	1	2	3	4	5	6	7	8	9	10	11	12
Total Demand	826.27	796.71	772.82	756.03	701.88	705.26	694.92	675.08	721.83	753.48	776.74	805.66
Total Generation	826.27	796.71	772.82	756.03	701.88	705.26	694.92	675.08	721.83	753.48	776.74	805.66
Mismatch	0.001901744	0.003895145	0.004874	0.001258	0	0.00454512	0.00169486	0.003518	0.00277536	0	0	0.00465

	13	14	15	16	17	18	19	20	21	22	23	24
Total Demand	849.47	844.24	846.98	842.05	883.82	934.10	934.64	916.98	899.70	874.80	840.86	836.34
Total Generation	849.47	844.24	846.98	842.05	883.82	934.10	934.64	916.98	899.70	874.80	840.86	836.34
Mismatch	0	0	0.003496	0	0.00280417	0.00126224	0.00426963	0.002371	0	0.00240926	0.004987	0.001153

System Demand met: PASS

Nuclear Dispatch Constraint PASS

Line Constraints Met Fail

Total Billable Hour	1	2	3	4	5	6	7	8	9	10	11	12
Generation	$ 123.29	$ 119.92	$ 113.56	$ 87.44	$ 59.65	$ 63.82	$ 64.18	$ 72.40	$ 95.03	$ 111.27	$ 120.09	$ 123.98

Hour	13	14	15	16	17	18	19	20	21	22	23	24
Generation	$ 143.06	$ 148.78	$ 147.13	$ 135.31	$ 132.96	$ 137.48	$ 137.39	$ 134.93	$ 132.58	$ 129.34	$ 125.20	$ 124.60

Total Cost **$ 1,154.62**

Transmission Charges

Line	1	2	3	4	5	6	7	8	9	10
From Node	1	1	2	2	2	3	4	4	4	5
to Node	2	5	3	4	5	4	5	7	9	6
Overchage Hours	3	0	0	0	4	5	0	0	8	6
Charge	$ 30.00	$ -	$ -	$ -	$ 40.00	$ 50.00	$ -	$ -	$ 80.00	$ 60.00

Line	11	12	13	14	15	16	17	18	19	20
From Node	6	6	6	7	7	9	9	10	12	13
to Node	11	12	13	8	9	10	14	11	13	14
Overchage Hours	0	0	0	0	6	0	0	2	0	0
Charge	$ -	$ -	$ -	$ -	$ 60.00	$ -	$ -	$ 20.00	$ -	$ -

