

Attachment 3
Closed-Loop Station Performance

- Section 1:** **PEPSE Models for SONGS Units 2 and 3**
- Section 2:** **Annual Closed-Loop Operational Power Losses by Month**
- Section 3:** **Monthly Closed-Loop Operational Power Losses by Time of Day**
- Section 4:** **Worst 24-hr Closed-Loop Operational Power Losses**
- Section 5:** **Annual Closed-Loop Low Pressure Alarm Occurrence**

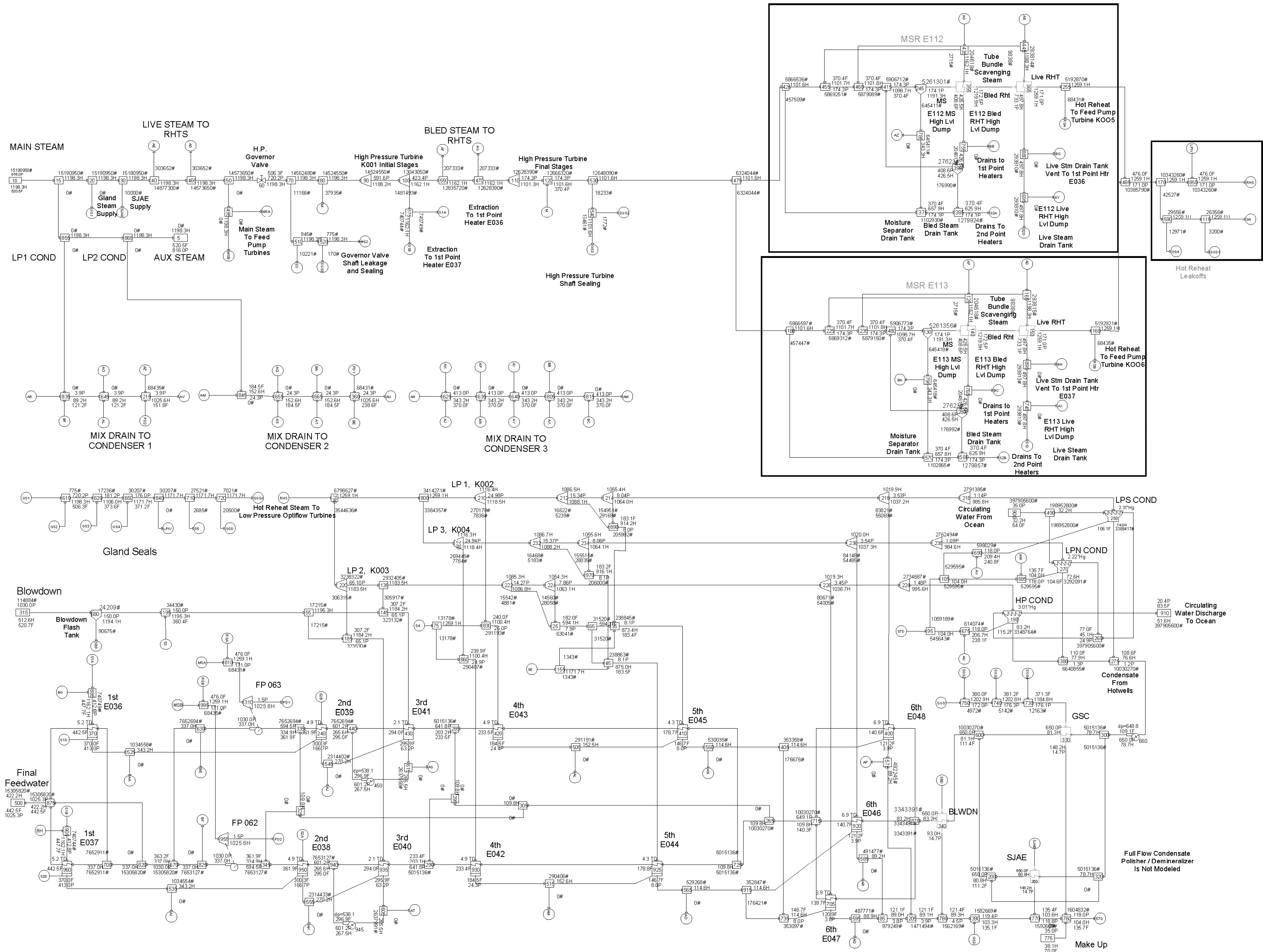
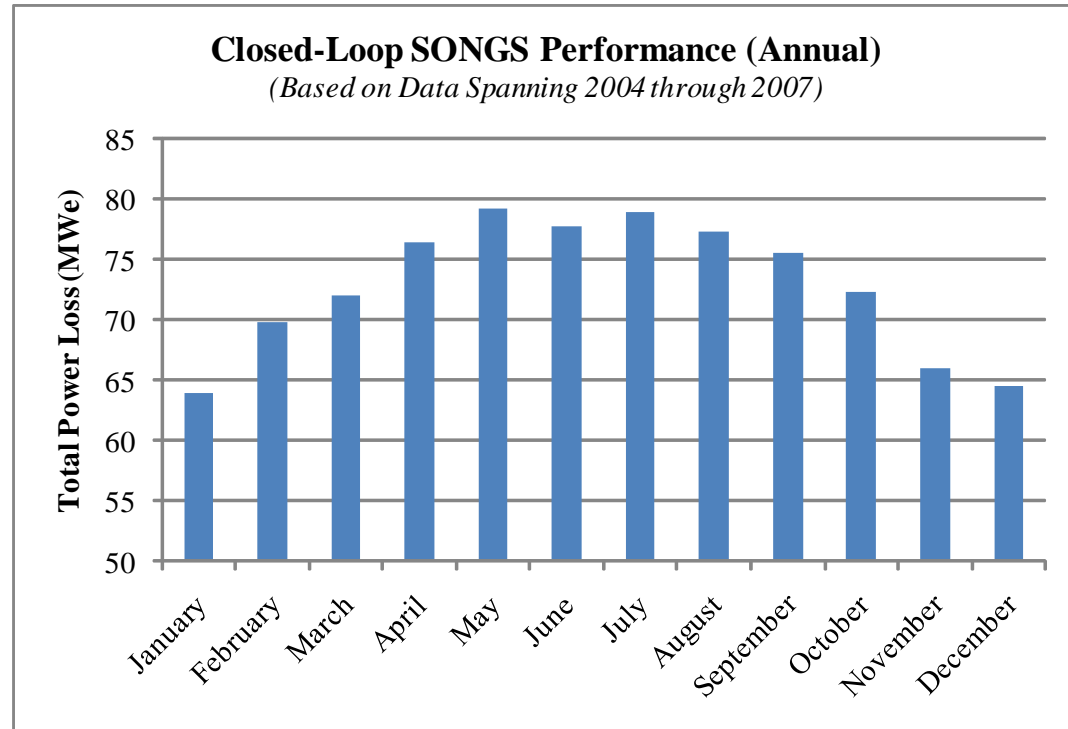


