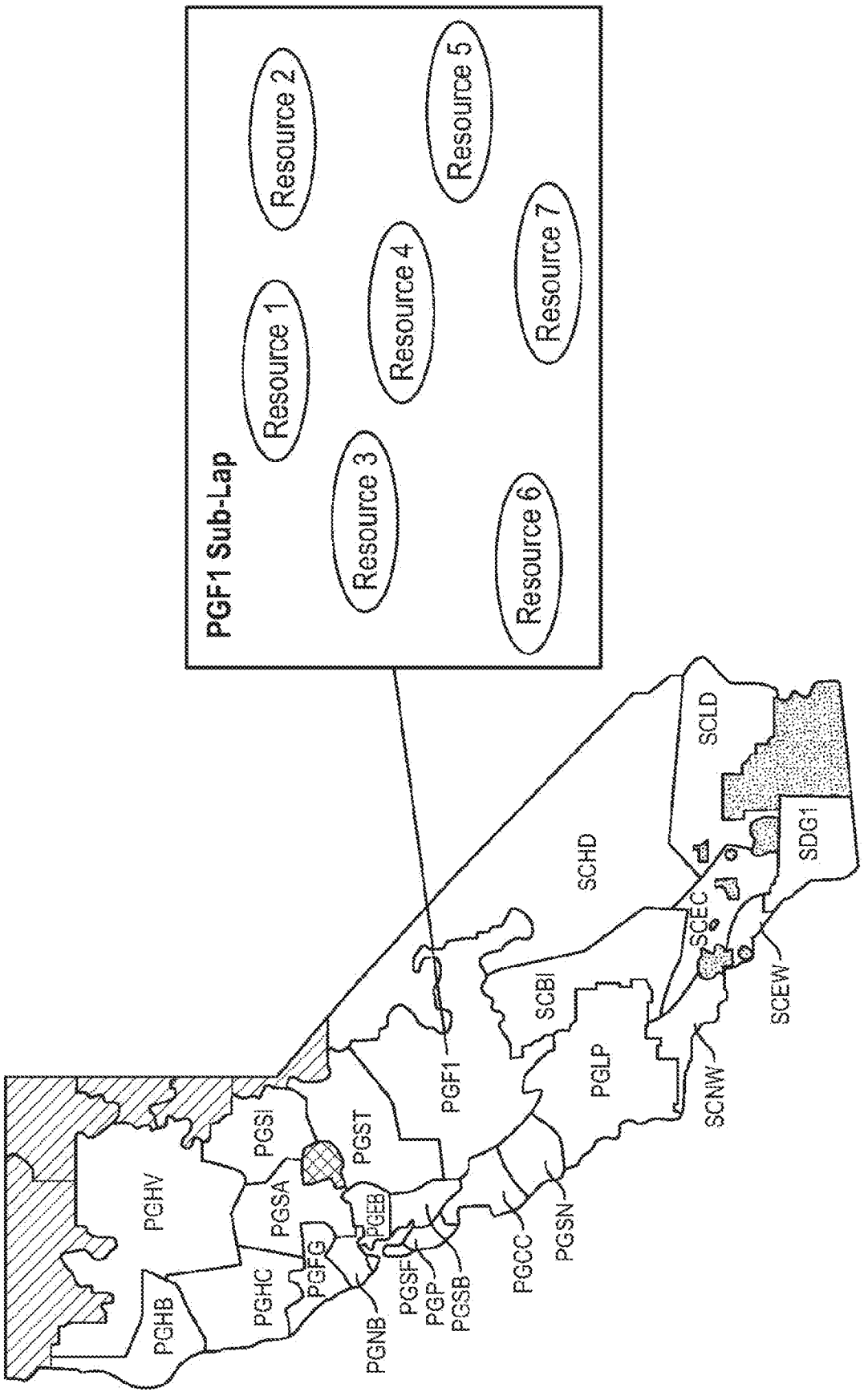

PGF1 Sub-Lap
Resource 1
Resource 2
Resource 3
Resource 4
Resource 5
Resource 6
Resource 7
PGHB
PGHC
PGHV
PGFG
PGSA
PGSI
PGST
PGEB
PGNB
PGSF
PGP
PGSB
PGCC
PGSN
PGF1
SCBI
SCHD
PGLP
SCNW
SCEC
SCEW
SCLD
SDG1

