```
Initial Parameters...
R(load) = 500 ohms
r = 0.50
w = 0.50

---------
INITIAL Particle 1 ::   pos(duty)=   0.40000000    fitness(Output Power)=  10.64447425
INITIAL Particle 2 ::   pos(duty)=   0.60000000    fitness(Output Power)=  23.53304429
INITIAL Particle 3 ::   pos(duty)=   0.80000000    fitness(Output Power)=  88.83299511

================================================
++++++++++++++Start of Iterations++++++++++++++
================================================
Iteration No: 1
c1 =   0.50000000    c2 =   0.50000000
velocity =

    0.1000
    0.0500
         0

Particle 1 ::   pos(duty)=   0.50000000    fitness(Output Power)=  15.76065445
Particle 2 ::   pos(duty)=   0.65000000    fitness(Output Power)=  30.98951381
Particle 3 ::   pos(duty)=   0.80000000    fitness(Output Power)=  88.83299511


Updated best Fitness Position =   0.80000000


--------
Iteration No: 2
c1 =   0.50000000    c2 =   0.50000000
velocity =

    0.1250
    0.0625
         0

Particle 1 ::   pos(duty)=   0.62500000    fitness(Output Power)=  26.96078784
Particle 2 ::   pos(duty)=   0.71250000    fitness(Output Power)=  45.00175791
Particle 3 ::   pos(duty)=   0.80000000    fitness(Output Power)=  88.83299511


Updated best Fitness Position =   0.80000000


--------
Iteration No: 3
c1 =   0.50000000    c2 =   0.50000000
velocity =

    0.1063
    0.0531
         0
```

```
Particle 1 ::   pos(duty)=   0.73125000    fitness(Output Power)=  50.99330530
Particle 2 ::   pos(duty)=   0.76562500    fitness(Output Power)=  66.59834511
Particle 3 ::   pos(duty)=   0.80000000    fitness(Output Power)=  88.83299511


Updated best Fitness Position =   0.80000000


--------
Iteration No: 4
c1 =   0.50000000    c2 =   0.50000000
velocity =

    0.0703
    0.0352
         0

Particle 1 ::   pos(duty)=   0.80156250    fitness(Output Power)=  90.14882363
Particle 2 ::   pos(duty)=   0.80078125    fitness(Output Power)=  89.71194028
Particle 3 ::   pos(duty)=   0.80000000    fitness(Output Power)=  88.83299511


Updated best Fitness Position =   0.80156250


--------
Iteration No: 5
c1 =   0.50000000    c2 =   0.50000000
velocity =

    0.0352
    0.0178
    0.0004

Particle 1 ::   pos(duty)=   0.83671875    fitness(Output Power)= 126.94585537
Particle 2 ::   pos(duty)=   0.81855469    fitness(Output Power)= 105.90439147
Particle 3 ::   pos(duty)=   0.80039063    fitness(Output Power)=  89.27333278


Updated best Fitness Position =   0.83671875


--------
Iteration No: 6
c1 =   0.50000000    c2 =   0.50000000
velocity =

    0.0176
    0.0134
    0.0093

Particle 1 ::   pos(duty)=   0.85429687    fitness(Output Power)= 151.24856842
Particle 2 ::   pos(duty)=   0.83198242    fitness(Output Power)= 120.95290113
Particle 3 ::   pos(duty)=   0.80966797    fitness(Output Power)=  97.31778483
```

```
Updated best Fitness Position =   0.85429687


--------
Iteration No: 7
c1 =   0.50000000    c2 =   0.50000000
velocity =

    0.0088
    0.0123
    0.0158

Particle 1 ::   pos(duty)=   0.86308594    fitness(Output Power)= 163.99146564
Particle 2 ::   pos(duty)=   0.84427490    fitness(Output Power)= 136.79197589
Particle 3 ::   pos(duty)=   0.82546387    fitness(Output Power)= 113.42255545


Updated best Fitness Position =   0.86308594


--------
Iteration No: 8
c1 =   0.50000000    c2 =   0.50000000
velocity =

    0.0044
    0.0108
    0.0173

Particle 1 ::   pos(duty)=   0.86748047    fitness(Output Power)= 169.94316370
Particle 2 ::   pos(duty)=   0.85512390    fitness(Output Power)= 152.32554214
Particle 3 ::   pos(duty)=   0.84276733    fitness(Output Power)= 134.79195338


Updated best Fitness Position =   0.86748047


--------
Iteration No: 9
c1 =   0.50000000    c2 =   0.50000000
velocity =

    0.0022
    0.0085
    0.0148

Particle 1 ::   pos(duty)=   0.86967773    fitness(Output Power)= 172.68853834
Particle 2 ::   pos(duty)=   0.86363754    fitness(Output Power)= 164.70575570
Particle 3 ::   pos(duty)=   0.85759735    fitness(Output Power)= 156.02845044


Updated best Fitness Position =   0.86967773
```

```
--------
Iteration No: 10
c1 =   0.50000000    c2 =   0.50000000
velocity =

    0.0011
    0.0058
    0.0104

Particle 1 ::   pos(duty)=   0.87077637    fitness(Output Power)= 173.92794010
Particle 2 ::   pos(duty)=   0.86940441    fitness(Output Power)= 172.31885422
Particle 3 ::   pos(duty)=   0.86803246    fitness(Output Power)= 170.63918686


Updated best Fitness Position =   0.87077637


--------
Iteration No: 11
c1 =   0.50000000    c2 =   0.50000000
velocity =

    0.0005
    0.0032
    0.0059

Particle 1 ::   pos(duty)=   0.87132568    fitness(Output Power)= 174.55697645
Particle 2 ::   pos(duty)=   0.87263083    fitness(Output Power)= 175.90342021
Particle 3 ::   pos(duty)=   0.87393599    fitness(Output Power)= 177.07717215


Updated best Fitness Position =   0.87393599


--------
Iteration No: 12
