The Empire District Electric Company
Missouri Jurisdiction
Docket No. ER-2019-0374
Schedule SDR-1 Revenue Requirement

Line No.	Description	Reference	3/31/2019 Test Year End	Pro Forma Adjustments	Adjusted Test Year End
	(a)	(b)	(c)	(d)	(e) = (c) + (d)
1	Rate Base	Schedules 2 & 3	1,301,068,347	156,292,122	1,457,360,469
2	Revenues	Schedules 4 & 5	538,554,855	(409,586)	538,145,269
3	Expenses	Schedules 4 & 5	395,553,192	50,492,361	446,045,553
4	Operating Income (Loss) Before Taxes	(Line 2 - Line 3)	143,001,663	(50,901,947)	92,099,716
5	Income Taxes	Schedule 4	9,911,046	(6,854,196)	3,056,850
6	Operating Income (Loss) After Taxes	(Line 4 - Line 5)	133,090,617	(44,047,751)	89,042,866
7	Current Rate of Return	(Line 6 / Line 1)	10.23%		6.11%
8	Rate of Return Requested	Schedule 6	7.50%	7.50%	7.50%
9	Required Net Operating Income	(Line 1 x Line 8)	97,522,879	11,715,032	109,237,911
10	Income Deficiency	(Line 9 - Line 6)	(35,567,738)	55,762,783	20,195,045
11	Gross Revenue Conversion factor	Schedule 7	1.313027	1.313027	1.313027
12	Revenue Deficiency	(Line 10 x Line 11)	(46,701,398)	73,218,036	26,516,638
13	Revenue Deficiency %	(Line 12 / Line 2)	-8.67%		4.93%
14	Revenue Requirement	(Line 2 + Line 12)	491,853,457	72,808,450	564,661,907

Liberty Utilities EMPIRE DISTRICT

The Empire District Electric Company
Missouri Jurisdiction
Docket No. ER-2019-0374
Schedule SDR-2 Rate Base

Line No.	Description	Reference	3/31/2019 Test Year End	Pro Forma Adjustments	Adjusted Test Year End
	(a)	(b)	(c)	(d)	(e) = (c) + (d)
1	Plant in Service:				
2	Plant in Service	WP 2.1	2,450,631,524	176,143,000	2,626,774,524
3	Accumulated Depreciation/Amortization	WP 2.2	(871,165,685)	(56,177,574)	(927,343,259)
4	Net Plant in Service		1,579,465,839	119,965,426	1,699,431,265
5	Working Capital:				
6	Cash Working Capital	WP 2.10	-	(1,060,829)	(1,060,829)
7	Prepayments (13-Month Average)	WP 2.4	7,478,372	174,360	7,652,732
8	Materials, Supplies, and Fuel Inventories (13-Month Average)	WP 2.3	46,853,981	27,388	46,881,369
9	Additions and Deductions:				
10	Customer Deposits	WP 2.8	(13,427,551)	189,103	(13,238,448)
11	Customer Advances	WP 2.9	(4,103,516)	263,021	(3,840,495)
12	Regulatory Assets	WP 2.6	63,409,608	26,919,655	90,329,263
13	Regulatory Liabilities	WP 2.7	(153,525,684)	10,336,884	(143,188,799)
14	Accumulated Deferred Income Taxes	WP 2.5	(225,082,702)	(522,886)	(225,605,588)
15	Total Rate Base		1,301,068,347	156,292,122	1,457,360,469

The Empire District Electric Company
Missouri Jurisdiction
Docket No. ER-2019-0374
Schedule SDR-3 Rate Base Adjustments

Line No.	Description	Reference	3/31/2019 Test Year End	Plant Additions RB ADJ 1	Common Plant RB ADJ 2
	(a)	(b)	(c)	(d)	(e)
1	Plant in Service:				
2	Plant in Service	WP 2.1	2,450,631,524	180,144,089	(4,001,090)
3	Accumulated Depreciation/Amortization	WP 2.2	(871,165,685)	(1,379,466)	2,615,671
4	Net Plant in Service		1,579,465,839	178,764,623	(1,385,418)
5	Working Capital:				
6	Cash Working Capital	WP 2.10	-	-	-
7	Prepayments	WP 2.4	7,478,372	-	-
8	Materials, Supplies, and Fuel Inventories	WP 2.3	46,853,981	-	-
9	Additions and Deductions:				
10	Customer Deposits	WP 2.8	(13,427,551)	-	-
11	Customer Advances	WP 2.9	(4,103,516)	-	-
12	Regulatory Assets	WP 2.6	63,409,608	-	-
13	Regulatory Liabilities	WP 2.7	(153,525,684)	-	-
14	Accumulated Deferred Income Taxes	WP 2.5	(225,082,702)	-	-
15	Total		1,301,068,347	178,764,623	(1,385,418)

Liberty Utilities
EMPIRE DISTRICT

The Empire District Electric Company
Missouri Jurisdiction
Docket No. ER-2019-0374
Schedule SDR-3 Rate Base Adjustments

