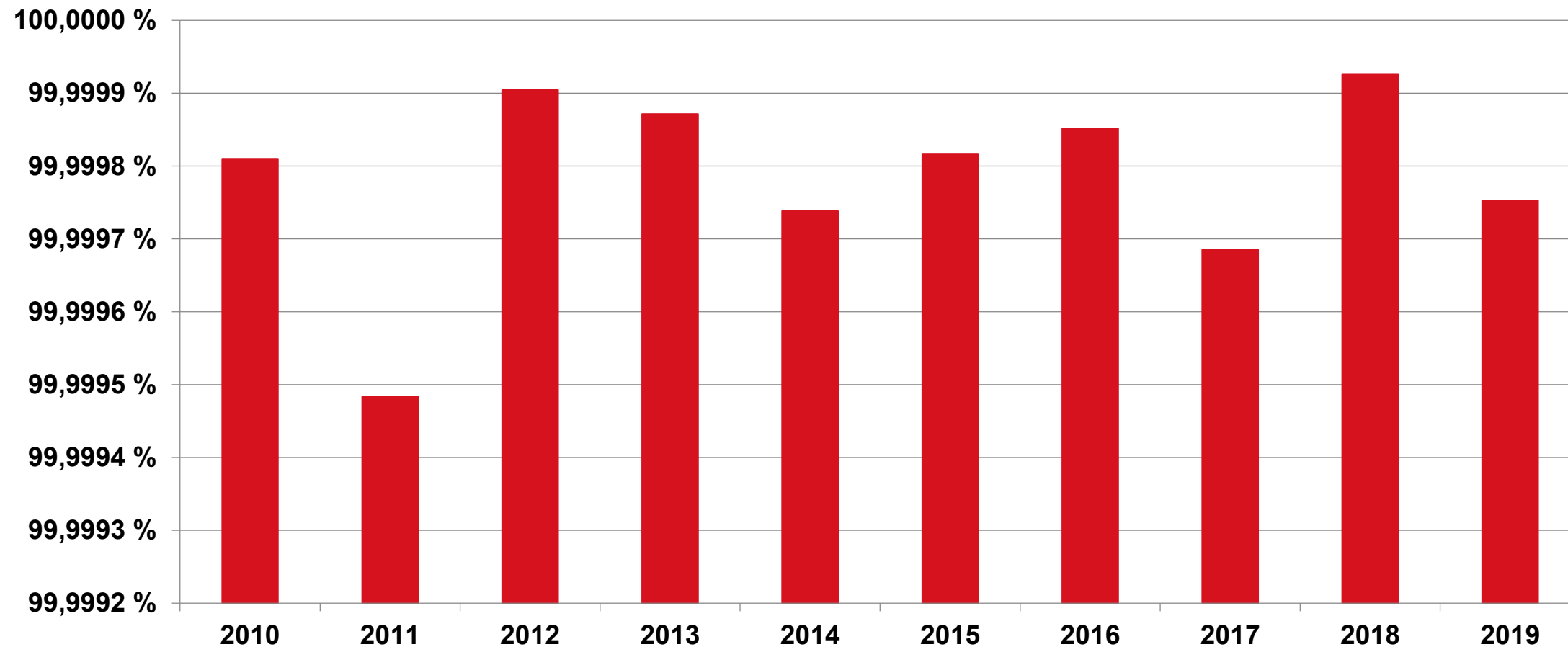




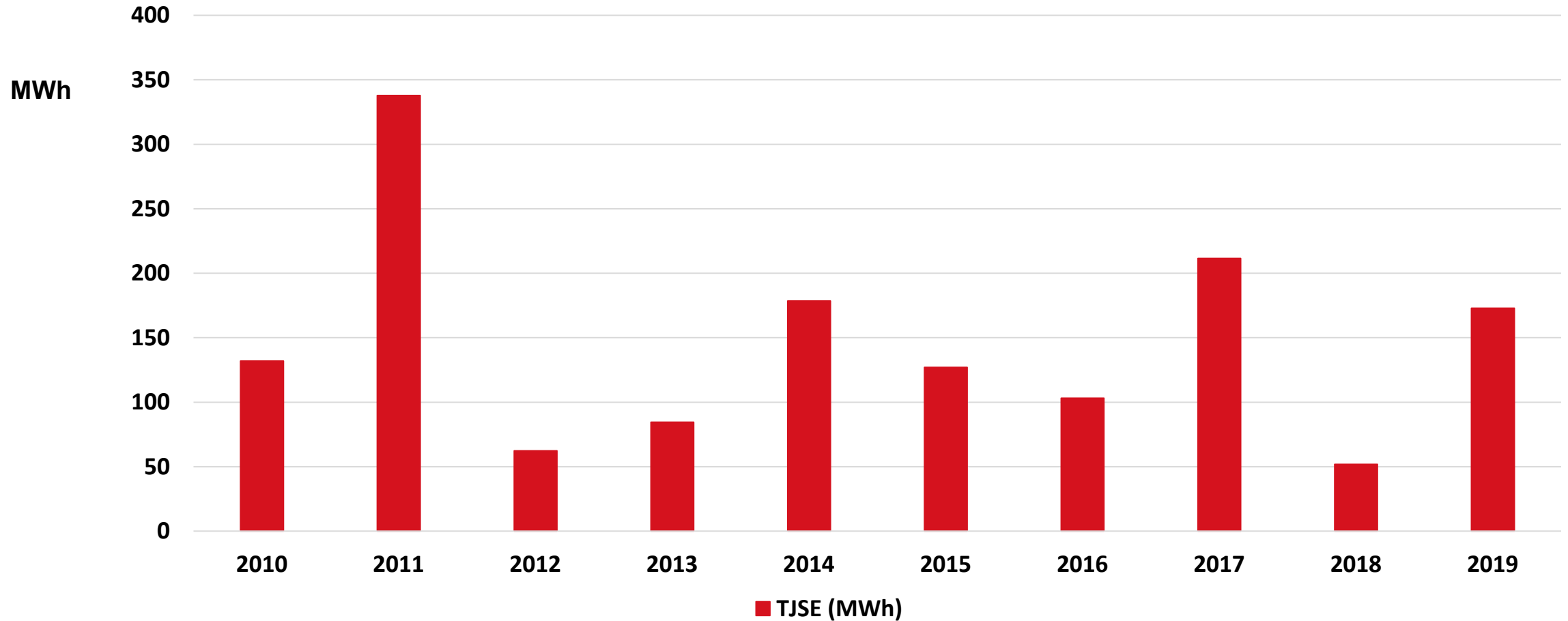
