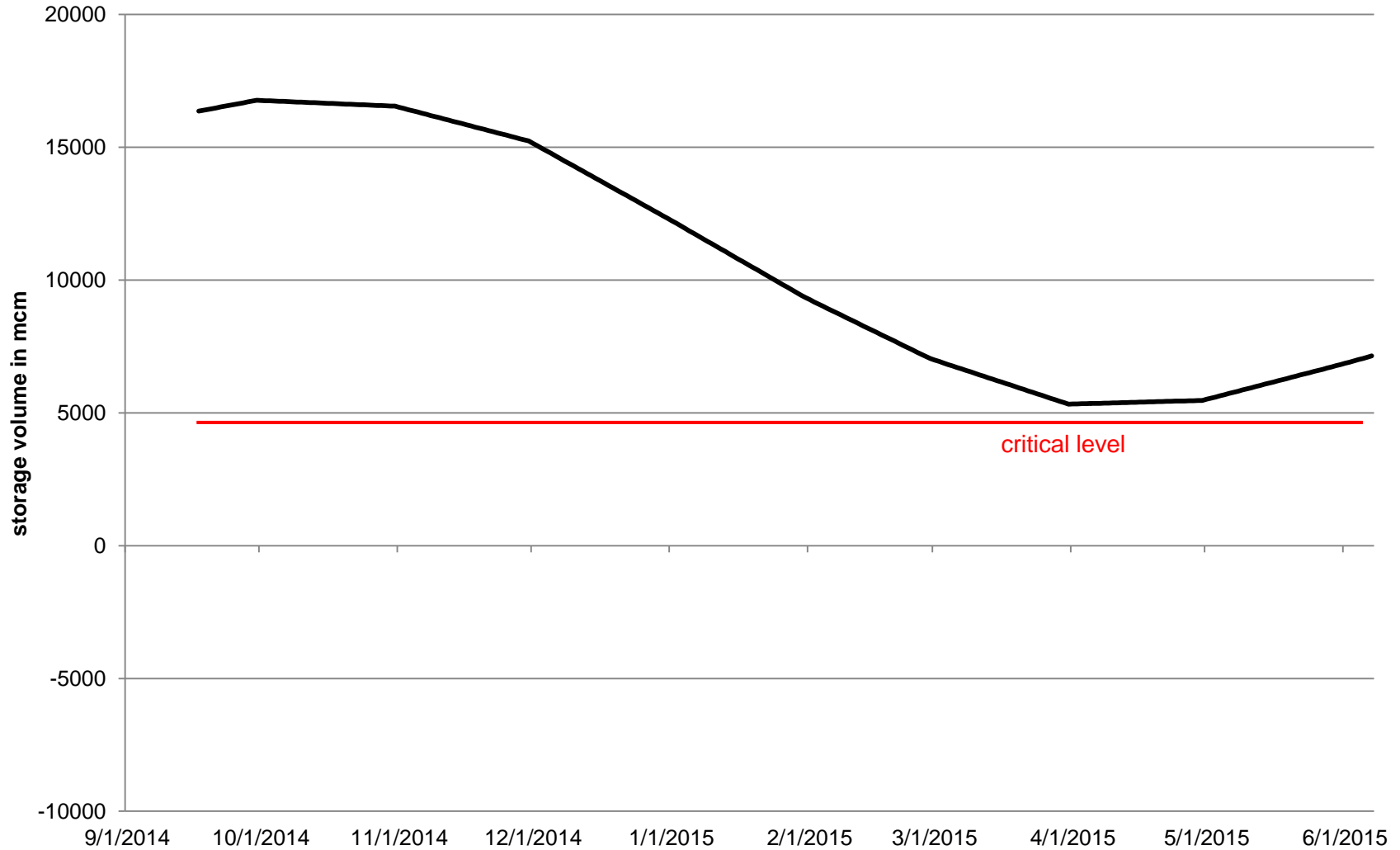


Scenario 3: Full revers flows, but no demand reduction



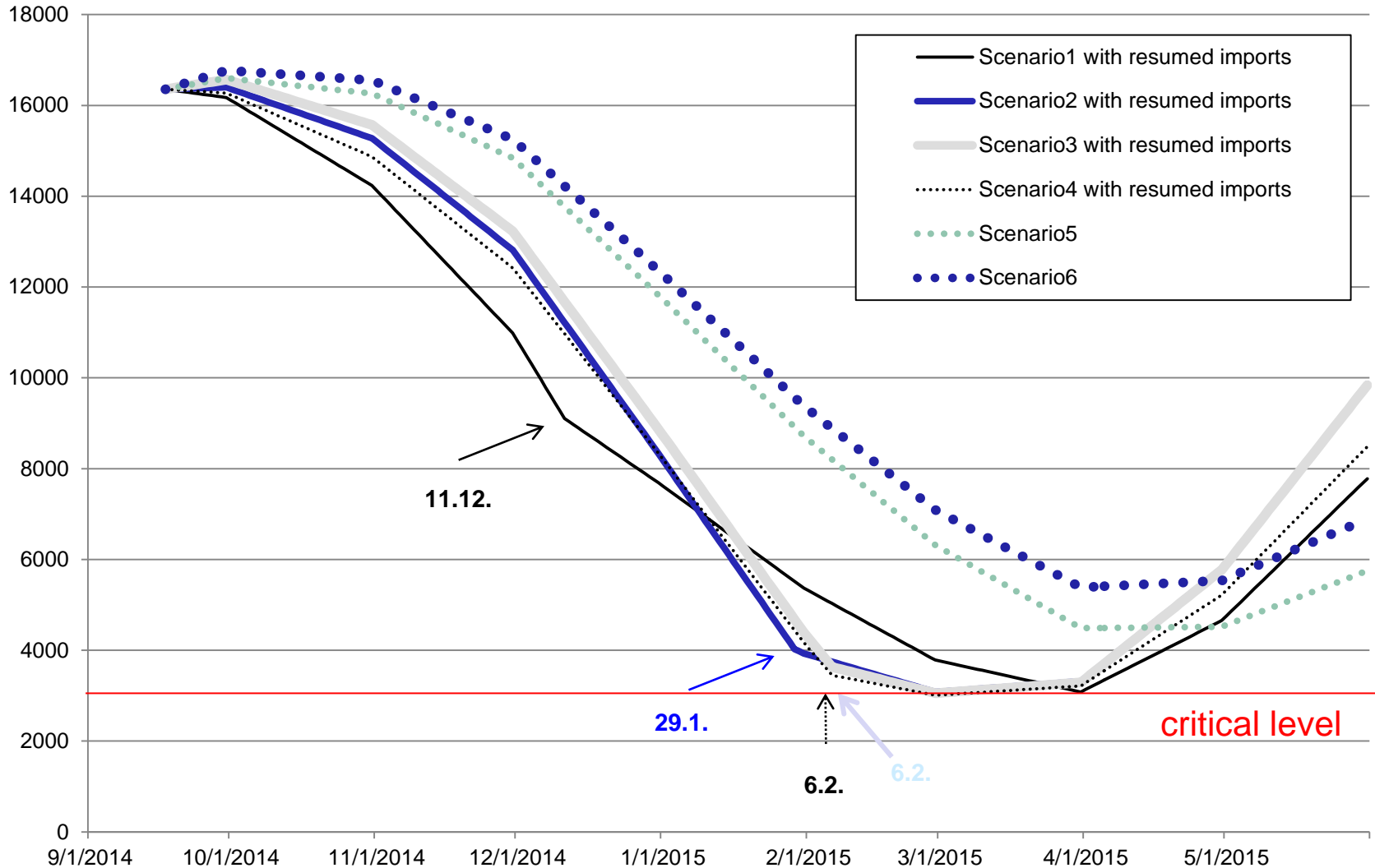


Scenario 6: Full reverse flows & 20% demand reduction





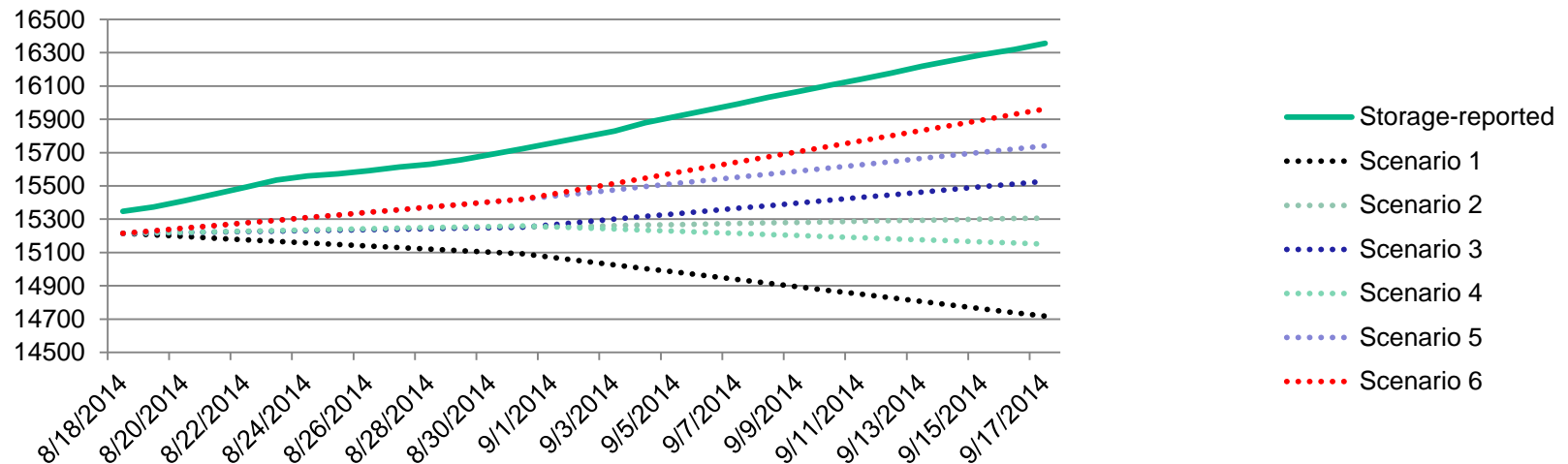
In case: When will Ukraine need an agreement with Russia?





Differences compared to August 18th

- Storage levels are reported to increase much faster than we anticipated between 17th of August and 18th of September 2014



- This is partly due to early reverse flows from Slovakia (we assume in Scenario 6 that they only start on September 1st, while they started earlier)
- Consumption data for June and July published in September suggest that demand (non-heating) is actually 24% and 31% below 2013



Key messages

- Whether Ukraine will be able to get over the winter depends on gas consumption and amount of reverse flows.
- Demand has to be at least 20% below 2013 values and some imports from Slovakia are crucial.
- Otherwise, Ukraine will have to re-start imports from Russia in the second half of January 2015 in order to avoid a short-fall at the end of the winter.
- An interruption in gas transits would reduce the ability and willingness of the western neighbours to provide reverse flows and is thus not in the interest of Ukraine.



Dr. Georg Zachmann

zachmann@berlin-economics.com

German Advisory Group
c/o BE Berlin Economics GmbH
Schillerstr. 59, D-10627 Berlin
Tel: +49 30 / 20 61 34 64 0
Fax: +49 30 / 20 61 34 64 9
E-mail: info@beratergruppe-ukraine.de
www.beratergruppe-ukraine.de
Follow us on Twitter @BerlinEconomics