Line No.	Description	Reference	3/31/2019 Test Year End	Water Inventory RB ADJ 3	Pension/OPEB RB ADJ 4	Low Income Pilot Program RB ADJ 5	EDR RB ADJ 6
	(a)	(b)	(c)	(f)	(g)	(h)	(i)
1	Plant in Service:						
2	Plant in Service	WP 2.1	2,450,631,524	-	-	-	-
3	Accumulated Depreciation/Amortization	WP 2.2	(871,165,685)	-	-	-	-
4	Net Plant in Service		1,579,465,839	-	-	-	-
5	Working Capital:						
6	Cash Working Capital	WP 2.10	-	-	-	-	-
7	Prepayments	WP 2.4	7,478,372	-	-	-	-
8	Materials, Supplies, and Fuel Inventories	WP 2.3	46,853,981	(55,635)	-	-	-
9	Additions and Deductions:						
10	Customer Deposits	WP 2.8	(13,427,551)	-	-	-	-
11	Customer Advances	WP 2.9	(4,103,516)	-	-	-	-
12	Regulatory Assets	WP 2.6	63,409,608	-	10,790,815	246,851	301,947
13	Regulatory Liabilities	WP 2.7	(153,525,684)	-	(3,418,175)	-	-
14	Accumulated Deferred Income Taxes	WP 2.5	(225,082,702)	-	-	-	-
15	Total		1,301,068,347	(55,635)	7,372,640	246,851	301,947

The Empire District Electric Company
Missouri Jurisdiction
Docket No. ER-2019-0374
Schedule SDR-3 Rate Base Adjustments

Line No.	Description	Reference	3/31/2019 Test Year End	ADIT True-Up RB ADJ 7	A/D True-up RB ADJ 8	Regulatory Assets/Liabilities True-Up RB ADJ 9
	(a)	(b)	(c)	(j)	(k)	(l)
1	Plant in Service:					
2	Plant in Service	WP 2.1	2,450,631,524	$ -	$ -	$ -
3	Accumulated Depreciation/Amortization	WP 2.2	(871,165,685)	-	(57,413,779)	
4	Net Plant in Service		1,579,465,839	-	(57,413,779)	-
5	Working Capital:					
6	Cash Working Capital	WP 2.10	-	-	-	-
7	Prepayments	WP 2.4	7,478,372	-	-	-
8	Materials, Supplies, and Fuel Inventories	WP 2.3	46,853,981	-	-	-
9	Additions and Deductions:					
10	Customer Deposits	WP 2.8	(13,427,551)	-	-	-
11	Customer Advances	WP 2.9	(4,103,516)	-	-	-
12	Regulatory Assets	WP 2.6	63,409,608	-	-	5,362,107
13	Regulatory Liabilities	WP 2.7	(153,525,684)	-	-	13,755,059
14	Accumulated Deferred Income Taxes	WP 2.5	(225,082,702)	(522,886)	-	-
15	Total		1,301,068,347	$ (522,886)	$ (57,413,779)	$ 19,117,166

Liberty Utilities EMPIRE DISTRICT

The Empire District Electric Company
Missouri Jurisdiction
Docket No. ER-2019-0374
Schedule SDR-3 Rate Base Adjustments

Line No.	Description	Reference	3/31/2019 Test Year End	Asset Retirement Obligations RB ADJ 10	Prepayments & Materials RB ADJ 11	CWC RB ADJ 12
	(a)	(b)	(c)	(m)		
1	Plant in Service:					
2	Plant in Service	WP 2.1	2,450,631,524	$ -	$ -	$ -
3	Accumulated Depreciation/Amortization	WP 2.2	(871,165,685)	-	-	-
4	Net Plant in Service		1,579,465,839	-	-	-
5	Working Capital:					
6	Cash Working Capital	WP 2.10	-	-	-	(1,060,829)
7	Prepayments	WP 2.4	7,478,372	-	174,360	-
8	Materials, Supplies, and Fuel Inventories	WP 2.3	46,853,981	-	83,023	-
9	Additions and Deductions:					
10	Customer Deposits	WP 2.8	(13,427,551)	-	-	-
11	Customer Advances	WP 2.9	(4,103,516)	-	-	-
12	Regulatory Assets	WP 2.6	63,409,608	10,217,935	-	-
13	Regulatory Liabilities	WP 2.7	(153,525,684)	-	-	-
14	Accumulated Deferred Income Taxes	WP 2.5	(225,082,702)	-	-	-
15	Total		1,301,068,347	$ 10,217,935	$ 257,383	$ (1,060,829)

The Empire District Electric Company
Missouri Jurisdiction
Docket No. ER-2019-0374
Schedule SDR-3 Rate Base Adjustments

Line No.	Description	Reference	3/31/2019 Test Year End	Customer Advances & Deposits RB ADJ 13	Total Pro Forma Adjustments	Adjusted Test Year End
	(a)	(b)	(c)		(n) = (d) thru (m)	(o) = (c) + (n)
1	Plant in Service:					
2	Plant in Service	WP 2.1	2,450,631,524		176,143,000	2,626,774,524
3	Accumulated Depreciation/Amortization	WP 2.2	(871,165,685)		(56,177,574)	(927,343,259)
4	Net Plant in Service		1,579,465,839	-	119,965,426	1,699,431,265
5	Working Capital:					
6	Cash Working Capital	WP 2.10	-		(1,060,829)	(1,060,829)
7	Prepayments	WP 2.4	7,478,372		174,360	7,652,732
8	Materials, Supplies, and Fuel Inventories	WP 2.3	46,853,981		27,388	46,881,369
					-	-
9	Additions and Deductions:				-	-
10	Customer Deposits	WP 2.8	(13,427,551)	189,103	189,103	(13,238,448)
11	Customer Advances	WP 2.9	(4,103,516)	263,021	263,021	(3,840,495)
12	Regulatory Assets	WP 2.6	63,409,608		26,919,655	90,329,263
13	Regulatory Liabilities	WP 2.7	(153,525,684)		10,336,884	(143,188,799)
14	Accumulated Deferred Income Taxes	WP 2.5	(225,082,702)		(522,886)	(225,605,588)
15	Total		1,301,068,347	$ 452,124	156,292,122	1,457,360,469

