UL Problem

| Leader: LSE | Leaders: | DRP 1 | DRP d | DRP$\Omega_{\mathbf{D}}$ |

Obj.: **min** cost

Sub. to: Network & DRP constraints

Determine: Incentive to: DRP 1 · · · · · · · DRP d · · · · · · · DRP$\Omega_{\mathbf{D}}$

$\rho_{1,t}^{INC}$ $\quad$ $P_{1,t}^{F}$ $\qquad \{1,...,d,,...,\Omega_{\mathbf{D}}\}$ $\qquad$ $\rho_{d,t}^{INC}$ $\quad$ $P_{d,t}^{F}$

LL Problem

Follower: DRP 1

Obj.: **min** bills and disutility

Sub. to: DRP Constraints

Determine:
● Optimal energy schedule

Follower: DRP $\Omega_{\mathbf{D}}$

Obj.: **min** bills and disutility

Sub. to: DRP Constraints

Determine:
● Optimal energy schedule