Toal Charge **$ 260.00**

Total Cost of Dispatch ($) **$ 1,414,618**

Environmental Footprints

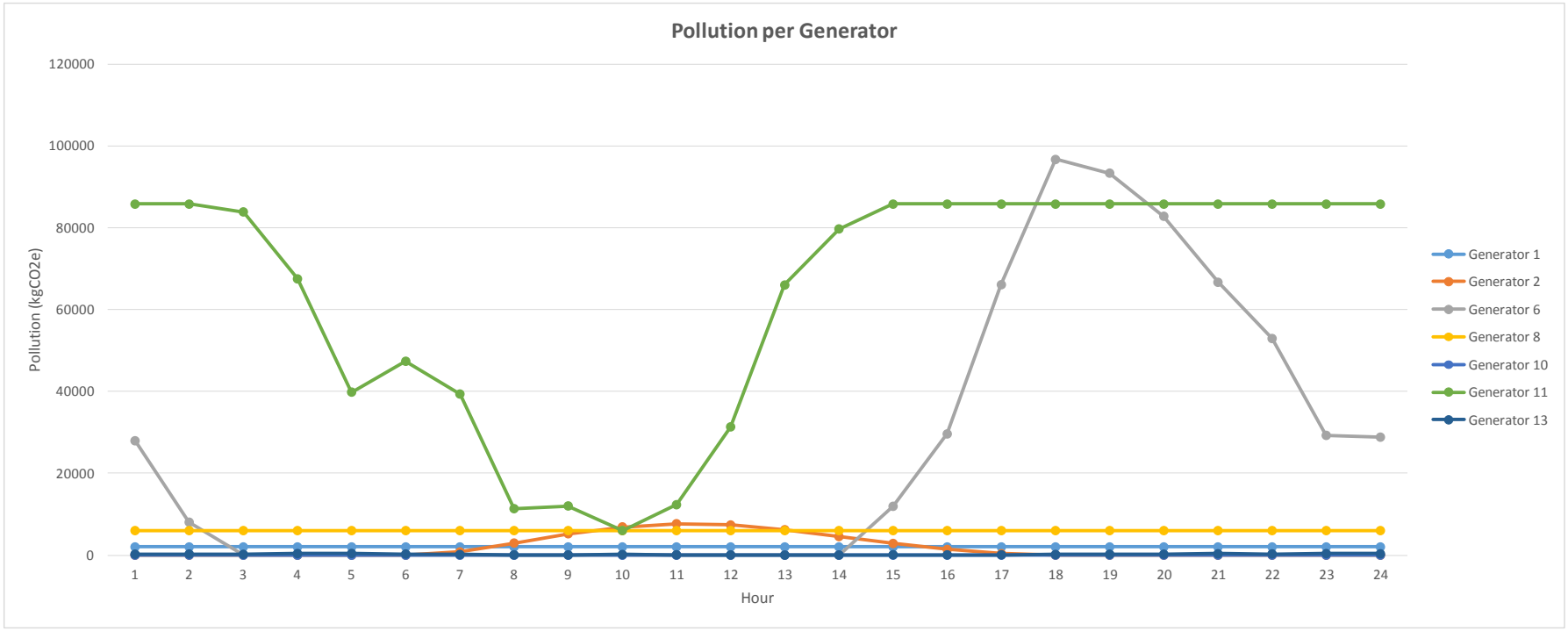
	1	2	3	4	5	6	7	8	9	10	11	12
Environmental Footprints	121.93	102.07	92.05	75.87	48.24	55.65	