

### Aggregator<sub>2,1</sub>

$$\begin{aligned}\sigma_{2,1} &= 15.00 \\ \gamma_{2,1} &= 11.05 \\ \mu_{2,1} &= 0.016 \\ P_{2,1}^n &= 84.62 \\ P_{2,1}^c &= 42.00 \\ Q_{2,1}^n &= 25.69 \\ Q_{2,1}^c &= 13.81\end{aligned}$$

### Aggregator<sub>3,1</sub>

$$\begin{aligned}\sigma_{3,1} &= 56.00 \\ \gamma_{3,1} &= 63.54 \\ \mu_{3,1} &= 0.066 \\ P_{3,1}^n &= 211.56 \\ P_{3,1}^c &= 105.00 \\ Q_{3,1}^n &= 64.24 \\ Q_{3,1}^c &= 34.51\end{aligned}$$

### Aggregator<sub>4,1</sub>

$$\begin{aligned}\sigma_{4,1} &= 100.00 \\ \gamma_{4,1} &= 29.99 \\ \mu_{4,1} &= 0.089 \\ P_{4,1}^n &= 324.39 \\ P_{4,1}^c &= 161.00 \\ Q_{4,1}^n &= 98.48 \\ Q_{4,1}^c &= 52.92\end{aligned}$$

### Aggregator<sub>4,3</sub>

$$\begin{aligned}\sigma_{4,3} &= 105.00 \\ \gamma_{4,3} &= 55.71 \\ \mu_{4,3} &= 0.087 \\ P_{4,3}^n &= 133.99 \\ P_{4,3}^c &= 66.50 \\ Q_{4,3}^n &= 40.68 \\ Q_{4,3}^c &= 21.86\end{aligned}$$

Bus<sub>2</sub>

Bus<sub>3</sub>

Bus<sub>4</sub>

### Aggregator<sub>2,2</sub>

$$\begin{aligned}\sigma_{2,2} &= 85.00 \\ \gamma_{2,2} &= 38.68 \\ \mu_{2,2} &= 0.045 \\ P_{2,2}^n &= 338.49 \\ P_{2,2}^c &= 168.00 \\ Q_{2,2}^n &= 102.78 \\ Q_{2,2}^c &= 55.22\end{aligned}$$

### Aggregator<sub>3,2</sub>

$$\begin{aligned}\sigma_{3,2} &= 32.00 \\ \gamma_{3,2} &= 45.34 \\ \mu_{3,2} &= 0.034 \\ P_{3,2}^n &= 211.56 \\ P_{3,2}^c &= 105.00 \\ Q_{3,2}^n &= 64.24 \\ Q_{3,2}^c &= 34.51\end{aligned}$$

### Aggregator<sub>4,2</sub>

$$\begin{aligned}\sigma_{4,2} &= 77.00 \\ \gamma_{4,2} &= 21.23 \\ \mu_{4,2} &= 0.024 \\ P_{4,2}^n &= 105.78 \\ P_{4,2}^c &= 52.50 \\ Q_{4,2}^n &= 32.12 \\ Q_{4,2}^c &= 17.26\end{aligned}$$