Transmission reliability 2019

FINGRID

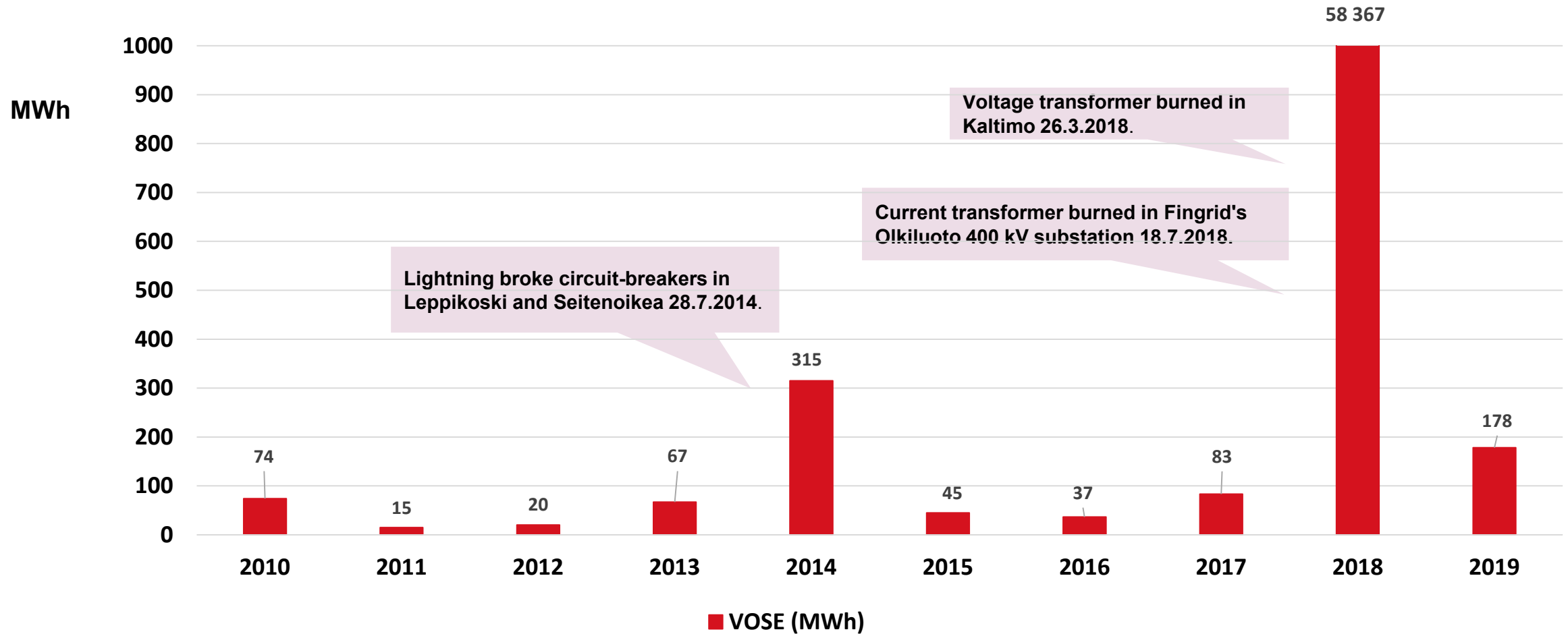
Transmission reliability