48.30	22.39	25.30	21.07	28.09	46.76

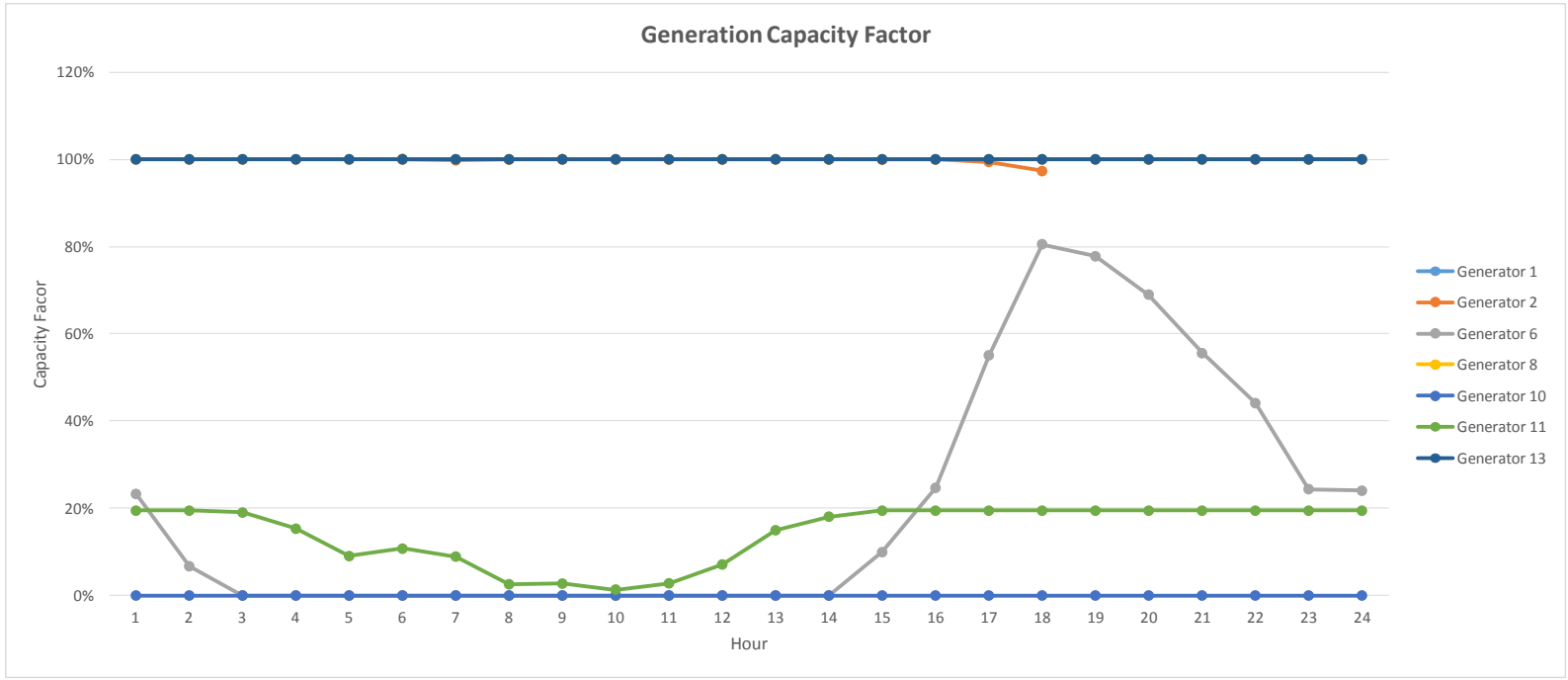
	13	14	15	16	17	18	19	20	21	22	23	24
Environmental Footprints	80.22	92.27	108.63	124.80	160.25	190.58	187.30	176.76	160.74	146.98	123.38	122.90