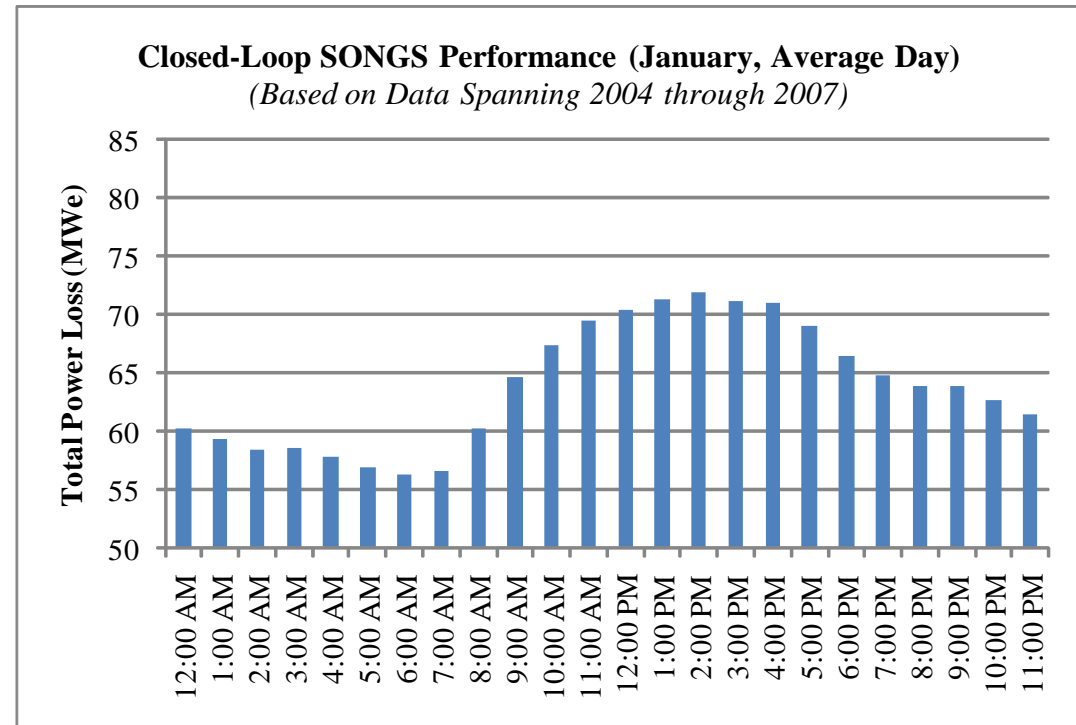
Figure 3-1 SONGS Unit 2 PEPSE Model

Time	Unit 2 Power Loss (MWe)	Unit 3 Power Loss (MWe)	Total Power Loss (MWe)
January	31.9	32.0	64.0
February	34.9	35.0	69.8
March	35.9	36.1	72.0
April	38.1	38.2	76.4
May	39.5	39.6	79.1
June	38.8	38.9	77.8
July	39.4	39.5	79.0
August	38.6	38.7	77.2
September	37.7	37.8	75.6
October	36.1	36.2	72.3
November	33.0	33.1	66.0
December	32.2	32.3	64.4
Annual	36.7	36.8	73.4



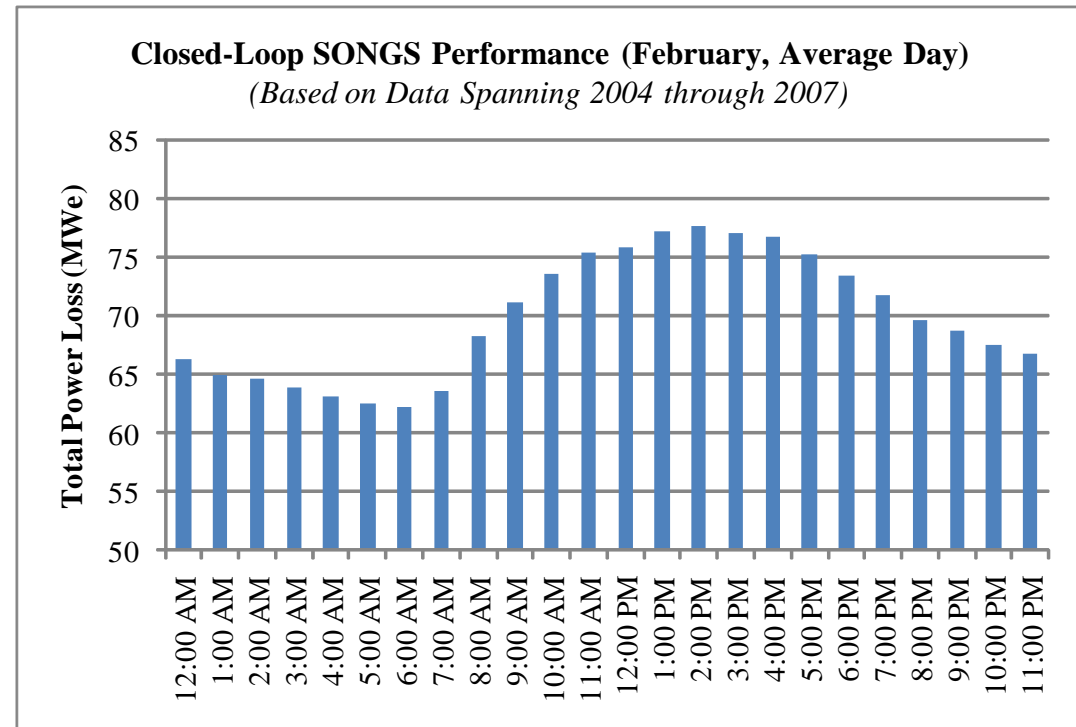
Attachment 3, Section 3: Monthly Closed-Loop Operational Power Losses by Time of Day

Time	Unit 2 Power Loss (MWe)	Unit 3 Power Loss (MWe)	Total Power Loss (MWe)
12:00 AM	30.1	30.1	60.2
1:00 AM	29.6	29.7	59.3
2:00 AM	29.2	29.2	58.4
3:00 AM	29.3	29.4	58.6
4:00 AM	28.9	29.0	57.9
5:00 AM	28.4	28.5	57.0
6:00 AM	28.1	28.2	56.4
7:00 AM	28.3	28.4	56.6
8:00 AM	30.1	30.2	60.3
9:00 AM	32.3	32.4	64.7
10:00 AM	33.6	33.7	67.3
11:00 AM	34.7	34.8	69.5
12:00 PM	35.1	35.2	70.4
1:00 PM	35.6	35.7	71.2
2:00 PM	35.9	36.0	71.8
3:00 PM	35.5	35.6	71.2
4:00 PM	35.4	35.5	70.9
5:00 PM	34.5	34.6	69.1
6:00 PM	33.2	33.3	66.5
7:00 PM	32.4	32.5	64.8
8:00 PM	31.9	32.0	63.9
9:00 PM	31.9	32.0	63.8
10:00 PM	31.3	31.3	62.6
11:00 PM	30.7	30.8	61.5
Average	31.9	32.0	64.0