c1 =   0.50000000    c2 =   0.50000000
velocity =

    0.0009
    0.0019
    0.0030

Particle 1 ::   pos(duty)=   0.87225292    fitness(Output Power)= 175.53377023
Particle 2 ::   pos(duty)=   0.87457033    fitness(Output Power)= 177.63976290
Particle 3 ::   pos(duty)=   0.87688775    fitness(Output Power)= 179.19376617


Updated best Fitness Position =   0.87688775


--------
Iteration No: 13
c1 =   0.50000000    c2 =   0.50000000
velocity =
```

```
    0.0016
    0.0015
    0.0015

Particle 1 ::   pos(duty)=   0.87387524    fitness(Output Power)= 177.03445806
Particle 2 ::   pos(duty)=   0.87611944    fitness(Output Power)= 178.74608869
Particle 3 ::   pos(duty)=   0.87836363    fitness(Output Power)= 179.85642479


Updated best Fitness Position =   0.87836363


--------
Iteration No: 14
c1 =   0.50000000    c2 =   0.50000000
velocity =

    0.0019
    0.0013
    0.0007

Particle 1 ::   pos(duty)=   0.87580850    fitness(Output Power)= 178.54700287
Particle 2 ::   pos(duty)=   0.87745504    fitness(Output Power)= 179.48083851
Particle 3 ::   pos(duty)=   0.87910157    fitness(Output Power)= 180.06434098


Updated best Fitness Position =   0.87910157


--------
Iteration No: 15
c1 =   0.50000000    c2 =   0.50000000
velocity =

    0.0018
    0.0011
    0.0004

Particle 1 ::   pos(duty)=   0.87759840    fitness(Output Power)= 179.55344339
Particle 2 ::   pos(duty)=   0.87853447    fitness(Output Power)= 179.90540009
Particle 3 ::   pos(duty)=   0.87947055    fitness(Output Power)= 180.13468474


Updated best Fitness Position =   0.87947055


--------
Iteration No: 16
c1 =   0.50000000    c2 =   0.50000000
velocity =

    0.0014
    0.0008
    0.0002
```

```
Particle 1 ::   pos(duty)=   0.87896139    fitness(Output Power)= 180.03004655
Particle 2 ::   pos(duty)=   0.87930821    fitness(Output Power)= 180.10915508
Particle 3 ::   pos(duty)=   0.87965503    fitness(Output Power)= 180.16658078


Updated best Fitness Position =   0.87965503


--------
Iteration No: 17
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-03 *

    0.8549
    0.4736
    0.0922

Particle 1 ::   pos(duty)=   0.87981629    fitness(Output Power)= 180.18364863
Particle 2 ::   pos(duty)=   0.87978178    fitness(Output Power)= 180.17969307
Particle 3 ::   pos(duty)=   0.87974727    fitness(Output Power)= 180.17553039


Updated best Fitness Position =   0.87981629


--------
Iteration No: 18
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-03 *

    0.4275
    0.2454
    0.0634

Particle 1 ::   pos(duty)=   0.88024374    fitness(Output Power)= 180.21655106
Particle 2 ::   pos(duty)=   0.88002719    fitness(Output Power)= 180.20307316
Particle 3 ::   pos(duty)=   0.87981065    fitness(Output Power)= 180.18364863


Updated best Fitness Position =   0.88024374


--------
Iteration No: 19
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-03 *

    0.2137
```

```
    0.1768
    0.1400

Particle 1 ::   pos(duty)=   0.88045747    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88020404    fitness(Output Power)= 180.21369650
Particle 3 ::   pos(duty)=   0.87995061    fitness(Output Power)= 180.19741424


Updated best Fitness Position =   0.88045747


--------
Iteration No: 20
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-03 *

    0.1069
    0.1518
    0.1967

Particle 1 ::   pos(duty)=   0.88056433    fitness(Output Power)= 180.21971674
Particle 2 ::   pos(duty)=   0.88035582    fitness(Output Power)= 180.21935595
Particle 3 ::   pos(duty)=   0.88014730    fitness(Output Power)= 180.21197174


Updated best Fitness Position =   0.88045747


--------
Iteration No: 21
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-03 *

    0.0000
    0.1013
    0.1759

Particle 1 ::   pos(duty)=   0.88056433    fitness(Output Power)= 180.21971674
Particle 2 ::   pos(duty)=   0.88045712    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88032319    fitness(Output Power)= 180.21861699


Updated best Fitness Position =   0.88045747


--------
Iteration No: 22
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-03 *
```

```
   -0.0534
    0.0507
    0.1215

Particle 1 ::   pos(duty)=   0.88051090    fitness(Output Power)= 180.22013808
Particle 2 ::   pos(duty)=   0.88050786    fitness(Output Power)= 180.22013808
Particle 3 ::   pos(duty)=   0.88044471    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045747


--------
Iteration No: 23
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-04 *

   -0.5343
    0.0009
    0.6395

Particle 1 ::   pos(duty)=   0.88045747    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88050794    fitness(Output Power)= 180.22013808
Particle 3 ::   pos(duty)=   0.88050865    fitness(Output Power)= 180.22013808


Updated best Fitness Position =   0.88045747


--------
Iteration No: 24
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-04 *

   -0.2672
   -0.2528