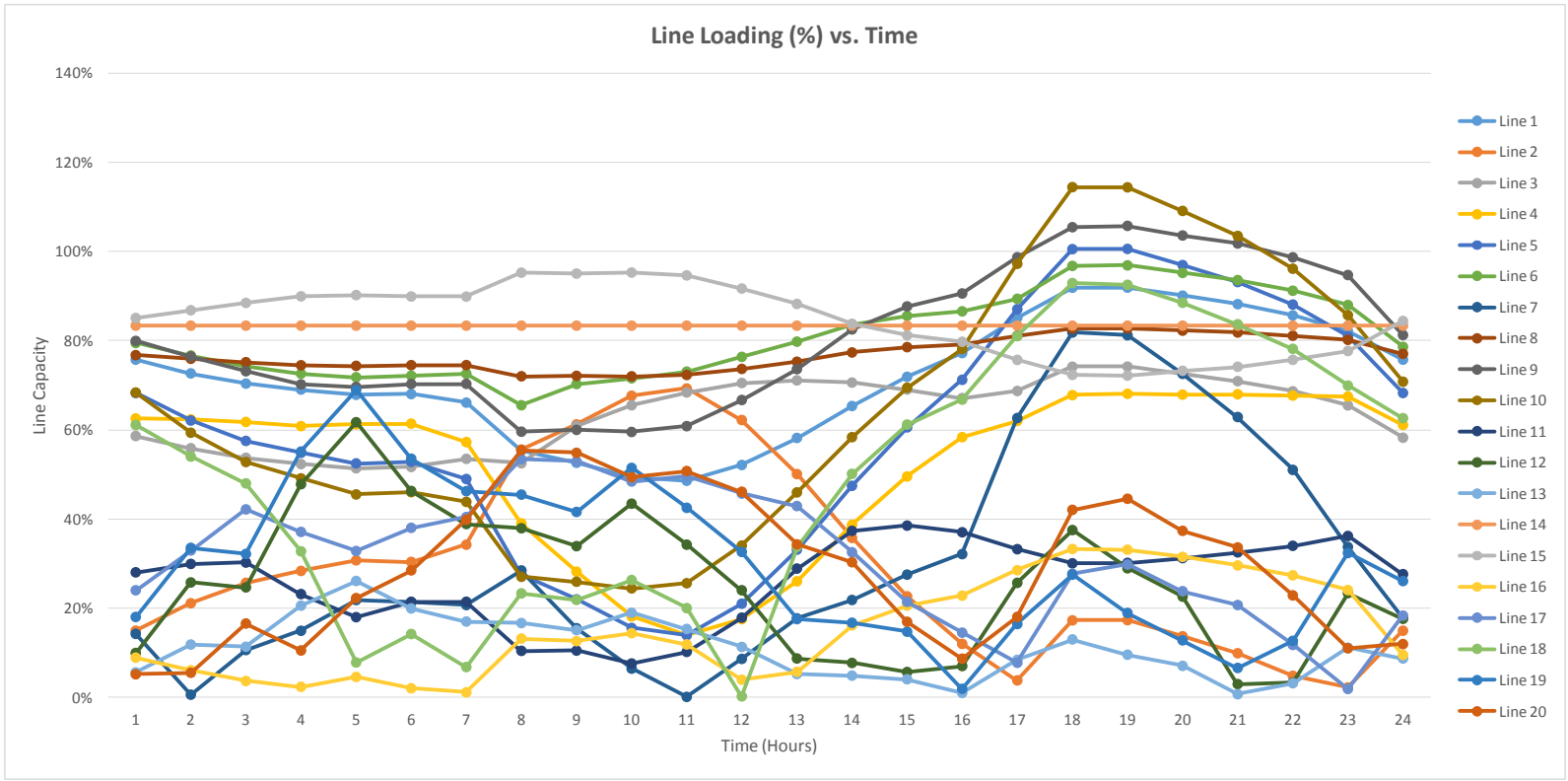
Total Environmental Footprints **687.71**

