

APPENDIX

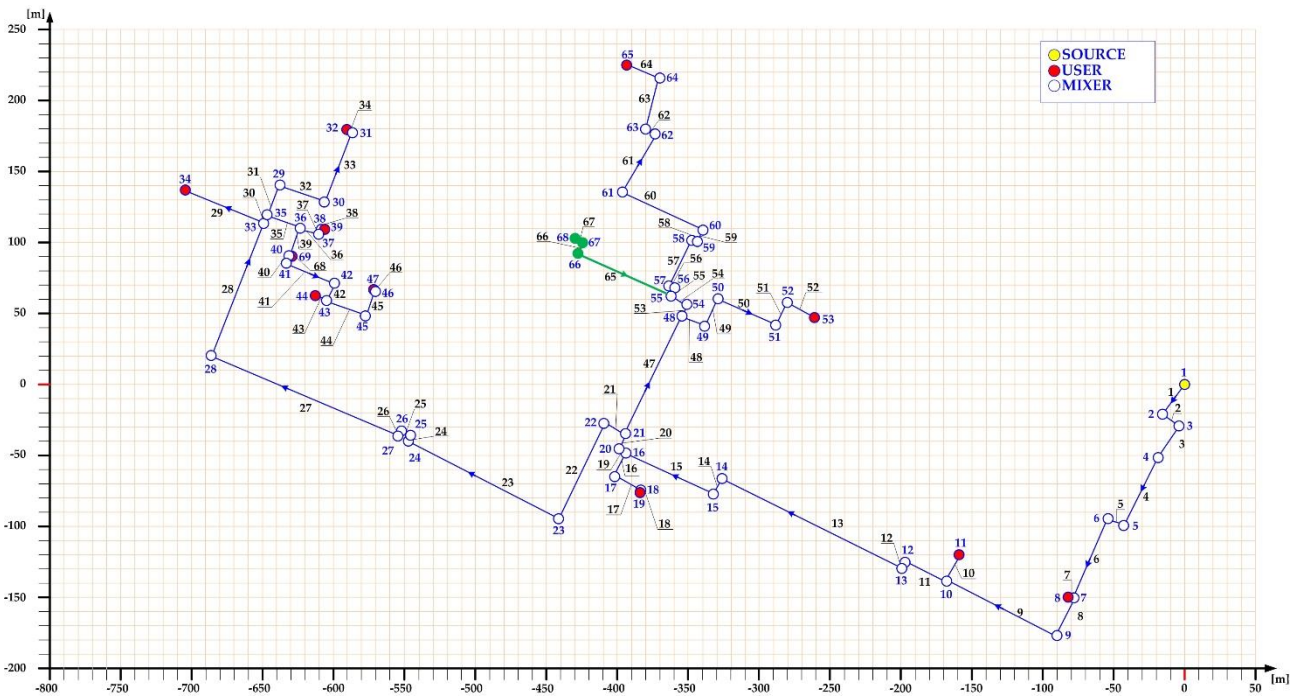


Fig. A1. Network setting in Case 3 (the green pipes are closed in this configuration) and in Case 4 (in green color the reverse flow pipes with respect to the design case).