    0.0319

Particle 1 ::   pos(duty)=   0.88043075    fitness(Output Power)= 180.22024928
Particle 2 ::   pos(duty)=   0.88048266    fitness(Output Power)= 180.22036773
Particle 3 ::   pos(duty)=   0.88051184    fitness(Output Power)= 180.22013808


Updated best Fitness Position =   0.88045747


--------
Iteration No: 25
c1 =   0.50000000    c2 =   0.50000000
velocity =
```

```
   1.0e-04 *

    0.0000
   -0.2533
   -0.2878

Particle 1 ::   pos(duty)=   0.88043075    fitness(Output Power)= 180.22024928
Particle 2 ::   pos(duty)=   0.88045734    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88048306    fitness(Output Power)= 180.22036773


Updated best Fitness Position =   0.88045747


--------
Iteration No: 26
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-04 *

    0.1336
   -0.1263
   -0.3038

Particle 1 ::   pos(duty)=   0.88044411    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88044471    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045268    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88044411


--------
Iteration No: 27
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-04 *

    0.0668
   -0.0646
   -0.1733

Particle 1 ::   pos(duty)=   0.88045079    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88043824    fitness(Output Power)= 180.22024928
Particle 3 ::   pos(duty)=   0.88043535    fitness(Output Power)= 180.22024928


Updated best Fitness Position =   0.88045079


--------
Iteration No: 28
```

```
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-05 *

    0.3339
    0.1520
   -0.0473

Particle 1 ::   pos(duty)=   0.88045413    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88043976    fitness(Output Power)= 180.22024928
Particle 3 ::   pos(duty)=   0.88043488    fitness(Output Power)= 180.22024928


Updated best Fitness Position =   0.88045413


--------
Iteration No: 29
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-05 *

    0.1670
    0.5587
    0.9028

Particle 1 ::   pos(duty)=   0.88045580    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88044535    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88044390    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045580


--------
Iteration No: 30
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-05 *

    0.0835
    0.5406
    0.7487

Particle 1 ::   pos(duty)=   0.88045663    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045076    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045139    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045663
```

```
--------
Iteration No: 31
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-05 *

    0.0417
    0.4172
    0.5054

Particle 1 ::   pos(duty)=   0.88045705    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045493    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045645    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045705


--------
Iteration No: 32
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-05 *

    0.0209
    0.2617
    0.2678

Particle 1 ::   pos(duty)=   0.88045726    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045754    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045912    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045726


--------
Iteration No: 33
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-05 *

    0.0104
    0.1237
    0.0873

Particle 1 ::   pos(duty)=   0.88045736    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045878    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88046000    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045736
```

```
--------
Iteration No: 34
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-06 *

    0.0522
    0.2639
   -0.2218

Particle 1 ::   pos(duty)=   0.88045742    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045904    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045977    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045742


--------
Iteration No: 35
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-06 *

    0.0261
   -0.2755
   -0.7007

Particle 1 ::   pos(duty)=   0.88045744    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045877    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045907    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045744


--------
Iteration No: 36
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-06 *

    0.0130
   -0.4698
   -0.7585

Particle 1 ::   pos(duty)=   0.88045745    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045830    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045832    fitness(Output Power)= 180.22040503
```

```
Updated best Fitness Position =   0.88045745


--------
Iteration No: 37
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-06 *

    0.0065
   -0.4463
   -0.5945

