

```

1 D:\Python\Python\setroute\python.exe "D:\Python\Pycharm\setroute\PyCharm Community Edition 2021.2.3\plugins\python-ce\helpers\pydev\pydevconsole.py" --
  mode=client --port=6035
2
3 import sys; print('Python %s on %s' % (sys.version, sys.platform))
4 sys.path.extend(['E:/1 /3 / /1 / / /1 / / / /1 / / / /1 /_ / / /1 /_LW_ / / /1 /4 / / / /3 python_code/9 Code for this
  paper', 'E:/1 / /3 / / / /1 / / / / /1 / / / / /1 /_ / / / /1 /_LW_ / / / /1 /4 / / / /3 python_code/9 Code for this paper'])
5
6 PyDev console: starting.
7
8 Python 3.9.7 (tags/v3.9.7:1016ef3, Aug 30 2021, 20:19:38) [MSC v.1929 64 bit (AMD64)] on win32
9 >>> runfile('E:/1 / /3 / / / /1 / / / / /1 / / / / /1 /_ / / / /1 /_LW_ / / / /1 /4 / / / /3 python_code/9 Code for this paper/
  main_ECCG_deterministic.py', wdir='E:/1 / /3 / / / /1 / / / / /1 / / / / /1 /_ / / / /1 /_LW_ / / / /1 /4 / / / /3 python_code/
  9 Code for this paper')
10 Backend TkAgg is interactive backend. Turning interactive mode on.
11 Waiting 5s.....
12
13 Optimize the ./R_6_9.xlsx instance by ECGG for deterministic model
14
15 Set parameter MIPGap to value 0.01
16 Master problem status = 2 , is Optimal and MP obj = 355.0
17 The initial lb = -inf ub = inf
18
19 The current iteration cnt = 0
20 The SP model was solved Optimal 2 and SPObj = 355.0
21 Deterministic Sub problem Status= 2 , is Optimal
22 Master problem status = 2 , is Optimal
23 lb = 616.0 ub = 616.0
24 MPObj = 616.0 MP_delete_Hua_Obj = 355.0 Hua = 261.0 SPObj = 355.0 MP_SP_Obj = 261.0 Deter_SP_Obj = 261.0
25
26 ub - lb = 0.0
27
28 Iteration cycle stopped by termination criterion 1: Because ub - lb <= eps, the iteration stop, and cnt = 0
29 i: 0.0 l_i: 5.0 p_i: 0.0 al_i: 1.0 sol_a_i: 1.0 sol_g_i: 0.0 d_i: 22.0 sol_taoi: 1.0 sol_deltai: 20.0 sol_deltai - sol_taoi: 19.0 sol_taoP: 1.0
  sol_deltaP: 6.0 sol_deltaP - sol_taoP: 5.0 cl_i: 4929520.0 sol_c_i: 4929520.0 sol_gp_i: 0.0 total work: 5009236.0 wasted work: 0.
  3023622764030283
30 i: 1.0 l_i: 4.0 p_i: 30.0 al_i: 36.0 sol_a_i: 36.0 sol_g_i: 0.0 d_i: 66.0 sol_taoi: 36.0 sol_deltai: 64.0 sol_deltai - sol_taoi: 28.0 sol_taoP:
  36.0 sol_deltaP: 44.0 sol_deltaP - sol_taoP: 8.0 cl_i: 7260454.0 sol_c_i: 7260454.0 sol_gp_i: 0.0 total work: 7382032.0 wasted work: 0.
  46114457374338125
31 i: 2.0 l_i: 7.0 p_i: 23.0 al_i: 58.0 sol_a_i: 58.0 sol_g_i: 0.0 d_i: 76.0 sol_taoi: 58.0 sol_deltai: 74.0 sol_deltai - sol_taoi: 16.0 sol_taoP:
  58.0 sol_deltaP: 60.0 sol_deltaP - sol_taoP: 2.0 cl_i: 4163291.0 sol_c_i: 4163291.0 sol_gp_i: 0.0 total work: 4218304.0 wasted work: 0.
  20866395594058654
32 i: 3.0 l_i: 6.0 p_i: 17.0 al_i: 40.0 sol_a_i: 40.0 sol_g_i: 0.0 d_i: 68.0 sol_taoi: 40.0 sol_deltai: 66.0 sol_deltai - sol_taoi: 26.0 sol_taoP:
  40.0 sol_deltaP: 45.0 sol_deltaP - sol_taoP: 5.0 cl_i: 6657387.0 sol_c_i: 6657387.0 sol_gp_i: 0.0 total work: 6854744.0 wasted work: 0.
  7485738344130721
33 i: 4.0 l_i: 5.0 p_i: 0.0 al_i: 60.0 sol_a_i: 60.0 sol_g_i: 0.0 d_i: 83.0 sol_taoi: 60.0 sol_deltai: 81.0 sol_deltai - sol_taoi: 21.0 sol_taoP:
  60.0 sol_deltaP: 66.0 sol_deltaP - sol_taoP: 6.0 cl_i: 5517711.0 sol_c_i: 5517711.0 sol_gp_i: 0.0 total work: 6063812.0 wasted work: 2.
  0713575882629605
34 i: 5.0 l_i: 6.0 p_i: 0.0 al_i: 29.0 sol_a_i: 29.0 sol_g_i: 0.0 d_i: 54.0 sol_taoi: 29.0 sol_deltai: 50.0 sol_deltai - sol_taoi: 21.0 sol_taoP:
  29.0 sol_deltaP: 40.0 sol_deltaP - sol_taoP: 11.0 cl_i: 5404610.0 sol_c_i: 5404610.0 sol_gp_i: 0.0 total work: 5800168.0 wasted work: 1.
  5003489554095675
35 Time: 32.000000
36
37
38
39

```