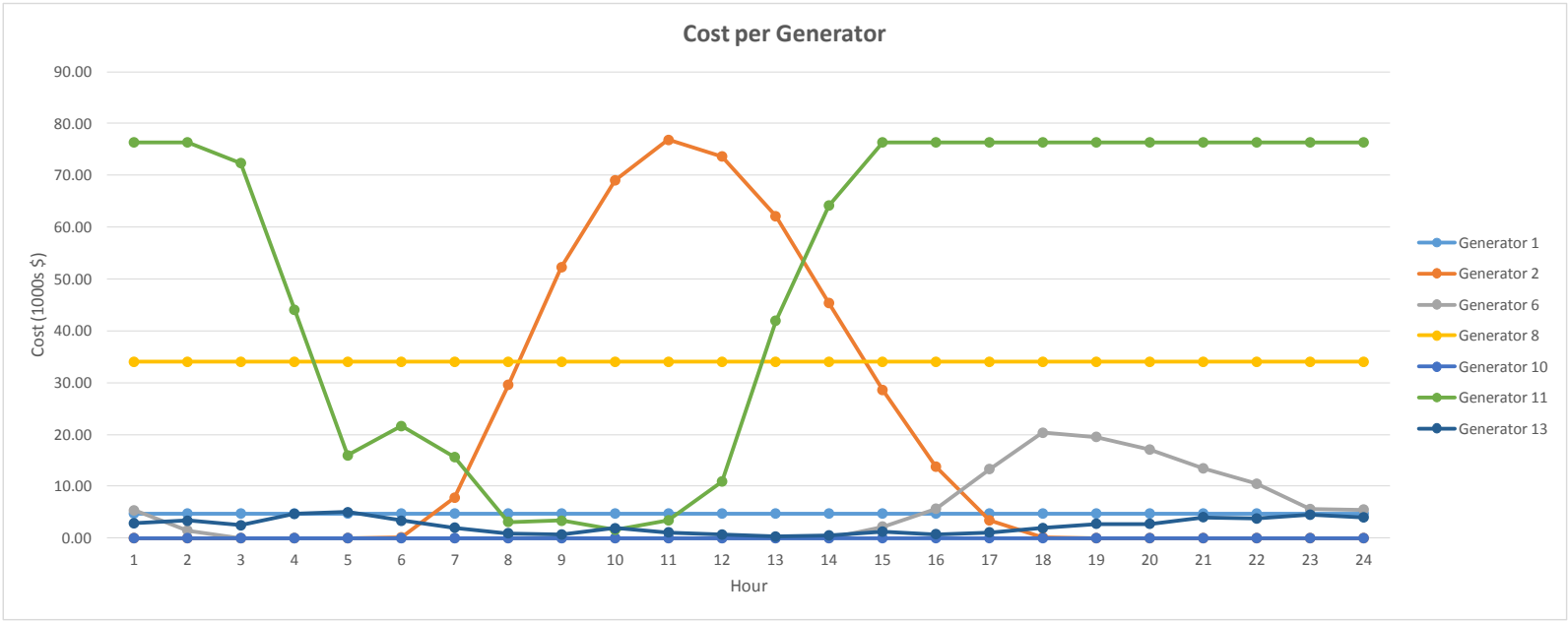
Power Flow Line	From	To	Power Flow Hour 1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	75.72	72.64	70.35	69.02	67.83	68.01	66.08	55.42	52.60	49.39	48.57	52.11
2	1	5	7.48	10.56	12.85	14.18	15.37	15.19	17.12	27.78	30.60	33.81	34.63	31.09
3	2	3	175.81	167.60	161.16	156.92	154.13	154.99	160.47	157.47	182.56	196.48	205.10	211.45
4	2	4	(62.53)	(62.33)	(61.76)	(60.81)	(61.20)	(61.38)	(57.24)	(39.03)	(28.20)	(18.16)	(14.00)	(17.56)
5	2	5	(68.24)	(62.08)	(57.50)	(54.84)	(52.46)	(52.82)	(48.96)	(27.64)	(21.99)	(15.58)	(13.95)	(21.02)
6	3	4	(238.34)	(229.93)	(222.92)	(217.73)	(215.33)	(216.37)	(217.71)	(196.50)	(210.76)	(214.64)	(219.10)	(229.01)
7	4	5	(5.70)	0.25	4.25	5.98	8.74	8.56	8.29	11.39	6.21	2.59	0.05	(3.46)
8	4	7	(329.91)	(326.42)	(323.12)	(320.17)	(319.61)	(320.25)	(320.30)	(309.58)	(309.98)	(309.51)	(310.81)	(316.68)
9	4	9	(159.82)	(152.84)	(146.24)	(140.35)	(139.23)	(140.51)	(140.61)	(119.15)	(119.96)	(119.02)	(121.62)	(133.35)
10	5	6	(136.69)	(118.68)	(105.54)	(98.21)	(91.02)	(92.05)	(87.69)	(54.11)	(51.88)	(48.90)	(51.21)	(68.08)
11	6	11	(84.14)	(89.80)	(90.73)	(69.53)	(54.00)	(64.28)	(64.36)	(31.35)	(31.53)	(22.84)	(30.66)	(53.66)
12	6	12	(1.99)	(5.16)	(4.94)	(9.56)	(12.34)	(9.26)	(7.77)	(7.59)	(6.78)	(8.69)	(6.85)	(4.81)
13	6	13	(5.60)	(11.86)	(11.37)	(20.58)	(26.12)	(19.96)	(17.02)	(16.68)	w	(18.98)	(15.35)	(11.33)
14	7	8	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)
15	7	9	170.09	173.58	176.88	179.83	180.39	179.75	179.70	190.42	190.02	190.49	189.19	183.32
16	9	10	(17.86)	(12.20)	(7.39)	4.80	9.22	4.12	2.29	26.42	25.25	28.81	23.77	7.95
17	9	14	14.41	19.77	25.29	22.27	19.69	22.81	24.26	32.03	31.77	29.04	29.73	27.42
18	10	11	(48.86)	(43.20)	(38.39)	(26.20)	(6.28)	(11.38)	(5.46)	18.67	17.50	21.06	16.02	0.20
19	12	13	(3.61)	(6.71)	(6.43)	(11.02)	(13.78)	(10.70)	(9.25)	(9.09)	(8.32)	(10.29)	(8.50)	(6.52)
20	13	14	2.60	(2.77)	(8.29)	(5.27)	(11.14)	(14.25)	(19.92)	(27.73)	(27.42)	(24.69)	(25.38)	(23.06)