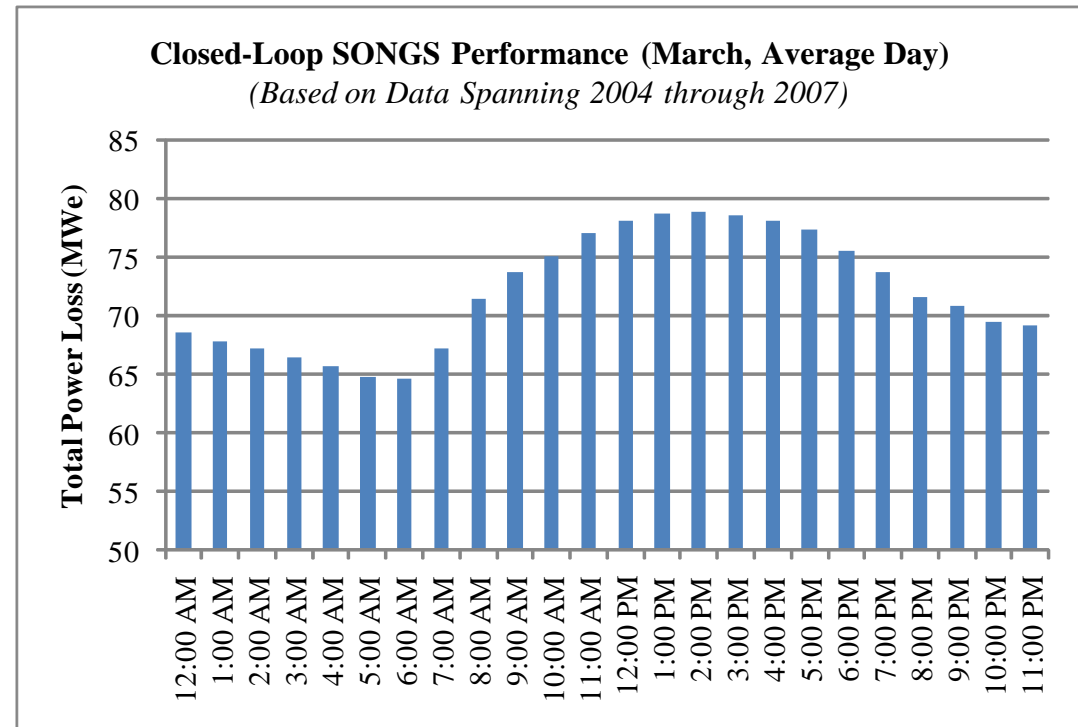


Attachment 3, Section 3: Monthly Closed-Loop Operational Power Losses by Time of Day

Time	Unit 2 Power Loss (MWe)	Unit 3 Power Loss (MWe)	Total Power Loss (MWe)
12:00 AM	33.1	33.2	66.2
1:00 AM	32.4	32.5	64.9
2:00 AM	32.3	32.4	64.7
3:00 AM	31.9	32.0	63.9
4:00 AM	31.5	31.6	63.1
5:00 AM	31.2	31.3	62.5
6:00 AM	31.0	31.1	62.2
7:00 AM	31.8	31.9	63.7
8:00 AM	34.1	34.2	68.3
9:00 AM	35.5	35.7	71.2
10:00 AM	36.7	36.8	73.6
11:00 AM	37.6	37.8	75.4
12:00 PM	37.9	38.0	75.8
1:00 PM	38.6	38.7	77.3
2:00 PM	38.7	38.9	77.6
3:00 PM	38.5	38.6	77.1
4:00 PM	38.3	38.4	76.7
5:00 PM	37.5	37.6	75.2
6:00 PM	36.7	36.8	73.5
7:00 PM	35.8	35.9	71.7
8:00 PM	34.7	34.9	69.6
9:00 PM	34.3	34.4	68.8
10:00 PM	33.7	33.8	67.5
11:00 PM	33.3	33.4	66.7
Average	34.9	35.0	69.8

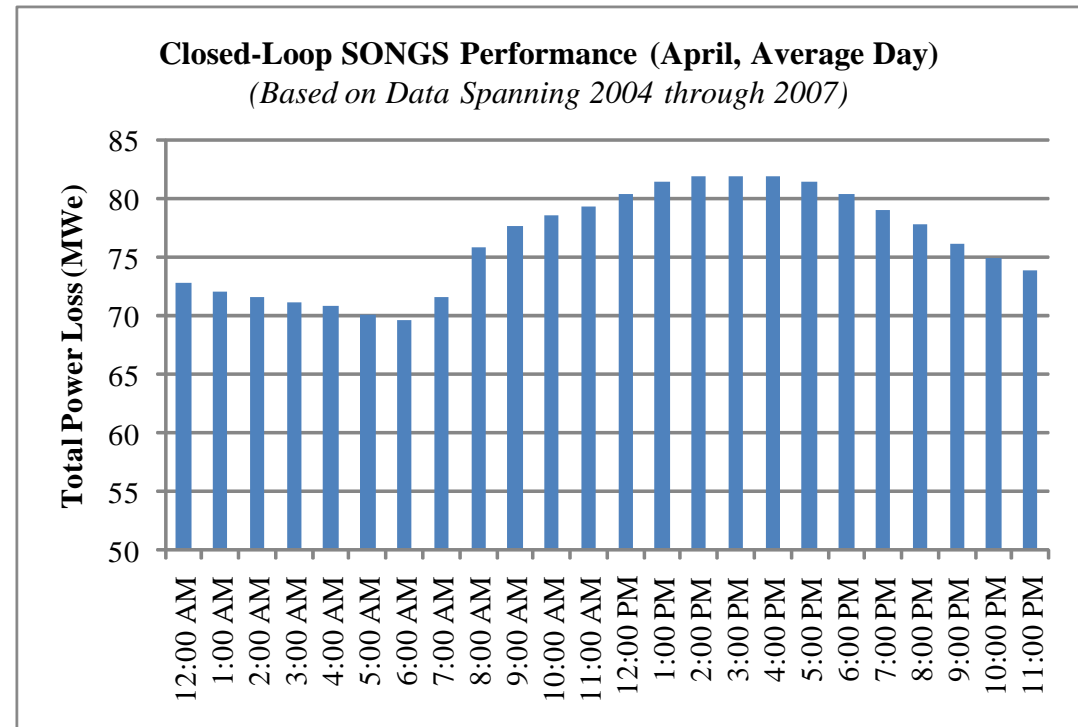


Time	Unit 2 Power Loss (MWe)	Unit 3 Power Loss (MWe)	Total Power Loss (MWe)
12:00 AM	34.3	34.4	68.6
1:00 AM	33.9	34.0	67.8
2:00 AM	33.6	33.7	67.3
3:00 AM	33.2	33.3	66.5
4:00 AM	32.8	32.9	65.7
5:00 AM	32.4	32.5	64.8
6:00 AM	32.3	32.4	64.7
7:00 AM	33.5	33.6	67.2
8:00 AM	35.7	35.8	71.4
9:00 AM	36.8	37.0	73.8
10:00 AM	37.5	37.6	75.1
11:00 AM	38.5	38.6	77.1
12:00 PM	39.0	39.1	78.1
1:00 PM	39.3	39.5	78.8
2:00 PM	39.4	39.5	78.8
3:00 PM	39.2	39.3	78.6
4:00 PM	39.0	39.1	78.1
5:00 PM	38.6	38.8	77.4
6:00 PM	37.7	37.8	75.6
7:00 PM	36.8	36.9	73.7
8:00 PM	35.8	35.9	71.6
9:00 PM	35.3	35.4	70.8
10:00 PM	34.7	34.8	69.5
11:00 PM	34.5	34.7	69.2
Average	35.9	36.1	72.0