The Empire District Electric Company
Missouri Jurisdiction
Docket No. ER-2019-0374
Schedule 4 Operating Income

Line No.	Description	Reference	3/31/2019 Test Year End	Pro Forma Adjustments	Adjusted Test Year End Current Rates	Rate Increase Requested	Adjusted Test Year End Proposed Rates
	(a)	(b)	(c)	(d)	(e) = (c) + (d)	(f)	(g) = (e) + (f)
	REVENUES						
1	Residential	Schedule 5	$ 247,334,429	(24,815,988)	$ 222,518,442		
2	Commercial	Schedule 5	171,333,658	(11,503,458)	159,830,200		
3	Industrial	Schedule 5	81,413,350	(1,841,705)	79,571,645		
4	Public Street & Hwy Lighting	Schedule 5	3,864,366	(24,987)	3,839,379		
5	Other Public Authorities	Schedule 5	10,991,502	(382,921)	10,608,582		
6	Resale - Municipalities	Schedule 5	-	-	-		
7	Interdepartmental	Schedule 5	329,179	(11,072)	318,107		
8	Other Revenues	Schedule 5	(1,500,536)	30,795	(1,469,741)		
9	Total On-System Revenues:		513,765,949	(38,549,335)	475,216,614		
10	Resale - SPP Integrated Market	Schedule 5	24,788,906	38,139,748	62,928,655		
11	Total Electric Operating Revenues		$ 538,554,855	(409,586)	$ 538,145,269	$ 26,516,638	$ 564,661,907
	OPERATION AND MAINTENANCE EXPENSES						
12	Production Expenses	Schedule 5	185,955,973	32,746,343	218,702,316	-	218,702,316
13	Transmission Expenses	Schedule 5	22,316,120	(1,489,781)	20,826,339	-	20,826,339
14	Distribution Expenses	Schedule 5	22,641,086	483,082	23,124,168	-	23,124,168
15	Customer Accounts Expenses	Schedule 5	8,414,222	1,559,052	9,973,274	-	9,973,274
16	Customer Assistance Expenses	Schedule 5	4,253,278	1,774,556	6,027,833	-	6,027,833
17	Sales Expenses	Schedule 5	141,448	5,425	146,873	-	146,873
18	Administrative and General Expenses	Schedule 5	866,381	217,736	1,084,117	-	1,084,117
19	Other Administrative and General Expenses	Schedule 5	47,859,335	7,216,361	55,075,697	-	55,075,697
20	Depreciation Expense	Schedule 5	68,165,979	7,875,008	76,040,987	-	76,040,987
21	Amortization Expense	Schedule 5	3,598,034	2,659,413	6,257,447	-	6,257,447
22	Taxes other than Income Taxes	Schedule 5	31,341,337	(3,418,516)	27,922,821	-	27,922,821
23	Interest on Customer Deposits		-	863,681	863,681	-	863,681
24	Total Operation and Maintenance Expenses		$ 395,553,192	50,492,361	$ 446,045,553	$ -	$ 446,045,553
	Operating Income/(Loss) Before Taxes		$ 143,001,663	$ (50,901,947)	$ 92,099,716	$ 26,516,638	$ 118,616,354
	Income Taxes		9,911,046	(6,854,196)	3,056,850	6,321,601	9,378,451
	Operating Income/(Loss) After Taxes		$ 133,090,617	$ (44,047,751)	$ 89,042,866	$ 20,195,038	$ 109,237,904

The Empire District Electric Company
Missouri Jurisdiction
Docket No. ER-2019-0374
Schedule SDR-5 Operating Income Adjustment Summary