FIG. 1

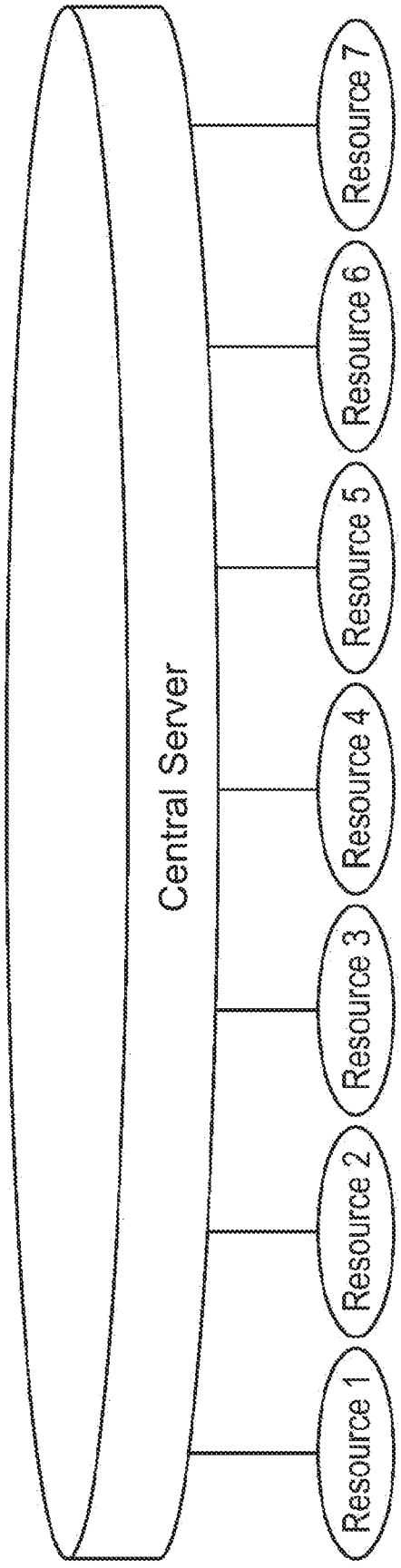

Central Server
Resource 1
Resource 2
Resource 3
Resource 4
Resource 5
Resource 6
Resource 7