of Fingrid's grid



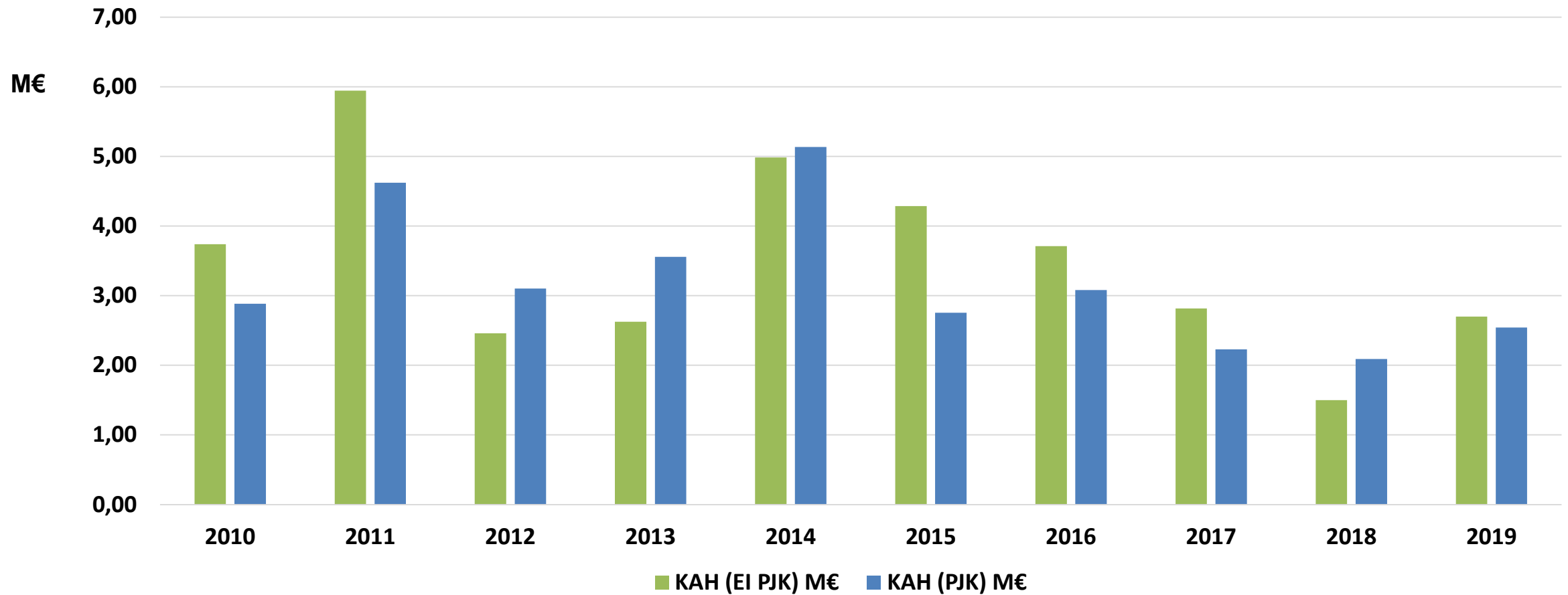
Energy Not Supplied (MWh)