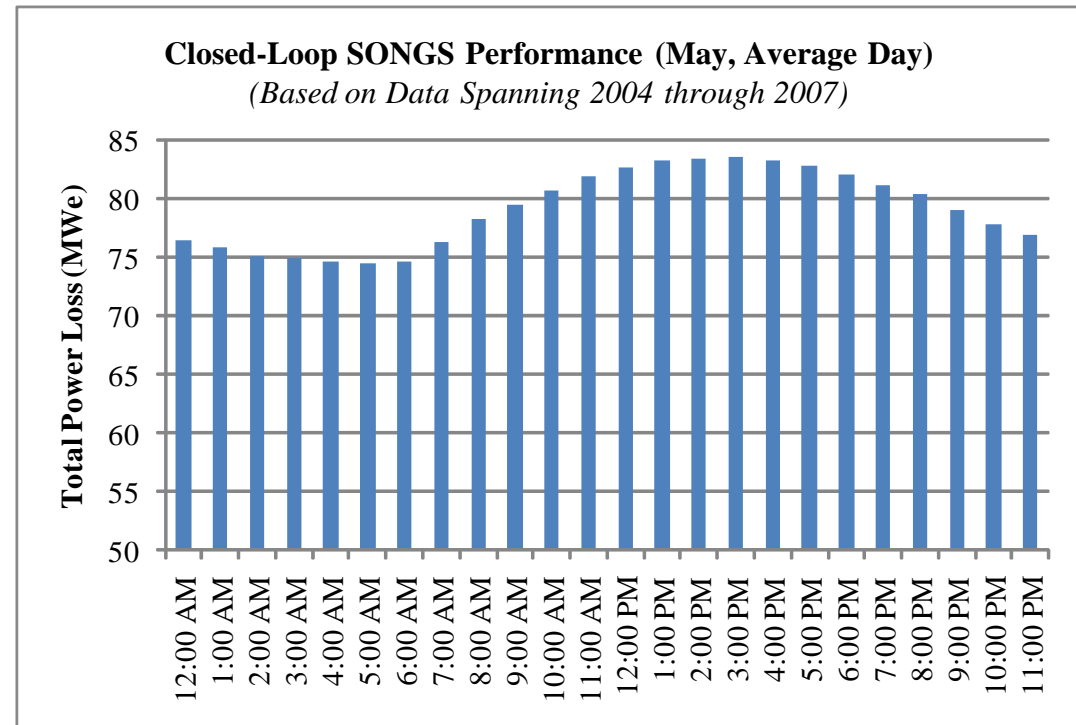


Attachment 3, Section 3: Monthly Closed-Loop Operational Power Losses by Time of Day

Time	Unit 2 Power Loss (MWe)	Unit 3 Power Loss (MWe)	Total Power Loss (MWe)
12:00 AM	36.3	36.5	72.8
1:00 AM	36.0	36.1	72.0
2:00 AM	35.8	35.9	71.6
3:00 AM	35.5	35.6	71.2
4:00 AM	35.4	35.5	70.9
5:00 AM	35.0	35.1	70.0
6:00 AM	34.7	34.8	69.6
7:00 AM	35.8	35.9	71.6
8:00 AM	37.9	38.0	75.9
9:00 AM	38.8	38.9	77.7
10:00 AM	39.2	39.4	78.6
11:00 AM	39.6	39.8	79.4
12:00 PM	40.1	40.2	80.4
1:00 PM	40.7	40.8	81.5
2:00 PM	40.9	41.0	81.9
3:00 PM	40.9	41.0	81.9
4:00 PM	40.9	41.0	81.8
5:00 PM	40.7	40.8	81.5
6:00 PM	40.1	40.3	80.4
7:00 PM	39.4	39.5	79.0
8:00 PM	38.9	39.0	77.8
9:00 PM	38.0	38.1	76.1
10:00 PM	37.4	37.5	75.0
11:00 PM	36.9	37.0	73.8
Average	38.1	38.2	76.4

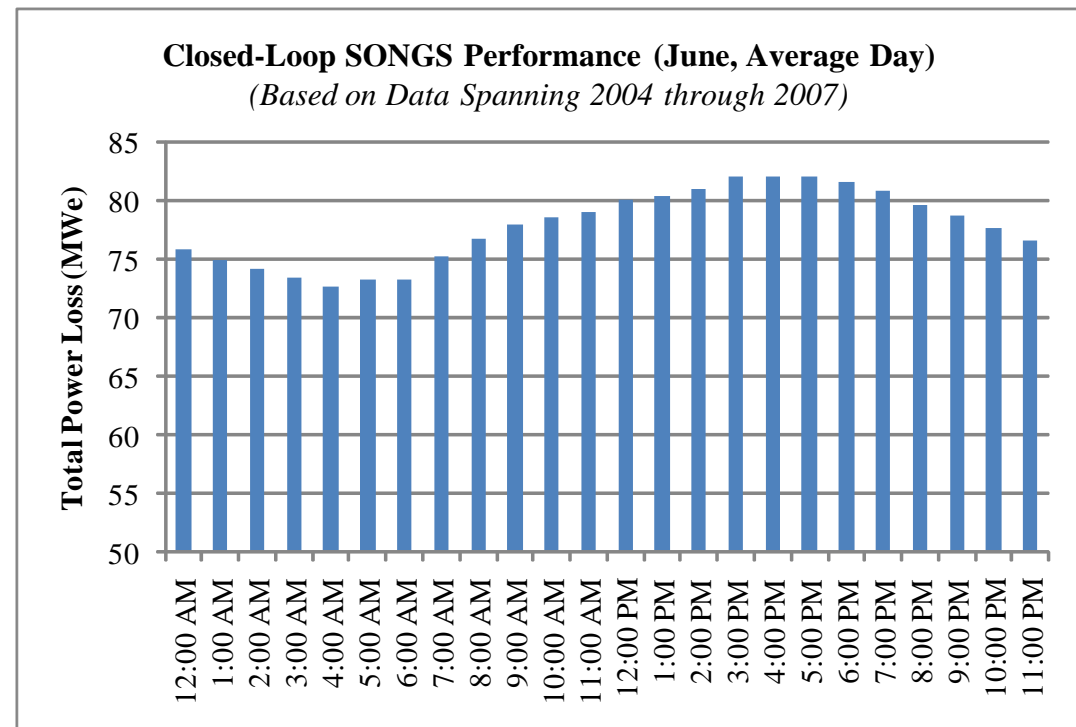


Time	Unit 2 Power Loss (MWe)	Unit 3 Power Loss (MWe)	Total Power Loss (MWe)
12:00 AM	38.2	38.3	76.4
1:00 AM	37.9	38.0	75.8
2:00 AM	37.5	37.6	75.1
3:00 AM	37.4	37.5	74.9
4:00 AM	37.3	37.4	74.6
5:00 AM	37.2	37.3	74.5
6:00 AM	37.3	37.4	74.6
7:00 AM	38.1	38.2	76.3
8:00 AM	39.1	39.2	78.3
9:00 AM	39.7	39.8	79.5
10:00 AM	40.3	40.4	80.7
11:00 AM	40.9	41.0	82.0
12:00 PM	41.3	41.4	82.6
1:00 PM	41.6	41.7	83.3
2:00 PM	41.6	41.7	83.4
3:00 PM	41.8	41.9	83.6
4:00 PM	41.6	41.7	83.3
5:00 PM	41.3	41.4	82.7
6:00 PM	41.0	41.1	82.0
7:00 PM	40.5	40.6	81.1
8:00 PM	40.1	40.2	80.3
9:00 PM	39.5	39.6	79.0
10:00 PM	38.9	39.0	77.9
11:00 PM	38.4	38.5	77.0
Average	39.5	39.6	79.1