FIG. 2

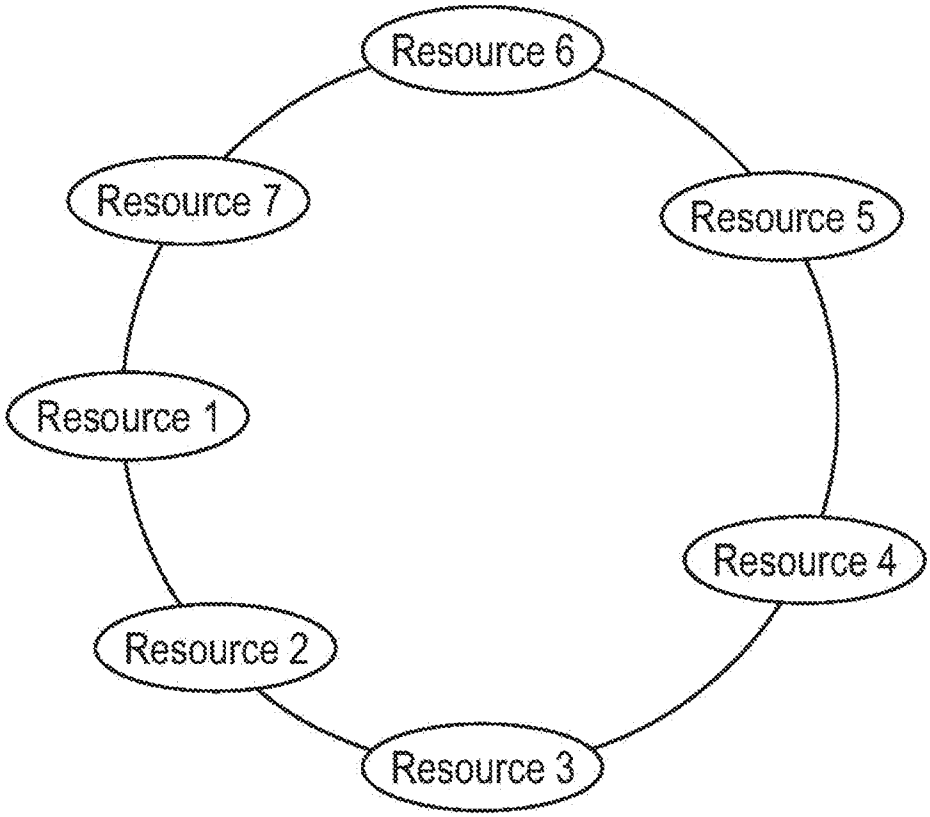

Resource 6
Resource 7
Resource 5
Resource 1
Resource 4
Resource 2
Resource 3

FIG. 3

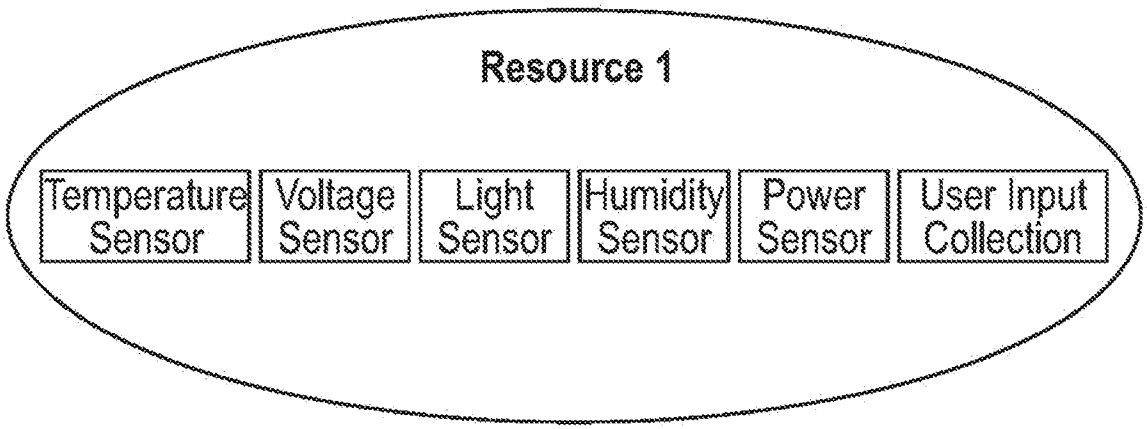

Resource 1
Temperature Sensor
Voltage Sensor
Light Sensor
Humidity Sensor
Power Sensor
User Input Collection