Energy Not Received (MWh)

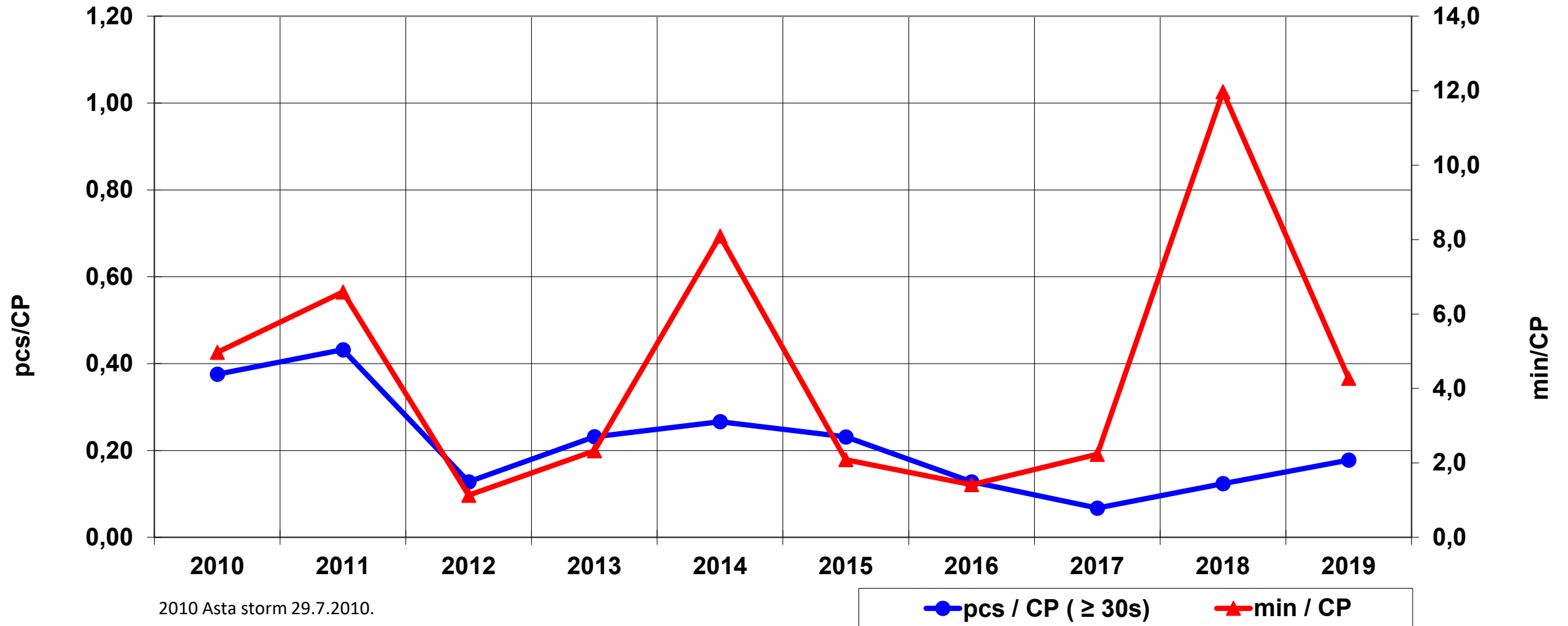


Calculated economic damage KAH from ENS



5 Calculated economic damage (KAH, M€) from ENS due to disturbances. KAH (EI PJK) = damage from permanent faults and auto-reclosings, KAH (PJK) = damage from high-speed automatic reclosing (<1 s). The formula and factors from the regulator with money value for year 2010.