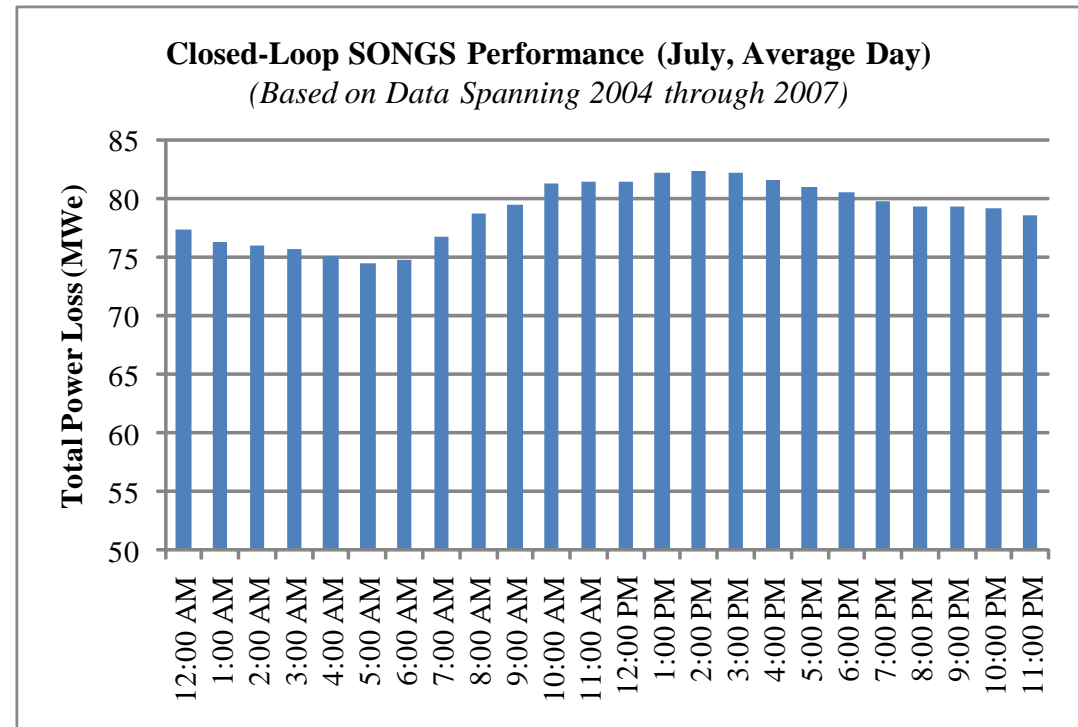
Attachment 3, Section 3: Monthly Closed-Loop Operational Power Losses by Time of Day

Time	Unit 2 Power Loss (MWe)	Unit 3 Power Loss (MWe)	Total Power Loss (MWe)
12:00 AM	37.9	38.0	75.8
1:00 AM	37.4	37.5	75.0
2:00 AM	37.0	37.1	74.1
3:00 AM	36.7	36.8	73.5
4:00 AM	36.3	36.4	72.7
5:00 AM	36.6	36.7	73.2
6:00 AM	36.6	36.7	73.3
7:00 AM	37.6	37.7	75.2
8:00 AM	38.3	38.4	76.8
9:00 AM	38.9	39.0	77.9
10:00 AM	39.2	39.3	78.5
11:00 AM	39.5	39.6	79.0
12:00 PM	40.0	40.1	80.1
1:00 PM	40.1	40.2	80.3
2:00 PM	40.4	40.6	81.0
3:00 PM	41.0	41.1	82.1
4:00 PM	41.0	41.1	82.1
5:00 PM	40.9	41.0	82.0
6:00 PM	40.7	40.8	81.6
7:00 PM	40.4	40.5	80.8
8:00 PM	39.8	39.9	79.7
9:00 PM	39.3	39.4	78.7
10:00 PM	38.8	38.9	77.7
11:00 PM	38.2	38.3	76.6
Average	38.8	38.9	77.8



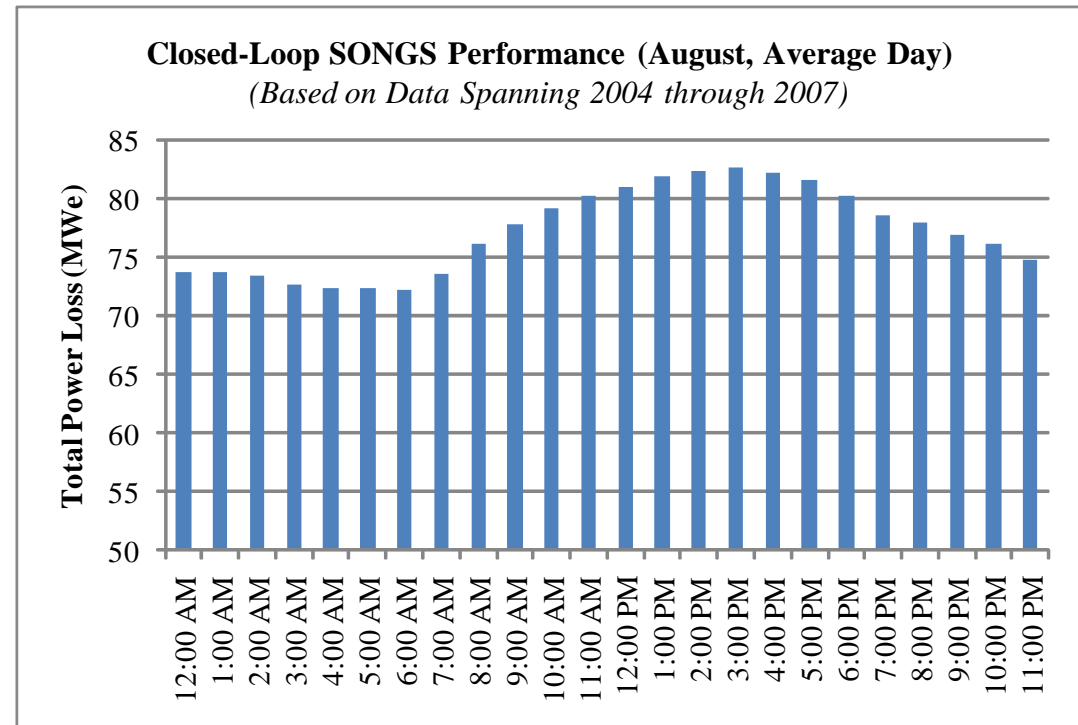
Attachment 3, Section 3: Monthly Closed-Loop Operational Power Losses by Time of Day