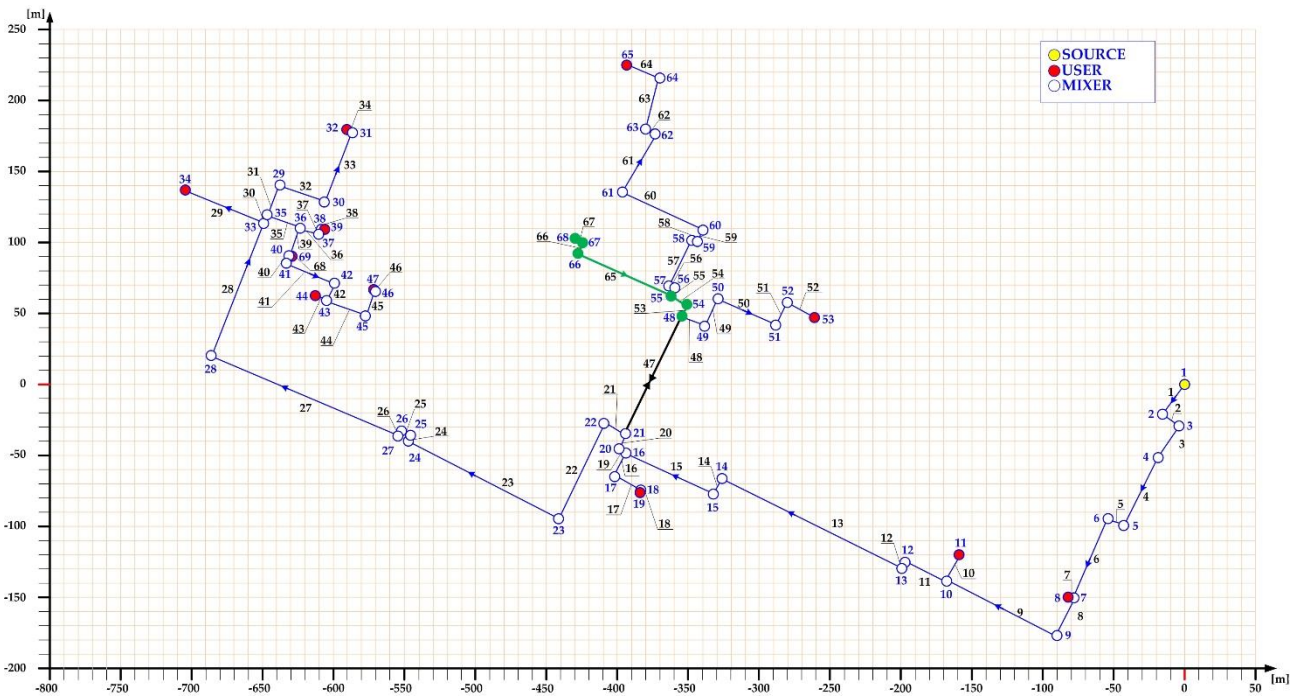


Fig. A2. Network setting in Case 5 (in green color the reverse flow pipes with respect to the design case, in black color the closed pipes).