Line No.	Description	Reference	3/31/2019 Test Year End	FAC Revenues WP 4.1	Uncollectible Expense WP IS ADJ 1	Acquisition Costs WP IS ADJ 2	Open Positions WP IS ADJ 3	Overtime WP IS ADJ 4	Payroll WP IS ADJ 5	Medical, Dental, Vision WP IS ADJ 6
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
	REVENUES									
1	Residential	WP 4.1	$ 247,334,429	(6,673,969)						
2	Commercial	WP 4.1	171,333,658	(6,101,463)						
3	Industrial	WP 4.1	81,413,350	(3,794,537)						
4	Public Street & Hwy Lighting	WP 4.1	3,864,366	(79,718)						
5	Other Public Authorities	WP 4.1	10,991,502	(386,449)						
6	Resale - Municipalities	WP 4.1	-							
7	Interdepartmental	WP 4.1	329,179	(11,072)						
8	Other Revenues	WP 4.1	(1,500,536)							
9	Total On-System Revenues		513,765,949	(17,047,207)	-	-	-	-	-	-
10	Resale - SPP Integrated Market	WP 4.1	24,788,906							
11	Total Electric Operating Revenues		$ 538,554,855	(17,047,207)	$ -	$ -	$ -	$ -	$ -	$ -
	OPERATION AND MAINTENANCE EXPENSES									
12	Production Expenses	WP 4.2	185,955,973				373,895	163,968	206,165	
13	Transmission Expenses	WP 4.2	22,316,120				59,418	26,112	32,832	
14	Distribution Expenses	WP 4.2	22,641,086				236,741	109,128	137,213	
15	Customer Accounts Expenses	WP 4.2	8,414,222		34,183		133,828	62,383	78,437	
16	Customer Assistance Expenses	WP 4.2	4,253,278				44,090	19,408	24,403	
17	Sales Expenses	WP 4.2	141,448				2,624	1,241	1,560	
18	Administrative and General Expenses	WP 4.2	866,381							
19	Other Administrative and General Expenses	WP 4.2	47,859,335			(102,449)	482,524	66,585	97,872	(264,101)
20	Depreciation Expense	WP 4.3	68,165,979							
21	Amortization Expense	WP 4.4	3,598,034							
22	Taxes other than Income Taxes	WP 4.5	31,341,337				76,460	49,917	43,171	
23	Interest on Customer Deposits		-							
24	Total Operation and Maintenance Expenses		$ 395,553,192		$ 34,183	$ (102,449)	$ 1,409,581	$ 498,742	$ 621,653	$ (264,101)
25	Operating Income/(Loss) Before Taxes		$ 143,001,663	$ (17,047,207)	$ (34,183)	$ 102,449	$ (1,409,581)	$ (498,742)	$ (621,653)	$ 264,101
26	Income Taxes		9,911,046							
27	Operating Income/(Loss) AfterTaxes		$ 133,090,617	$ (17,047,207)	$ (34,183)	$ 102,449	$ (1,409,581)	$ (498,742)	$ (621,653)	$ 264,101

Liberty Utilities
EMPIRE DISTRICT

The Empire District Electric Company
Missouri Jurisdiction
Docket No. ER-2019-0374
Schedule SDR-5 Operating Income Adjustment Summary

Line No.	Description	Reference	3/31/2019 Test Year End	Annualize Depreciation Expense WP IS ADJ 7	Normalize Maintenance of Boiler Plant WP IS ADJ 8	Customer Load Growth WP IS ADJ 9	EDR Revenues WP IS ADJ 10	Pension and OPEB WP IS ADJ 11	Fuel & Purchased Power WP IS ADJ 12
	(a)	(b)	(c)	(k)	(l)	(m)	(n)	(o)	(p)
	REVENUES								
1	Residential	WP 4.1	$ 247,334,429						
2	Commercial	WP 4.1	171,333,658						
3	Industrial	WP 4.1	81,413,350			1,109,211	462,805		
4	Public Street & Hwy Lighting	WP 4.1	3,864,366						
5	Other Public Authorities	WP 4.1	10,991,502						
6	Resale - Municipalities	WP 4.1	-						
7	Interdepartmental	WP 4.1	329,179						
8	Other Revenues	WP 4.1	(1,500,536)						30,795
9	Total On-System Revenues		513,765,949	-	-	1,109,211	462,805	-	30,795
10	Resale - SPP Integrated Market	WP 4.1	24,788,906						$ 38,139,748
11	Total Electric Operating Revenues		$ 538,554,855	$ -	$ -	$ 1,109,211	$ 462,805	$ -	$ 38,170,543
	OPERATION AND MAINTENANCE EXPENSES								
12	Production Expenses	WP 4.2	185,955,973		410,030				23,818,181
13	Transmission Expenses	WP 4.2	22,316,120						(1,608,142)
14	Distribution Expenses	WP 4.2	22,641,086						
15	Customer Accounts Expenses	WP 4.2	8,414,222						
16	Customer Assistance Expenses	WP 4.2	4,253,278						
17	Sales Expenses	WP 4.2	141,448						
18	Administrative and General Expenses	WP 4.2	866,381						
19	Other Administrative and General Expenses	WP 4.2	47,859,335					6,073,947	
20	Depreciation Expense	WP 4.3	68,165,979	7,875,008					
21	Amortization Expense	WP 4.4	3,598,034	40,087					
22	Taxes other than Income Taxes	WP 4.5	31,341,337						
23	Interest on Customer Deposits		-						
24	Total Operation and Maintenance Expenses		$ 395,553,192	$ 7,915,095	$ 410,030	$ -	$ -	$ 6,073,947	$ 22,210,039
25	Operating Income/(Loss) Before Taxes		$ 143,001,663	$ (7,915,095)	$ (410,030)	$ 1,109,211	$ 462,805	$ (6,073,947)	$ 15,960,504
26	Income Taxes		9,911,046						
27	Operating Income/(Loss) AfterTaxes		$ 133,090,617	$ (7,915,095)	$ (410,030)	$ 1,109,211	$ 462,805	$ (6,073,947)	$ 15,960,504

Liberty Utilities EMPIRE DISTRICT

The Empire District Electric Company
Missouri Jurisdiction
Docket No. ER-2019-0374
Schedule SDR-5 Operating Income Adjustment Summary