Time	Unit 2 Power Loss (MWe)	Unit 3 Power Loss (MWe)	Total Power Loss (MWe)
12:00 AM	38.6	38.7	77.3
1:00 AM	38.1	38.2	76.3
2:00 AM	38.0	38.1	76.0
3:00 AM	37.8	37.9	75.8
4:00 AM	37.5	37.6	75.1
5:00 AM	37.2	37.3	74.5
6:00 AM	37.4	37.5	74.8
7:00 AM	38.3	38.4	76.7
8:00 AM	39.3	39.4	78.7
9:00 AM	39.7	39.8	79.5
10:00 AM	40.6	40.7	81.3
11:00 AM	40.6	40.7	81.4
12:00 PM	40.6	40.7	81.4
1:00 PM	41.1	41.2	82.2
2:00 PM	41.1	41.2	82.3
3:00 PM	41.1	41.2	82.2
4:00 PM	40.8	40.9	81.6
5:00 PM	40.5	40.6	81.1
6:00 PM	40.2	40.3	80.6
7:00 PM	39.8	39.9	79.8
8:00 PM	39.6	39.7	79.3
9:00 PM	39.6	39.7	79.3
10:00 PM	39.5	39.6	79.1
11:00 PM	39.3	39.4	78.6
Average	39.4	39.5	79.0

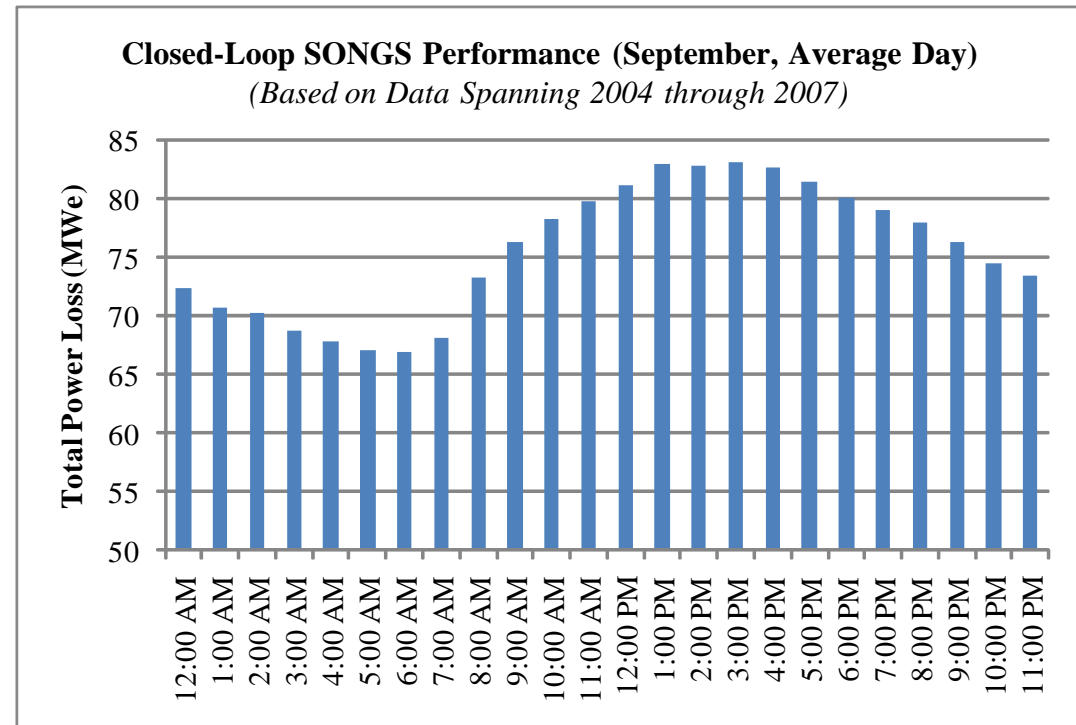


Attachment 3, Section 3: Monthly Closed-Loop Operational Power Losses by Time of Day

Time	Unit 2 Power Loss (MWe)	Unit 3 Power Loss (MWe)	Total Power Loss (MWe)
12:00 AM	36.8	36.9	73.8
1:00 AM	36.8	36.9	73.7
2:00 AM	36.6	36.7	73.4
3:00 AM	36.3	36.4	72.7
4:00 AM	36.1	36.2	72.3
5:00 AM	36.2	36.3	72.4
6:00 AM	36.1	36.2	72.3
7:00 AM	36.8	36.9	73.6
8:00 AM	38.0	38.1	76.1
9:00 AM	38.9	39.0	77.9
10:00 AM	39.5	39.6	79.2
11:00 AM	40.1	40.2	80.2
12:00 PM	40.4	40.5	80.9
1:00 PM	40.9	41.0	81.8
2:00 PM	41.2	41.3	82.4
3:00 PM	41.3	41.4	82.6
4:00 PM	41.0	41.1	82.1
5:00 PM	40.7	40.8	81.5
6:00 PM	40.1	40.2	80.2
7:00 PM	39.2	39.3	78.5
8:00 PM	38.9	39.0	77.9
9:00 PM	38.4	38.5	76.9
10:00 PM	38.1	38.2	76.2
11:00 PM	37.3	37.4	74.7
Average	38.6	38.7	77.2