Connection point interruptions



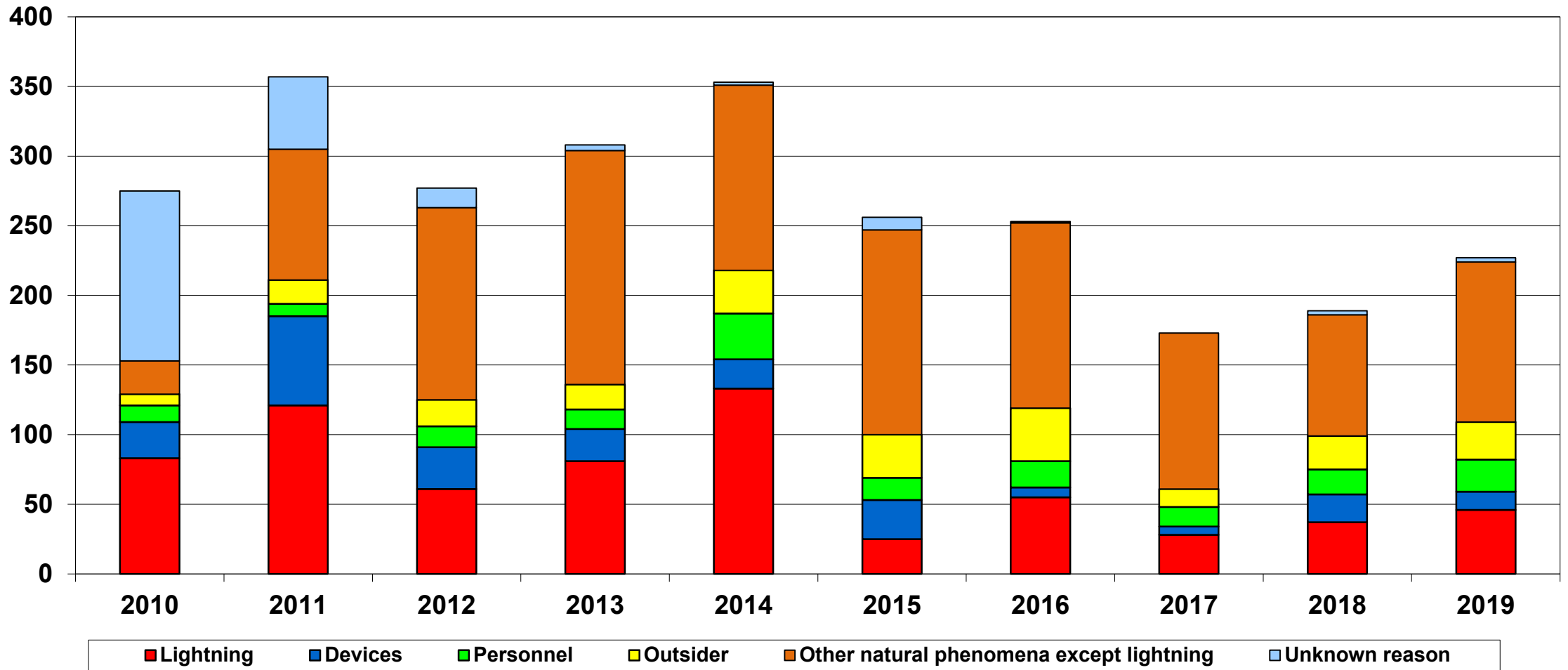
2010 Asta storm 29.7.2010.

2011 Tapani and Hannu storms 26.-27.12.2011.

2014 Felled tree on 110 kV line Hikiä-Forssa 24.3.2014. Circuit Breaker faults in Kainuu 28.7.2014.

2018 Voltage transformer burned in Kaltimo 26.3.2018 and current transformer in Olkiluoto 18.7.2018.

Number and reasons of disturbances





Thank you for your attention.

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