Line No.	Description	Reference	3/31/2019 Test Year End	Interest on Customer Deposits WP IS ADJ 13	Customer Annualization WP IS ADJ 14	Weather Normalized Revenue WP IS ADJ 15	Insurance Premiums WP IS ADJ 16	Non-Deductible WP IS ADJ 17	Property Tax WP IS ADJ 18	Low Income Pilot Amortization WP IS ADJ 19
	(a)	(b)	(c)	(q)	(r)	(s)	(t)	(u)	(v)	(w)
	REVENUES									
1	Residential	WP 4.1	$ 247,334,429		$ 1,229,663	$ (13,576,167)				
2	Commercial	WP 4.1	171,333,658		860,116	(4,806,135)				
3	Industrial	WP 4.1	81,413,350		-	-				
4	Public Street & Hwy Lighting	WP 4.1	3,864,366							
5	Other Public Authorities	WP 4.1	10,991,502							
6	Resale - Municipalities	WP 4.1	-							
7	Interdepartmental	WP 4.1	329,179							
8	Other Revenues	WP 4.1	(1,500,536)							
9	Total On-System Revenues		513,765,949	-	2,089,780	(18,382,302)	-	-	-	-
10	Resale - SPP Integrated Market	WP 4.1	24,788,906							
11	Total Electric Operating Revenues		$ 538,554,855	$ -	$ 2,089,780	$ (18,382,302)	$ -	$ -	$ -	$ -
	OPERATION AND MAINTENANCE EXPENSES									
12	Production Expenses	WP 4.2	185,955,973							
13	Transmission Expenses	WP 4.2	22,316,120							
14	Distribution Expenses	WP 4.2	22,641,086							
15	Customer Accounts Expenses	WP 4.2	8,414,222							
16	Customer Assistance Expenses	WP 4.2	4,253,278							49,370
17	Sales Expenses	WP 4.2	141,448							
18	Administrative and General Expenses	WP 4.2	866,381							
19	Other Administrative and General Expenses	WP 4.2	47,859,335				877,216	(15,233)		
20	Depreciation Expense	WP 4.3	68,165,979							
21	Amortization Expense	WP 4.4	3,598,034							
22	Taxes other than Income Taxes	WP 4.5	31,341,337						6,335,625	
23	Interest on Customer Deposits		-	$ 863,681						
24	Total Operation and Maintenance Expenses		$ 395,553,192	$ 863,681	$ -	$ -	$ 877,216	$ (15,233)	$ 6,335,625	$ 49,370
25	Operating Income/(Loss) Before Taxes		$ 143,001,663	$ (863,681)	$ 2,089,780	$ (18,382,302)	$ (877,216)	$ 15,233	$ (6,335,625)	$ (49,370)
26	Income Taxes		9,911,046							
27	Operating Income/(Loss) AfterTaxes		$ 133,090,617	$ (863,681)	$ 2,089,780	$ (18,382,302)	$ (877,216)	$ 15,233	$ (6,335,625)	$ (49,370)

The Empire District Electric Company
Missouri Jurisdiction
Docket No. ER-2019-0374
Schedule SDR-5 Operating Income Adjustment Summary

Line No.	Description	Reference	3/31/2019 Test Year End	MO Solar Initiative Amortization Expense WP IS ADJ 20	MO ITC Revenues WP IS ADJ 21	Rate Case Expense WP IS ADJ 22	SBEDR Amortization WP IS ADJ 23	Unprotected Excess ADIT WP IS ADJ 24	MEEIA Amortization WP IS ADJ 25	Reg. Asset Amortization WP IS ADJ 26
	(a)	(b)	(c)	(x)	(y)	(z)	(aa)	(ab)	(ac)	(ad)
	REVENUES									
1	Residential	WP 4.1	$ 247,334,429		$ 62,897					
2	Commercial	WP 4.1	171,333,658		57,811					
3	Industrial	WP 4.1	81,413,350		35,148					
4	Public Street & Hwy Lighting	WP 4.1	3,864,366		835					
5	Other Public Authorities	WP 4.1	10,991,502		3,528					
6	Resale - Municipalities	WP 4.1	-							
7	Interdepartmental	WP 4.1	329,179							
8	Other Revenues	WP 4.1	(1,500,536)							
9	Total On-System Revenues		513,765,949	-	160,218	-	-	-		-
10	Resale - SPP Integrated Market	WP 4.1	24,788,906							
11	Total Electric Operating Revenues		$ 538,554,855	$ -	$ 160,218	$ -	$ -	$ -		$ -
	OPERATION AND MAINTENANCE EXPENSES									
12	Production Expenses	WP 4.2	185,955,973							2,933,728
13	Transmission Expenses	WP 4.2	22,316,120							
14	Distribution Expenses	WP 4.2	22,641,086							
15	Customer Accounts Expenses	WP 4.2	8,414,222							
16	Customer Assistance Expenses	WP 4.2	4,253,278	1,401,804			60,389		68,106	
17	Sales Expenses	WP 4.2	141,448							
18	Administrative and General Expenses	WP 4.2	866,381			217,736	-			
19	Other Administrative and General Expenses	WP 4.2	47,859,335							
20	Depreciation Expense	WP 4.3	68,165,979							
21	Amortization Expense	WP 4.4	3,598,034							
22	Taxes other than Income Taxes	WP 4.5	31,341,337							
23	Interest on Customer Deposits		-							
24	Total Operation and Maintenance Expenses		$ 395,553,192	$ 1,401,804	$ -	$ 217,736	$ 60,389	$ -	$ 68,106	$ 2,933,728
25	Operating Income/(Loss) Before Taxes		$ 143,001,663	$ (1,401,804)	$ 160,218	$ (217,736)	$ (60,389)	$ -	$ (68,106)	$ (2,933,728)
26	Income Taxes		9,911,046					(8,540,550)		
27	Operating Income/(Loss) AfterTaxes		$ 133,090,617	$ (1,401,804)	$ 160,218	$ (217,736)	$ (60,389)	$ 8,540,550	$ (68,106)	$ (2,933,728)

