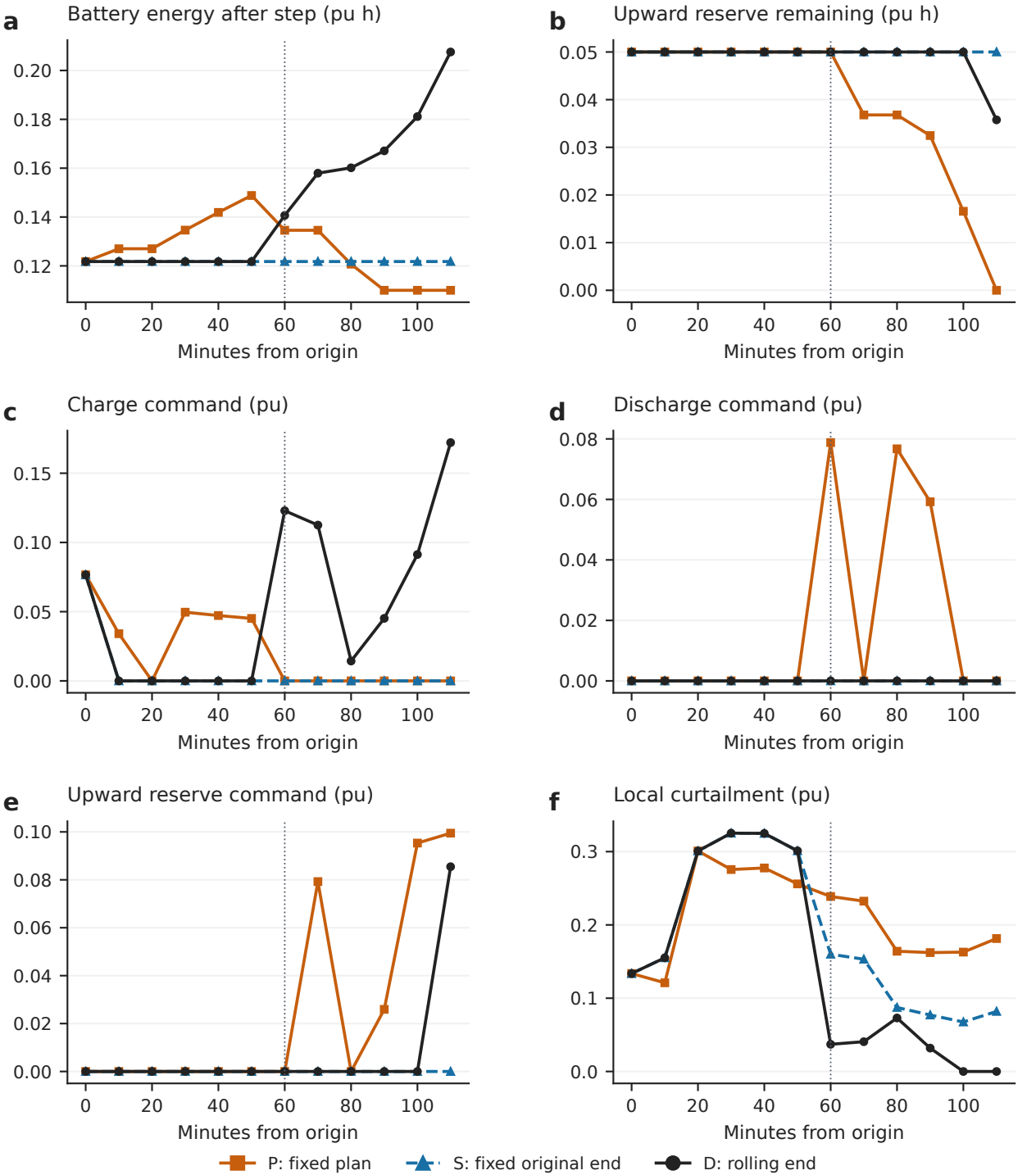

a
Battery energy after step (pu h)
0.20
0.18
0.16
0.14
0.12
0 20 40 60 80 100
Minutes from origin
b
Upward reserve remaining (pu h)
0.05
0.04
0.03
0.02
0.01
0.00
0 20 40 60 80 100
Minutes from origin
c
Charge command (pu)
0.15
0.10
0.05
0.00
0 20 40 60 80 100
Minutes from origin
d
Discharge command (pu)
0.08
0.06
0.04
0.02
0.00
0 20 40 60 80 100
Minutes from origin
e
Upward reserve command (pu)
0.10
0.08
0.06
0.04
0.02
0.00
0 20 40 60 80 100
Minutes from origin
f
Local curtailment (pu)
0.3
0.2
0.1
0.0
0 20 40 60 80 100
Minutes from origin
P: fixed plan
S: fixed original end
D: rolling end