Particle 1 ::   pos(duty)=   0.88045746    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045785    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045772    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045746


--------
Iteration No: 38
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-06 *

    0.0033
   -0.3213
   -0.3622

Particle 1 ::   pos(duty)=   0.88045746    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045753    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045736    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045746


--------
Iteration No: 39
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-06 *

    0.0016
   -0.1777
   -0.1547

Particle 1 ::   pos(duty)=   0.88045747    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045735    fitness(Output Power)= 180.22040503
```

```
Particle 3 ::   pos(duty)=   0.88045720    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045747


--------
Iteration No: 40
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-07 *

    0.0082
   -0.6102
   -0.1188

Particle 1 ::   pos(duty)=   0.88045747    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045729    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045719    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045747


--------
Iteration No: 41
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-07 *

    0.0041
    0.1275
    0.6271

Particle 1 ::   pos(duty)=   0.88045747    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045731    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045725    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045747


--------
Iteration No: 42
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-07 *

    0.0020
    0.4656
    0.8443
```

```
Particle 1 ::   pos(duty)=   0.88045747    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045735    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045734    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045747


--------
Iteration No: 43
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-07 *

    0.0010
    0.5187
    0.7423

Particle 1 ::   pos(duty)=   0.88045747    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045740    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045741    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045747


--------
Iteration No: 44
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-07 *

    0.0005
    0.4158
    0.5060

Particle 1 ::   pos(duty)=   0.88045747    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045745    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045746    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045747


--------
Iteration No: 45
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-07 *

    0.0003
    0.2606
```

```
    0.2615

Particle 1 ::   pos(duty)=   0.88045747    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045747    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045749    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045747


--------
Iteration No: 46
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-07 *

    0.0001
    0.1179
    0.0739

Particle 1 ::   pos(duty)=   0.88045747    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045748    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045750    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045747


--------
Iteration No: 47
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-08 *

    0.0006
    0.1708
   -0.3832

Particle 1 ::   pos(duty)=   0.88045747    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045749    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045749    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045747


--------
Iteration No: 48
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-08 *
```

```
    0.0003
   -0.3757
   -0.8484

Particle 1 ::   pos(duty)=   0.88045747    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045748    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045749    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045747


--------
Iteration No: 49
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-08 *

    0.0002
   -0.5549
   -0.8688

Particle 1 ::   pos(duty)=   0.88045747    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045748    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045748    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045747


--------
Iteration No: 50
c1 =   0.50000000    c2 =   0.50000000
velocity =

   1.0e-08 *

    0.0001
   -0.5058
   -0.6618

Particle 1 ::   pos(duty)=   0.88045747    fitness(Output Power)= 180.22040503
Particle 2 ::   pos(duty)=   0.88045747    fitness(Output Power)= 180.22040503
Particle 3 ::   pos(duty)=   0.88045747    fitness(Output Power)= 180.22040503


Updated best Fitness Position =   0.88045747


--------
>>
```