Liberty Utilities
EMPIRE DISTRICT

The Empire District Electric Company
Missouri Jurisdiction
Docket No. ER-2019-0374
Schedule SDR-5 Operating Income Adjustment Summary

Line No.	Description	Reference	3/31/2019 Test Year End	O&M Trackers Amortization WP IS ADJ 27	Protected Excess ADIT WP IS ADJ 28	Plum Point Contract WP IS ADJ 29	Credit Card Fees WP IS ADJ 30	Franchise Fees WP IS ADJ 31	Franchise Taxes WP IS ADJ 32	Unbilled Revenue WP IS ADJ 33
	(a)	(b)	(c)	(ae)	(af)	(ag)	(ah)	(ai)	(aj)	(ak)
	REVENUES									
1	Residential	WP 4.1	$ 247,334,429					(6,942,826)		(1,116,929)
2	Commercial	WP 4.1	171,333,658					(2,792,987)		39,196
3	Industrial	WP 4.1	81,413,350					(187,537)		42,803
4	Public Street & Hwy Lighting	WP 4.1	3,864,366							-
5	Other Public Authorities	WP 4.1	10,991,502							
6	Resale - Municipalities	WP 4.1	-							
7	Interdepartmental	WP 4.1	329,179							
8	Other Revenues	WP 4.1	(1,500,536)							
9	Total On-System Revenues		513,765,949	-	-	-	-	(9,923,350)	-	(1,034,930)
10	Resale - SPP Integrated Market	WP 4.1	24,788,906							
11	Total Electric Operating Revenues		$ 538,554,855	$ -	$ -	$ -	$ -	$ (9,923,350)	$ -	$ (1,034,930)
	OPERATION AND MAINTENANCE EXPENSES									
12	Production Expenses	WP 4.2	185,955,973	(224,322)		266,228				
13	Transmission Expenses	WP 4.2	22,316,120							
14	Distribution Expenses	WP 4.2	22,641,086							
15	Customer Accounts Expenses	WP 4.2	8,414,222				1,250,222			
16	Customer Assistance Expenses	WP 4.2	4,253,278	106,985		-				
17	Sales Expenses	WP 4.2	141,448							
18	Administrative and General Expenses	WP 4.2	866,381							
19	Other Administrative and General Expenses	WP 4.2	47,859,335							
20	Depreciation Expense	WP 4.3	68,165,979							
21	Amortization Expense	WP 4.4	3,598,034							
22	Taxes other than Income Taxes	WP 4.5	31,341,337						(9,923,690)	
23	Interest on Customer Deposits		-							
24	Total Operation and Maintenance Expenses		$ 395,553,192	$ (117,337)	$ -	$ 266,228	$ 1,250,222	$ -	$ (9,923,690)	$ -
25	Operating Income/(Loss) Before Taxes		$ 143,001,663	$ 117,337	$ -	$ (266,228)	$ (1,250,222)	$ (9,923,350)	$ 9,923,690	$ (1,034,930)
26	Income Taxes		9,911,046		(2,263,671)					
27	Operating Income/(Loss) AfterTaxes		$ 133,090,617	$ 117,337	$ 2,263,671	$ (266,228)	$ (1,250,222)	$ (9,923,350)	$ 9,923,690	$ (1,034,930)

Liberty Utilities
EMPIRE DISTRICT

The Empire District Electric Company
Missouri Jurisdiction
Docket No. ER-2019-0374
Schedule SDR-5 Operating Income Adjustment Summary