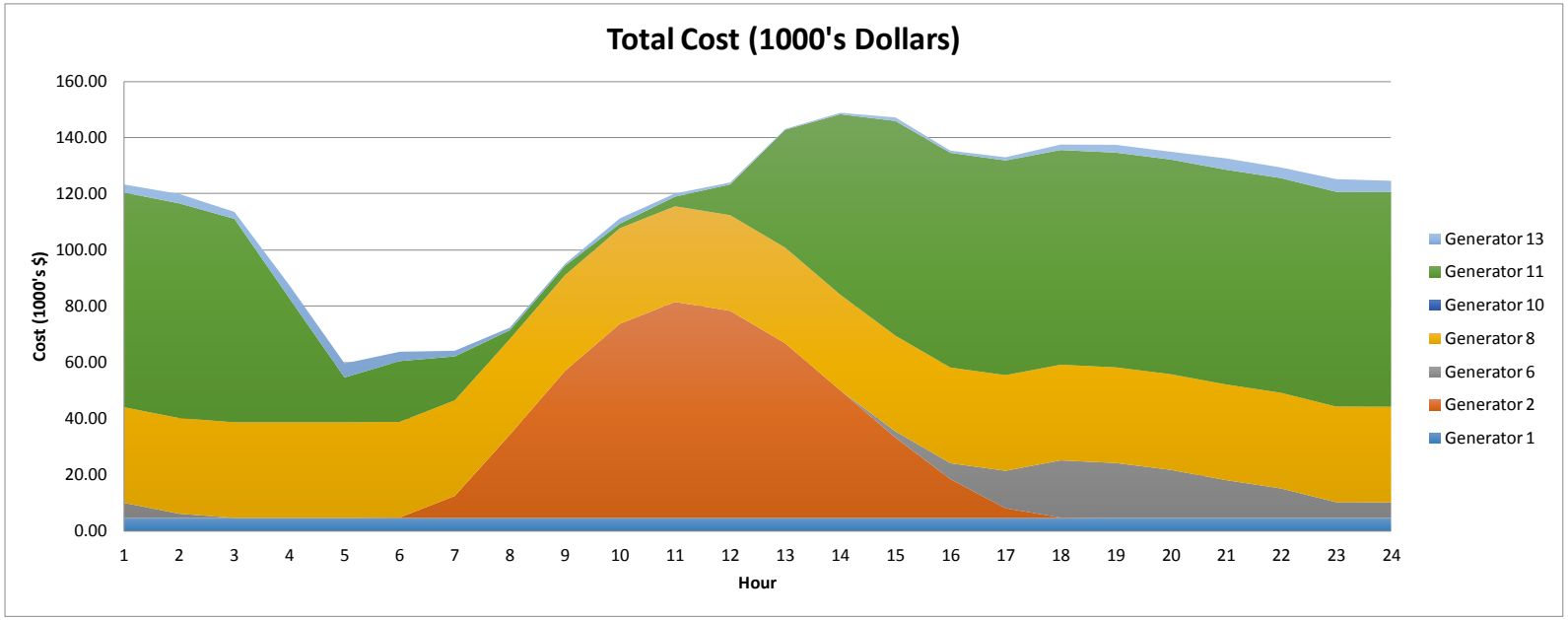
Line	From	To	13	14	15	16	17	18	19	20	21	22	23	24
1	0	0	58.16	65.32	71.87	77.20	85.11	91.84	91.87	90.06	88.16	85.63	82.08	75.72
2	0	0	25.04	17.88	11.33	6.00	(1.91)	(8.64)	(8.67)	(6.86)	(4.96)	(2.43)	1.12	7.48
3	0	0	213.21	211.73	207.09	201.29	206.09	222.41	222.47	217.58	212.69	205.84	196.40	174.65
4	0	0	(26.04)	(38.70)	(49.53)	(58.34)	(61.98)	(67.76)	(68.06)	(67.88)	(67.97)	(67.66)	(67.46)	(61.09)
5	0	0	(33.13)	(47.44)	(60.54)	(71.20)	(87.03)	(100.48)	(100.54)	(96.91)	(93.11)	(88.06)	(80.95)	(68.24)
6	0	0	(239.25)	(250.43)	(256.61)	(259.64)	(268.07)	(290.18)	(290.53)	(285.46)	(280.66)	(273.50)	(263.86)	(235.75)
7	0	0	(7.09)	(8.74)	(11.01)	(12.85)	(25.05)	(32.72)	(32.47)	(29.03)	(25.14)	(20.40)	(13.49)	(7.14)
8	0	0	(323.59)	(332.50)	(337.65)	(340.55)	(348.67)	(355.41)	(355.71)	(353.55)	(351.75)	(348.65)	(344.69)	(331.23)
9	0	0	(147.17)	(165.01)	(175.31)	(181.11)	(197.33)	(210.81)	(211.42)	(207.09)	(203.50)	(197.30)	(189.37)	(162.45)