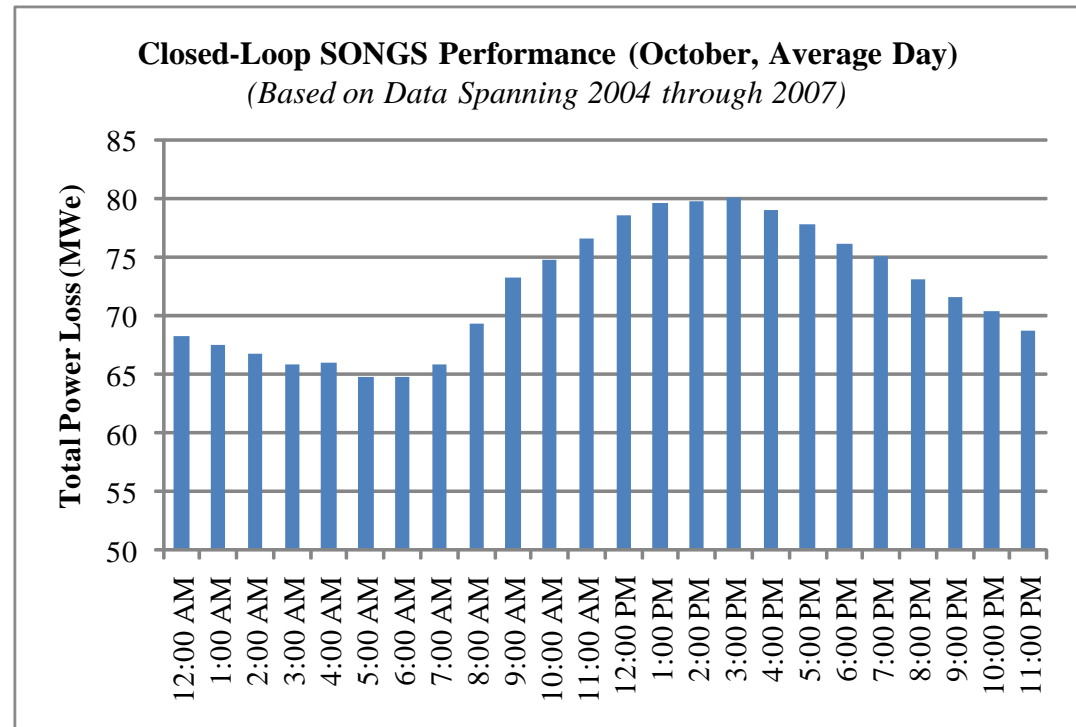


Time	Unit 2 Power Loss (MWe)	Unit 3 Power Loss (MWe)	Total Power Loss (MWe)
12:00 AM	36.2	36.3	72.4
1:00 AM	35.3	35.4	70.6
2:00 AM	35.1	35.2	70.2
3:00 AM	34.3	34.4	68.7
4:00 AM	33.9	34.0	67.9
5:00 AM	33.5	33.6	67.0
6:00 AM	33.4	33.5	66.9
7:00 AM	34.0	34.1	68.1
8:00 AM	36.6	36.7	73.3
9:00 AM	38.1	38.2	76.2
10:00 AM	39.1	39.2	78.3
11:00 AM	39.8	39.9	79.8
12:00 PM	40.5	40.6	81.1
1:00 PM	41.4	41.5	82.9
2:00 PM	41.3	41.4	82.8
3:00 PM	41.5	41.6	83.1
4:00 PM	41.3	41.4	82.6
5:00 PM	40.7	40.8	81.4
6:00 PM	40.0	40.1	80.0
7:00 PM	39.5	39.5	79.0
8:00 PM	39.0	39.1	78.0
9:00 PM	38.1	38.2	76.3
10:00 PM	37.2	37.3	74.5
11:00 PM	36.7	36.8	73.5
Average	37.7	37.8	75.6



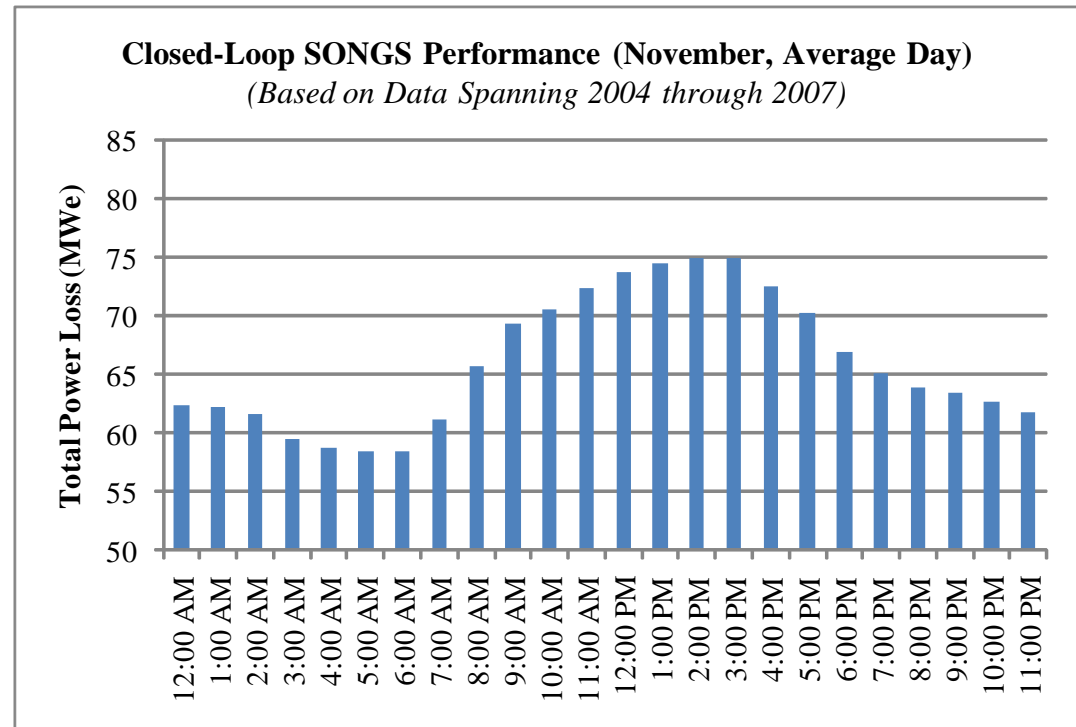
Attachment 3, Section 3: Monthly Closed-Loop Operational Power Losses by Time of Day

Time	Unit 2 Power Loss (MWe)	Unit 3 Power Loss (MWe)	Total Power Loss (MWe)
12:00 AM	34.1	34.2	68.3
1:00 AM	33.7	33.8	67.5
2:00 AM	33.3	33.4	66.8
3:00 AM	32.9	33.0	65.9
4:00 AM	32.9	33.0	65.9
5:00 AM	32.3	32.4	64.7
6:00 AM	32.4	32.5	64.8
7:00 AM	32.9	33.0	65.9
8:00 AM	34.7	34.7	69.4
9:00 AM	36.6	36.7	73.3
10:00 AM	37.4	37.5	74.9
11:00 AM	38.2	38.3	76.6
12:00 PM	39.2	39.3	78.6
1:00 PM	39.8	39.9	79.6
2:00 PM	39.8	39.9	79.7
3:00 PM	40.0	40.1	80.1
4:00 PM	39.5	39.6	79.1
5:00 PM	38.9	38.9	77.8
6:00 PM	38.0	38.1	76.2
7:00 PM	37.5	37.6	75.0
8:00 PM	36.5	36.6	73.1
9:00 PM	35.8	35.9	71.7
10:00 PM	35.1	35.2	70.4
11:00 PM	34.3	34.4	68.8
Average	36.1	36.2	72.3

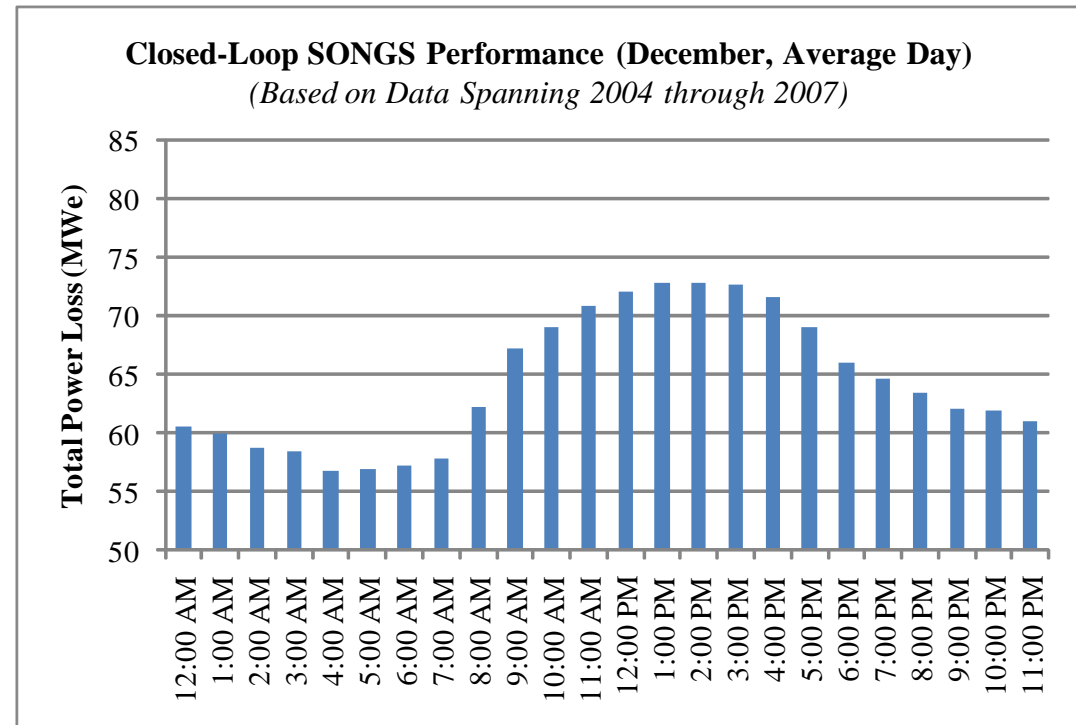


Attachment 3, Section 3: Monthly Closed-Loop Operational Power Losses by Time of Day