Line No.	Description	Reference	3/31/2019 Test Year End	Tax Rate Change Jan-Mar WP IS ADJ 34	Asset Retirement Obligations WP IS ADJ 35	Riverton O&M Adjustment WP IS ADJ 36	Income Tax Adjustment WP IS ADJ 37	Total Missouri Pro Forma Adjustments	Adjusted Test Year End
	(a)	(b)	(c)	(al)	(am)	(an)	(ao)	(ap) = (d) thru (ao)	(aq) = (c) + (ap)
	REVENUES								
1	Residential	WP 4.1	$ 247,334,429	2,201,343				(24,815,988)	$ 222,518,442
2	Commercial	WP 4.1	171,333,658	1,240,004				(11,503,458)	$ 159,830,200
3	Industrial	WP 4.1	81,413,350	490,402				(1,841,705)	$ 79,571,645
4	Public Street & Hwy Lighting	WP 4.1	3,864,366	53,896				(24,987)	$ 3,839,379
5	Other Public Authorities	WP 4.1	10,991,502					(382,921)	$ 10,608,582
6	Resale - Municipalities	WP 4.1	-					-	$ -
7	Interdepartmental	WP 4.1	329,179					(11,072)	$ 318,107
8	Other Revenues	WP 4.1	(1,500,536)					30,795	$ (1,469,741)
9	Total On-System Revenues		513,765,949	3,985,645				(38,549,335)	475,216,614
10	Resale - SPP Integrated Market	WP 4.1	24,788,906					$ 38,139,748	$ 62,928,655
11	Total Electric Operating Revenues		$ 538,554,855	$ 3,985,645	$ -	$ -	$ -	$ (409,586)	$ 538,145,269
	OPERATION AND MAINTENANCE EXPENSES								
12	Production Expenses	WP 4.2	185,955,973			4,798,471		32,746,343	$ 218,702,316
13	Transmission Expenses	WP 4.2	22,316,120					(1,489,781)	$ 20,826,339
14	Distribution Expenses	WP 4.2	22,641,086					483,082	$ 23,124,168
15	Customer Accounts Expenses	WP 4.2	8,414,222					1,559,052	$ 9,973,274
16	Customer Assistance Expenses	WP 4.2	4,253,278					1,774,556	$ 6,027,833
17	Sales Expenses	WP 4.2	141,448					5,425	$ 146,873
18	Administrative and General Expenses	WP 4.2	866,381					217,736	$ 1,084,117
19	Other Administrative and General Expenses	WP 4.2	47,859,335					7,216,361	$ 55,075,697
20	Depreciation Expense	WP 4.3	68,165,979					7,875,008	$ 76,040,987
21	Amortization Expense	WP 4.4	3,598,034		2,619,326			2,659,413	$ 6,257,447
22	Taxes other than Income Taxes	WP 4.5	31,341,337					(3,418,516)	$ 27,922,821
23	Interest on Customer Deposits		-					863,681	$ 863,681
24	Total Operation and Maintenance Expenses		$ 395,553,192	$ -	$ 2,619,326	$ 4,798,471	$ -	$ 50,492,361	$ 446,045,553
25	Operating Income/(Loss) Before Taxes		$ 143,001,663	$ 3,985,645	$ (2,619,326)	$ (4,798,471)	$ -	$ (50,901,947)	$ 92,099,716
26	Income Taxes		9,911,046				3,950,024	$ (6,854,196)	$ 3,056,850
27	Operating Income/(Loss) AfterTaxes		$ 133,090,617	$ 3,985,645	$ (2,619,326)	$ (4,798,471)	$ (3,950,024)	$ (44,047,751)	$ 89,042,866

Liberty Utilities
EMPIRE DISTRICT

The Empire District Electric Company
Missouri Jurisdiction
Docket No. ER-2019-0374
Schedule SDR-6 Weighted Average Cost of Capital

Line No.	Description	Capital Per Books 3/31/2019	Pro Forma Adjustments	Adjusted Capital 3/31/2019	Capital Ratio	Cost Rate	Rate of Return
	(a)	(b)	(c)	(d) = (b) + (c)	(e)	(f)	(g) = (e) x (f)
1	Long Term Debt	$ 780,000,000	$ -	$ 780,000,000	48.09%	4.85%	2.33%
2	Trust Preferred Stock	-	-	-	0.00%	0.00%	0.00%
3	Common Equity	842,107,842	-	842,107,842	51.91%	9.95%	5.17%
4	Total Capital	$ 1,622,107,842	$ -	$ 1,622,107,842	100.00%		7.50%

The Empire District Electric Company
Missouri Jurisdiction
Docket No. ER-2019-0374
Schedule SDR-7 Gross Revenue Conversion Factor

Line No.	Description	Reference	Rate	Factor
	(a)	(b)	(c)	(d)
1	Effective State Income Tax	WP 7.1	3.60%	3.60%
2	Federal Taxable Income	1 - Line 1		96.40%
3	Effective Federal Income Tax	WP 7.1	20.25%	20.25%
4	Operating Income	Line 2 - Line 3		76.16%
5	Gross Revenue Conversion Factor	1 / Line 4		1.3130

The Empire District Electric Company
Missouri Jurisdiction
Docket No. ER-2019-0374
Schedule SDR-8 Income Tax Calculation

Line No.	Description (a)	Reference (b)	Adjusted Federal (c)	Adjusted State (d)	Total Taxes (e) = (c) + (d)
1	Net Operating Income/(Loss) Before Tax		$ 92,099,716	$ 92,099,716	
2	Effective Tax Rates		20.25%	3.60%	
3	Tax - Subtotal	Line 1 x Line 2	18,645,614	3,311,076	
4	Interest Synchronization - Tax Impact	WP 8.1	(6,874,798)	(1,220,822)	
5	Taxes - Total	Line 5 + Line 6	$ 11,770,816	$ 2,090,254	$ 13,861,070
6	Deferred Taxes	Schedule 2	225,605,588	-	225,605,588
7	Current Taxes	Line 5 - Line 6	(213,834,772)	2,090,254	(211,744,518)
8	Taxes - Total	Line 6 + Line 7	$ 11,770,816	$ 2,090,254	13,861,070
9	Excess ADIT Amortization	Schedule 5	$ (10,804,220)	$ -	(10,804,220)
10	Adjusted Taxes - Total		$ 966,596	$ 2,090,254	3,056,850

MINIMUM FILING REQUIREMENTS

The Empire District Electric Company

ER-2019-0374

The Empire District Electric Company

ER-2019-0374

Statement of Missouri Revenue Increase Request

The amount of annual revenue, from Missouri electric customers, which would result from the application of the proposed rates in this case, would be $26,516,638 more than the annual revenue under existing rates. This would represent an overall increase of 4.93% for Missouri jurisdictional revenues.