FIG. 4

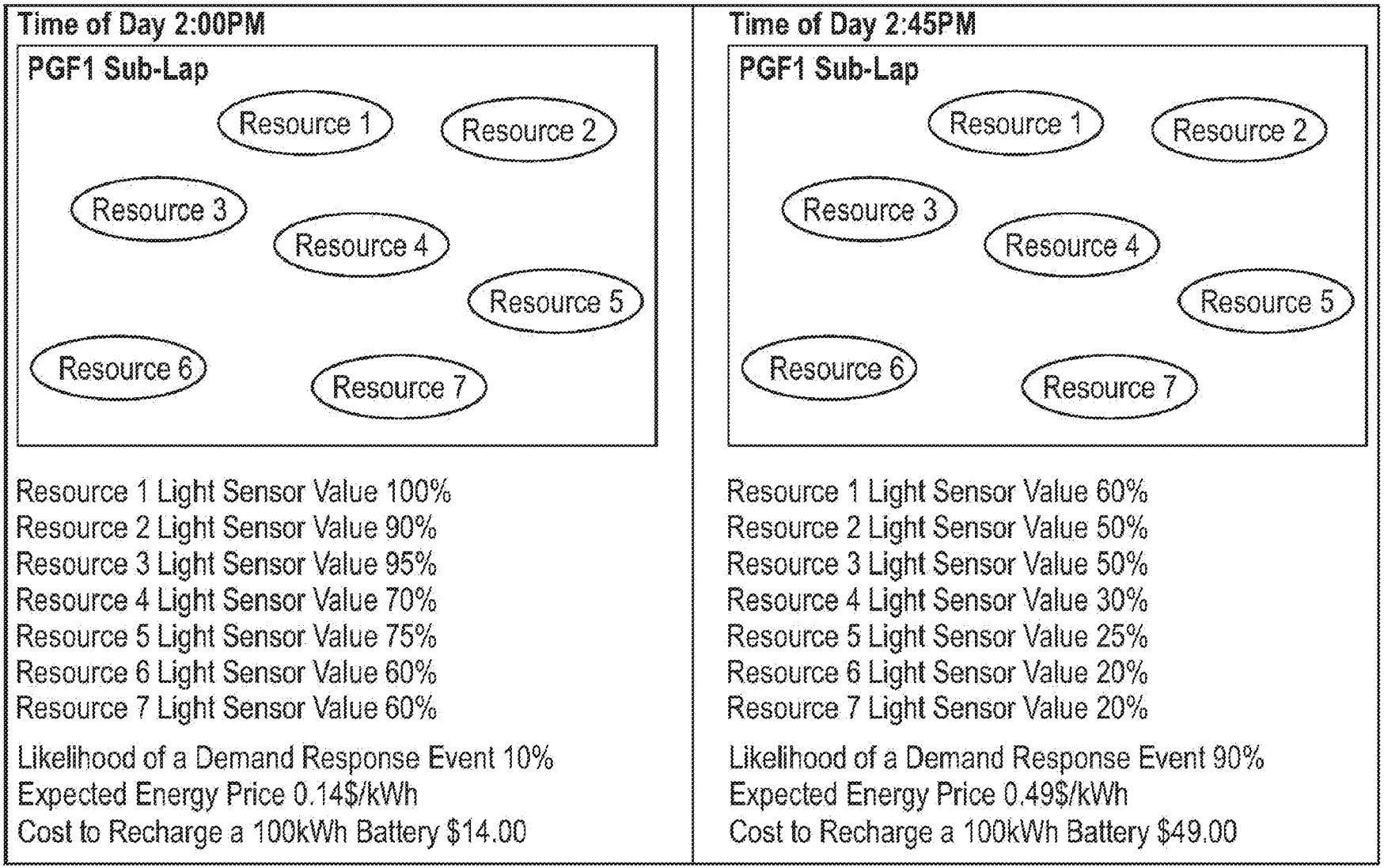

Time of Day 2:00PM
PGF1 Sub-Lap
Resource 1
Resource 2
Resource 3
Resource 4
Resource 5
Resource 6
Resource 7
Resource 1 Light Sensor Value 100%
Resource 2 Light Sensor Value 90%
Resource 3 Light Sensor Value 95%
Resource 4 Light Sensor Value 70%
Resource 5 Light Sensor Value 75%
Resource 6 Light Sensor Value 60%
Resource 7 Light Sensor Value 60%
Likelihood of a Demand Response Event 10%
Expected Energy Price 0.14$/kWh
Cost to Recharge a 100kWh Battery $14.00
Time of Day 2:45PM
PGF1 Sub-Lap
Resource 1
Resource 2
Resource 3
Resource 4
Resource 5
Resource 6
Resource 7
Resource 1 Light Sensor Value 60%
Resource 2 Light Sensor Value 50%
Resource 3 Light Sensor Value 50%
Resource 4 Light Sensor Value 30%
Resource 5 Light Sensor Value 25%
Resource 6 Light Sensor Value 20%
Resource 7 Light Sensor Value 20%
Likelihood of a Demand Response Event 90%
Expected Energy Price 0.49$/kWh
Cost to Recharge a 100kWh Battery $49.00

FIG. 5