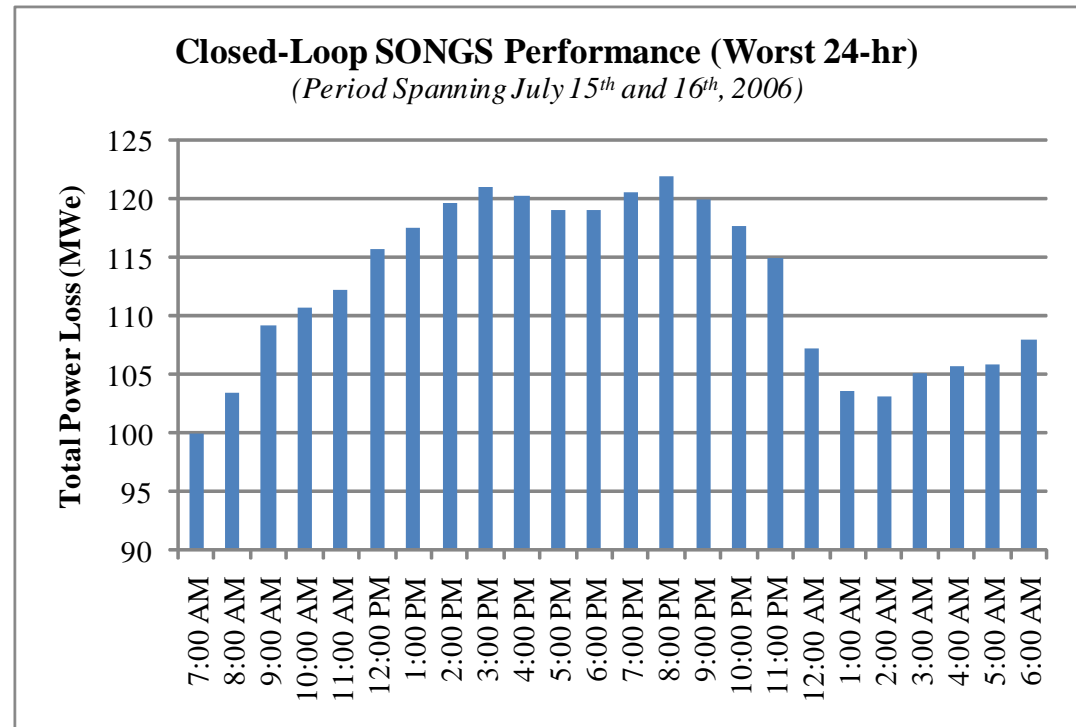
Time	Unit 2 Power Loss (MWe)	Unit 3 Power Loss (MWe)	Total Power Loss (MWe)
12:00 AM	31.1	31.2	62.4
1:00 AM	31.0	31.1	62.2
2:00 AM	30.8	30.9	61.7
3:00 AM	29.7	29.8	59.5
4:00 AM	29.3	29.4	58.7
5:00 AM	29.1	29.2	58.4
6:00 AM	29.2	29.3	58.4
7:00 AM	30.5	30.6	61.1
8:00 AM	32.8	32.9	65.7
9:00 AM	34.6	34.7	69.3
10:00 AM	35.3	35.4	70.6
11:00 AM	36.1	36.2	72.4
12:00 PM	36.8	36.9	73.8
1:00 PM	37.2	37.3	74.6
2:00 PM	37.4	37.5	75.0
3:00 PM	37.4	37.5	74.9
4:00 PM	36.2	36.3	72.6
5:00 PM	35.0	35.1	70.2
6:00 PM	33.4	33.5	66.9
7:00 PM	32.5	32.6	65.1
8:00 PM	31.9	32.0	63.9
9:00 PM	31.6	31.7	63.4
10:00 PM	31.3	31.3	62.6
11:00 PM	30.8	30.9	61.7
Average	33.0	33.1	66.0



Time	Unit 2 Power Loss (MWe)	Unit 3 Power Loss (MWe)	Total Power Loss (MWe)
12:00 AM	30.3	30.3	60.6
1:00 AM	29.9	30.0	60.0
2:00 AM	29.3	29.4	58.7
3:00 AM	29.2	29.2	58.4
4:00 AM	28.4	28.5	56.8
5:00 AM	28.4	28.5	57.0
6:00 AM	28.5	28.6	57.2
7:00 AM	28.9	29.0	57.9
8:00 AM	31.0	31.1	62.2
9:00 AM	33.5	33.6	67.2
10:00 AM	34.5	34.6	69.1
11:00 AM	35.4	35.5	70.9
12:00 PM	36.0	36.1	72.1
1:00 PM	36.4	36.5	72.9
2:00 PM	36.3	36.4	72.8
3:00 PM	36.3	36.4	72.7
4:00 PM	35.7	35.8	71.5
5:00 PM	34.5	34.6	69.1
6:00 PM	33.0	33.1	66.1
7:00 PM	32.3	32.3	64.6
8:00 PM	31.7	31.8	63.4
9:00 PM	31.0	31.1	62.1
10:00 PM	30.9	31.0	61.9
11:00 PM	30.4	30.5	61.0
Average	32.2	32.3	64.4



Time	Unit 2 Power Loss (MWe)	Unit 3 Power Loss (MWe)	Total Power Loss (MWe)
7:00 AM	49.9	50.1	100.0
8:00 AM	51.6	51.7	103.4
9:00 AM	54.5	54.6	109.2
10:00 AM	55.2	55.4	110.6
11:00 AM	56.0	56.2	112.2
12:00 PM	57.8	57.9	115.7
1:00 PM	58.7	58.8	117.4
2:00 PM	59.7	59.9	119.6
3:00 PM	60.4	60.6	121.0
4:00 PM	60.1	60.2	120.3
5:00 PM	59.4	59.5	119.0
6:00 PM	59.4	59.6	119.0
7:00 PM	60.2	60.3	120.5
8:00 PM	60.9	61.0	121.9
9:00 PM	59.9	60.1	120.0
10:00 PM	58.8	58.9	117.7
11:00 PM	57.4	57.5	114.9
12:00 AM	53.5	53.7	107.2
1:00 AM	51.7	51.9	103.6
2:00 AM	51.5	51.6	103.1
3:00 AM	52.5	52.6	105.0
4:00 AM	52.8	52.9	105.7
5:00 AM	52.9	53.0	105.8
6:00 AM	53.9	54.0	107.9
Average	56.2	56.3	112.5



Time	Unit 2 Low Vacuum Alarm (Average hours)	Unit 3 Low Vacuum Alarm (Average hours)
January	10	13
February	3	5
March	2	2
April	14	18
May	220	244
June	481	495
July	590	592
August	639	644
September	592	594
October	365	378
November	127	139
December	7	9
Annual	3411	3491

