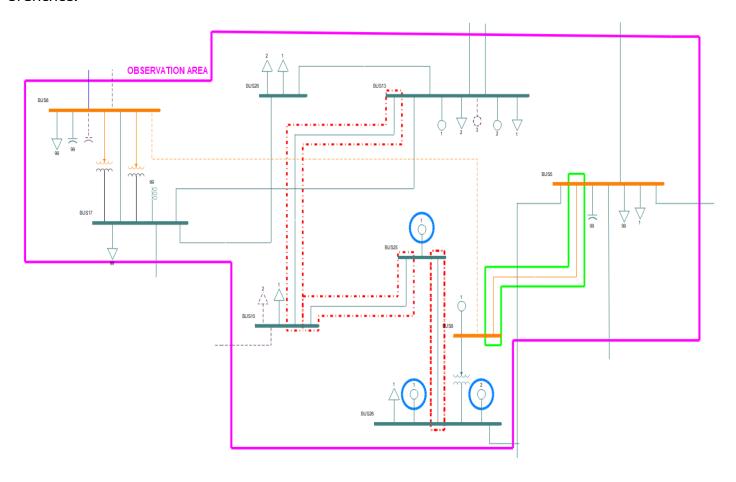
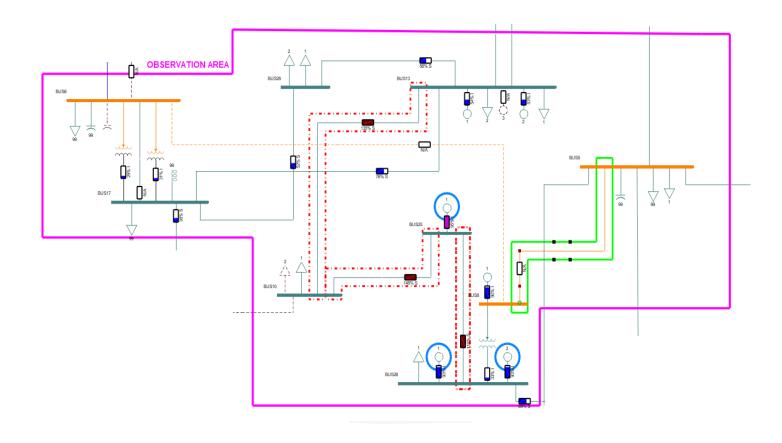
DEMO LOCATION 2

The following figure shows a part of the transmission grid. Dashed lines represent out of service branches.



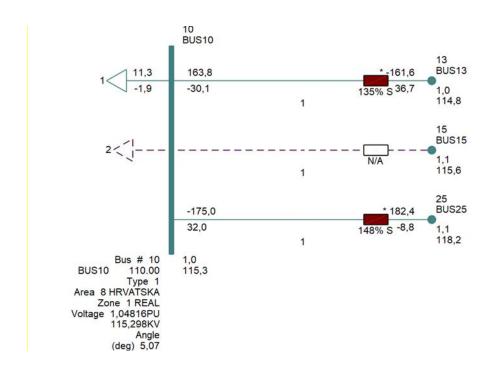
Tripping of the transmission line between buses BUS5 and BUS8 (green solid area) leads to congestion on lines between buses: BUS25 – BUS26, BUS10 – BUS25, BUS10 – BUS13 (red dash-dot line).

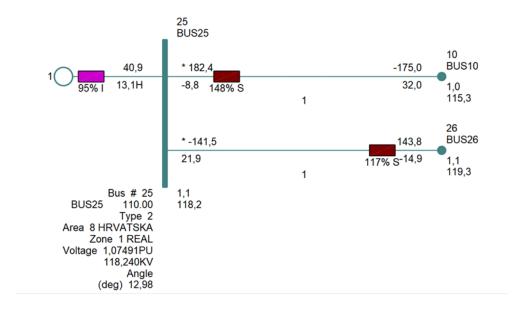
The following figure shows congestions after tripping of the line between BUS5 and BUS8.



Overloads are as follows:

LINE	OVERLOAD
BUS25 - BUS26	118%
BUS10 - BUS25	148%
BUS10 - BUS13	135%





By redispatching the generators rounded with a blue circle, the observed congestions are eliminated. The generator connected to BUS25 represents a wind power plant, whose active power output is limited to 50% of the rated power (in particular case production of wind power plant is lowered by 20 MW), and the generators connected to BUS26 represent a hydroelectric power plant, which at the observed moment reduced the active power output by 70 MW (35 MW per generator).

After the maneuver, the congestion is removed and the conditions in the transmission network are as follows.

