```
I = 14; % User Number
T = 24; % Time
N = 1000; % Iteration upper limit
% Generator data
% 1 2 3 columns are constants of cost, first-order and second-order
coefficients, in units of ￥, ￥kW-1, ￥kW-2;
% 4 5 columns are the lower and upper limits of power, in units of kW;
% 6 7 columns are lower and upper climbing limits, in units of kW;
Generator = [
    0.003256    9.4523*10^-3    213*10^-6  0   120 -18 18
    0.002457    8.2245*10^-3    256*10^-6  0   155 -10 18
    0.005365    6.9443*10^-3    312*10^-6  0   137.5   -18 12
    0.004682    9.2512*10^-3    256*10^-6  0   148 -10 10
    0.004256    8.2756*10^-3    298*10^-6  0   141 -18 12
    0.003987    9.2274*10^-3    247*10^-6  0   140 -18 18
    zeros(8,7)
    ];

% Time of use,￥/kWh
ElectricityPrice = ([0.60  0.59    0.55    0.56    0.60    0.63    0.68
    0.76    0.80    0.84    0.86    0.85    0.78    0.73    0.69    0.67
    0.65    0.69    0.82    0.83    0.85    0.83    0.78    0.68]);

% 24-hour backup capacity constraint
Su = [400   390 350 360 400 430 480 560 600 640 660 650 580 530 490 470 450
    490 620 630 650 630 580 480];
Sd = [40    39  35  36  40  43  48  56  60  64  66  65  58  53  49  47  45  49
    62  63  65  63  58  48];

% Load demand, 14 * 24, in units of kW
d = [5.89   6.32    7.16    8       8.429.26    9.68    10.1    10.95   11.79
    12.21   12.63   11.79   10.95   10.1    8.84    8.42    9.26    10.11
    11.78   10.95   9.26    7.53    6.73
    6.57    6.48    7.93    8.48    8.72    9.29    9.72    10.89   11.45
    12.14   12.90   13.54   12.04   11.40   10.23   9.05    8.90    9.65
    10.53   12.74   11.83   10.00   7.61    7.35
    6.49    7.19    7.94    8.19    8.56    9.98    10.65   10.61   11.57
    11.91   12.98   13.08   12.62   11.71   10.81   9.19    9.10    9.48
    10.59   12.42   11.43   9.91    8.47    7.67
    6.48    6.35    7.91    8.97    8.65    9.35    10.34   10.57   11.17
    12.75   12.27   13.52   12.49   11.20   10.53   8.93    8.52    9.53
    11.06   11.85   11.19   10.06   7.95    7.15
```

```
    6.84    6.87    7.25    8.59    9.18    10.14   10.35   10.78   11.71
    12.67   12.69   13.28   12.26   11.46   10.66   9.05    8.70    10.03
    10.28   11.88   11.26   9.83    8.31    7.46
    6.50    6.69    7.89    8.81    9.24    9.38    10.21   10.96   11.02
    12.54   12.88   13.37   11.95   11.86   10.58   8.89    8.82    10.13
    10.15   11.88   11.08   9.34    7.96    7.38
    6.81    7.13    7.83    8.35    8.48    9.30    10.43   11.02   11.10
    12.23   12.34   13.57   11.92   11.66   10.47   9.76    9.40    9.95
    10.64   11.79   11.04   9.34    7.92    6.87
    6.73    6.50    8.01    8.09    9.32    9.60    10.38   11.07   11.90
    12.50   12.34   13.25   11.89   11.91   10.38   9.58    8.89    10.06
    10.29   11.90   11.08   10.06   7.82    7.27
    6.66    6.95    7.38    8.61    8.92    9.67    10.54   10.97   11.17
    11.97   12.67   13.59   12.60   11.60   10.69   9.67    8.90    9.97
    10.16   12.01   11.87   9.98    7.86    6.77
    6.41    6.42    7.53    8.69    8.75    10.06   10.56   10.86   11.83
    12.52   12.49   13.23   12.08   11.62   10.69   9.01    8.76    9.86
    10.82   12.18   11.42   9.61    8.43    7.14
    6.31    6.96    7.26    8.93    8.93    9.67    9.77    10.53   11.63
    12.17   12.83   13.46   12.34   11.35   10.69   9.44    8.61    10.00
    10.99   11.91   11.40   10.17   7.81    7.15
    6.80    6.63    7.34    8.27    8.68    9.46    10.30   10.44   11.21
    12.33   13.08   13.37   12.20   11.23   10.67   9.08    9.05    10.01
    10.80   11.91   11.90   10.18   7.54    7.43
    6.33    6.79    7.58    8.94    9.09    10.13   9.85    11.04   11.09
    12.58   12.46   13.33   12.33   10.96   10.41   9.63    8.60    9.84
    10.54   11.95   11.31   9.82    7.91    7.28
    6.15    6.70    8.05    8.69    9.35    10.11   9.90    10.35   11.26
    12.10   12.44   13.56   12.59   11.69   10.30   9.48    9.10    10.14
    10.50   12.20   11.02   9.91    8.52    6.87
    ];

% Transaction volume limit for 14 users, in units of kWh
TransLimit = [23   21  20  27  22  22  26  25  25  24  24  26  25  21];
```