10	0	0	(91.92)	(116.68)	(138.86)	(156.22)	(194.41)	(228.77)	(228.68)	(218.11)	(206.88)	(192.19)	(171.38)	(141.54)
11	0	0	(86.67)	(112.04)	(115.56)	(111.10)	(99.71)	(90.19)	(90.51)	(93.73)	(97.58)	(101.98)	(108.58)	(82.92)
12	0	0	(1.75)	(1.55)	(1.14)	1.41	5.14	7.51	5.79	4.52	0.60	(0.67)	(4.68)	(3.53)
13	0	0	(5.26)	(4.90)	(4.09)	1.02	8.43	13.01	9.58	7.08	(0.72)	(3.21)	(11.15)	(8.74)
14	0	0	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)	(500.00)
15	0	0	176.41	167.50	162.35	159.45	151.33	144.59	144.29	146.45	148.25	151.35	155.31	168.77
16	0	0	(11.50)	(32.35)	(41.19)	(45.65)	(57.04)	(66.56)	(66.24)	(63.02)	(59.17)	(54.77)	(48.17)	(19.08)
17	0	0	25.75	19.53	12.86	8.71	(4.67)	(16.64)	(17.88)	(14.29)	(12.43)	(7.06)	(1.14)	11.01
18	0	0	(27.00)	(40.10)	(48.94)	(53.40)	(64.79)	(74.31)	(73.99)	(70.77)	(66.92)	(62.52)	(55.92)	(50.08)
19	0	0	(3.51)	(3.35)	(2.95)	(0.39)	3.29	5.51	3.79	2.56	(1.32)	(2.54)	(6.47)	(5.22)
20	0	0	(17.16)	(15.16)	(8.48)	(4.35)	9.03	21.03	22.27	18.68	16.81	11.44	5.51	5.98