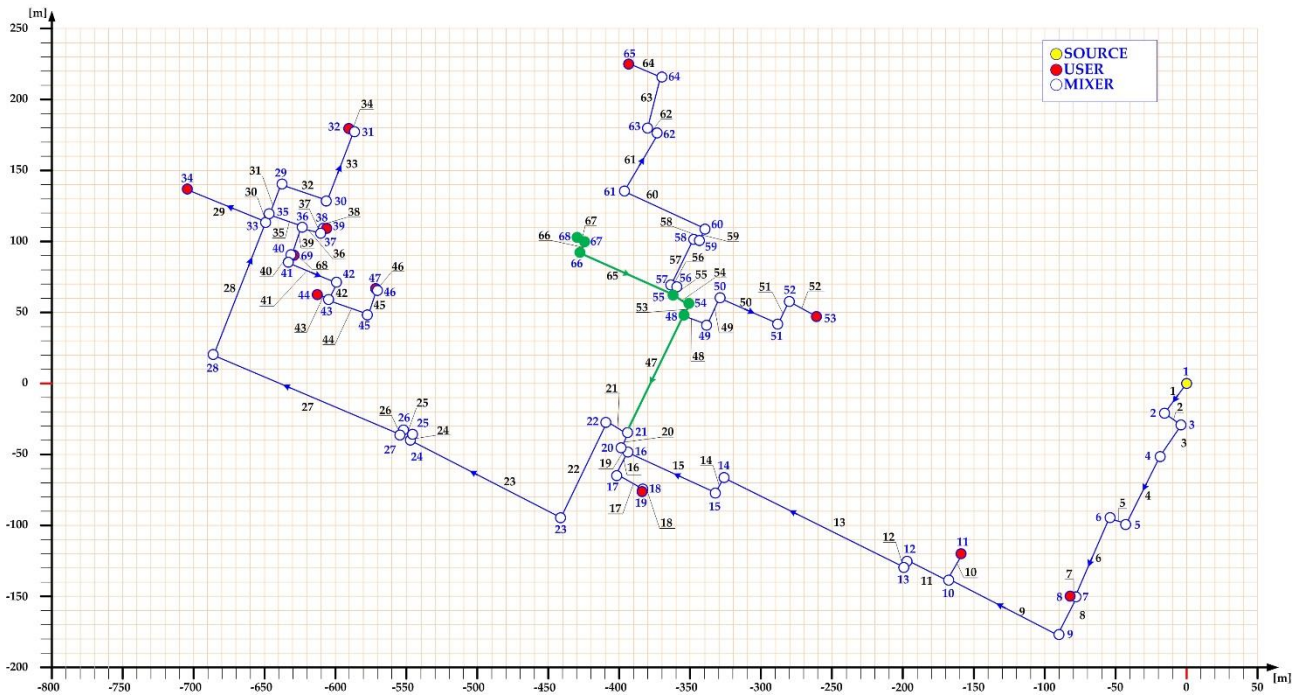


Fig. A3. Network setting in Case 6 and in Case 7 (in green color the reverse flow pipes with respect to the design case).

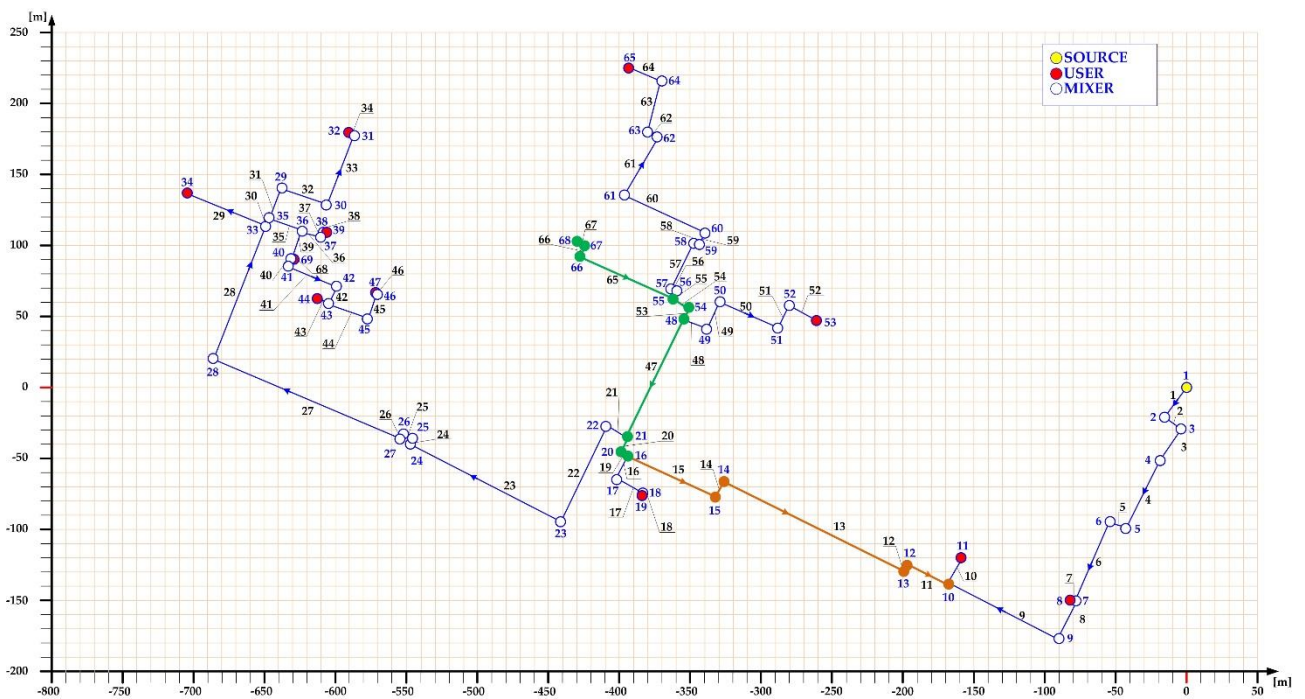


Fig. A4. Network setting in Case 8 (in green color the reverse flow with respect to the design case pipes for $P_{th68} = 10273 \text{ kW}$, in orange and green color the reverse flow with respect to the design case pipes for $P_{th68} = 11375 \text{ kW}$).

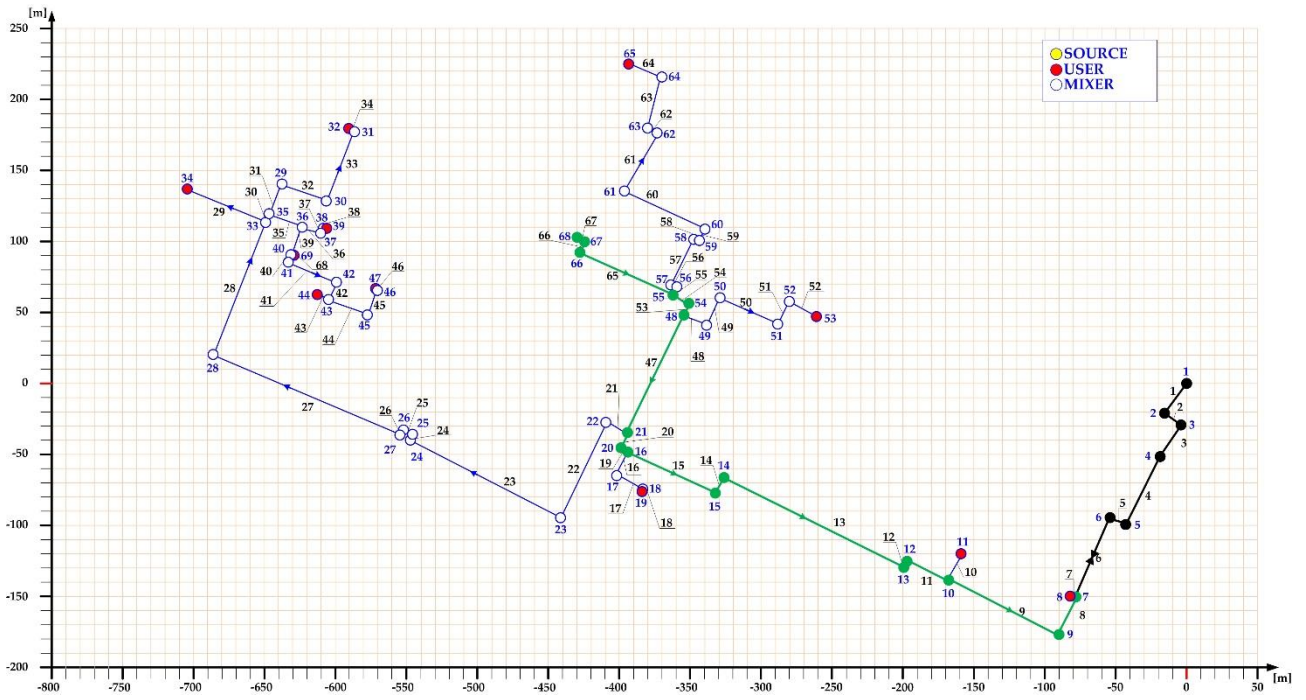


Fig. A5. Network setting in Case 9 (in green color the reverse flow pipes with respect to the design case, in in black color the closed pipes).