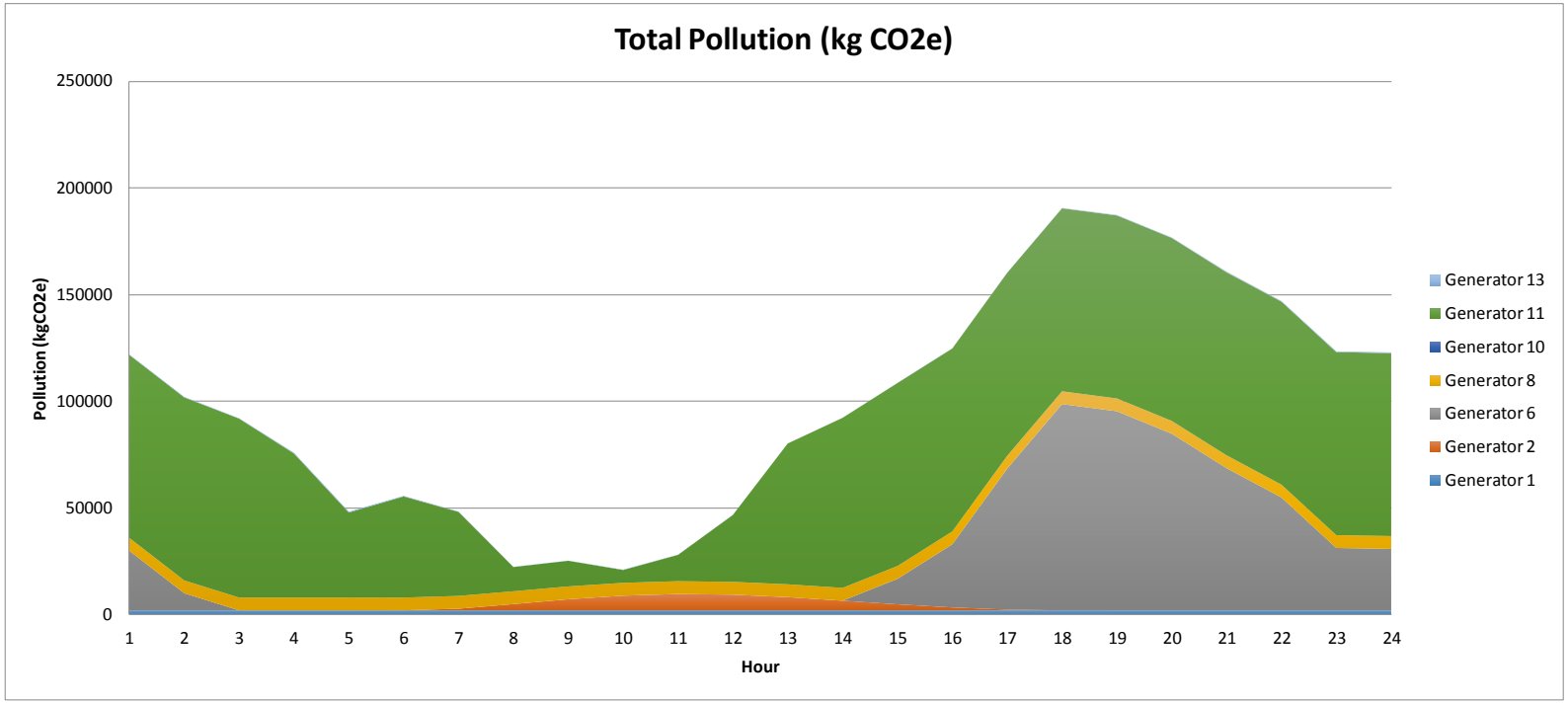

Pollution per Generator
120000
100000
80000
60000
40000
20000
0
Pollution (kgCO2e)
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
Hour
Generator 1
Generator 2
Generator 6
Generator 8
Generator 10
Generator 11
Generator 13


Generation Capacity Factor
120%
100%
80%
60%
40%
20%
0%
Capacity Facor
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
Hour
Generator 1
Generator 2
Generator 6
Generator 8
Generator 10
Generator 11
Generator 13


Line Loading (%) vs. Time
140%
120%
100%
80%
60%
40%
20%
0%
Line Capacity
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
Time (Hours)
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Line 7
Line 8
Line 9
Line 10
Line 11
Line 12
Line 13
Line 14
Line 15
Line 16
Line 17
Line 18
Line 19
Line 20


Cost per Generator
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
Cost (1000s $)
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
Hour
Generator 1
Generator 2
Generator 6
Generator 8
Generator 10
Generator 11
Generator 13


Total Cost (1000's Dollars)
160.00
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
Cost (1000's $)
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
Hour
Generator 13
Generator 11
Generator 10
Generator 8
Generator 6
Generator 2
Generator 1


Total Pollution (kg CO2e)
Pollution (kgCO2e)
250000
200000
150000
100000
50000
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
Hour
Generator 13
Generator 11
Generator 10
Generator 8
Generator 6
Generator 2
Generator 1