4 CSR-240-3.030 (3)(B)(1)

Explanation of Why Rate Relief is Needed

In accordance with RSMo. 386.266.4(3), the Company is required to file a general rate case with the effective date of new rates to be no later than four years after the effective date of the Commission's order for the continuation of the Company's Fuel Adjustment Clause. The last order for the FAC continuance was effective September 9th, 2016 so new general rates need to be effective no later than September 9th, 2020.

To recover the capital improvements the Company has made since the last rate case. As a result of the increased additional capital investments, the Company has also seen increased costs for property taxes and depreciation expense, as well as, normal and inflationary increases to operating costs. There has also been a significant increase in the Riverton Unit 12's Long Term Service Agreement "LTSA" costs.

4 CSR-240-3.030 (3)(B)(7)

Missouri Counties and Communities Affected

Barry County	**Greene County (cont.)**	**Lawrence County (cont.)**	**Newton County (cont.)**
Butterfield	Willard	Hoberg	Stella
Purdy		Marionville	Wentworth
	Hickory County	Miller	
Barton County	Cross Timbers	Phelps *	**Polk County**
Golden City	Hermitage	Pierce City	Aldrich
Kenoma *	Preston	Stotts City	Bolivar
	Weaubleau	Verona	Brighton*
Cedar County	Wheatland		Dunnegan*
Caplinger Mills *		**McDonald County**	Fair Play
Stockton	**Jasper County**	Anderson	Flemington
	Airport Drive	Ginger Blue	Halfway
Christian County	Alba	Goodman	Humansville
Billings	Asbury	Lanagan	Morrisville
Clever	Avilla	Noel	Pleasant Hope
Fremont Hills	Brooklyn Heights	Pineville	
Nixa	Carl Junction	Southwest City	**St Clair County**
Ozark	Carterville		Collins
Sparta	Carthage	**Newton County**	Gerster
	Carytown	Cliff Village	Vista
Dade County	Duneweg	Dennis Acres	
Arcola	Duquesne	Diamond	**Stone County**
Everton	Fidelity	Fairview	Branson West
Greenfield	Jasper	Fort Crowder *	Galena
South Greenfield	Joplin	Granby	Hurley
	LaRussell	Grand Falls Plaza	Reeds Spring
Dallas County	Neck City	Leawood	
Buffalo	Oronogo	Loma Linda	**Taney County**
Louisburg	Purcell	Neosho	Branson
Urbana	Reeds	Newtonia	Bull Creek
	Sarcoxie	Redings Mill	Forsyth
Greene County	Waco	Ritchey	Forsyth Sub*
Ash Grove	Webb City	Saginaw	Hollister
Bois D'Arc *		Seneca	Kirbyville
Fair Grove	**Lawrence County**	Shoal Creek Drive	Mount Branson*
Republic	Aurora	Shoal Creek Estates	Powersite *
Strafford	Freistatt	Silver Creek	
Walnut Grove	Halltown	Stark City	

* Not Incorporated

4 CSR-240-3.030 (3)(B)(2)

Schedule 3, Page 1 of 1
4 CSR 240-3.030(3)(B)(3)(4)(5)

Class	Average Customer Count	Average Annual Customer Impact [1] Bill Change $	Bill Change %	Aggregate Annual Change	[1] Aggregate Annual % Change
RG-Residential	130,887	$ 96.24	5.8%	$ 12,596,881	5.8%
CB-Commercial	18,072	$ 125.82	5.2%	$ 2,273,755	5.2%
SH-Small Heating	3,028	$ 164.22	5.0%	$ 497,260	5.0%
GP-General Power	1,793	$ 1,476.02	3.1%	$ 2,646,498	3.1%
SC-P PRAXAIR Transmission	1	$ 212,414.31	5.1%	$ 212,414	5.1%
TEB-Total Electric Bldg	946	$ 1,172.45	3.0%	$ 1,109,335	3.0%
PFM-Feed Mill/Grain Elev	10	$ 115.67	1.6%	$ 1,157	1.6%
LP-Large Power	40	$ 81,320.65	5.2%	$ 3,246,049	5.2%
MS-Miscellaneous	3	$ 282.94	5.8%	$ 849	5.8%
SPL-Municipal St Lighting	7	$ 29,358.47	9.4%	$ 205,509	9.4%
PL-Private Lighting	252	$ 553.88	3.4%	$ 139,347	3.4%
LS-Special Lighting	126	$ 72.13	6.9%	$ 9,076	6.9%
Total Customers	155,165			$ 22,938,132	4.9%

The proposed annual bill reflects a Fuel Adjustment Charge of $0.00259 per kWh; and EECR charge of $0.00039 per kWh
The current annual bill reflects a Tax Reform Credit of $0.00516 per kWh; a Fuel Adjustment Charge of $0.00351 per kWh; and a EECR of $0.00039 per kWh

RG-Residential (Monthly)	$ 8.02	5.8%

FOR IMMEDIATE RELEASE

LIBERTY UTILITIES FILES FOR MISSOURI ELECTRIC RATE UPDATES

JOPLIN, MO – August 14, 2019 – On Wednesday, August 14, 2019, Liberty Utilities - The Empire District Electric Company (Liberty-Empire) submitted a request to the Missouri Public Service Commission (MPSC) for updated Missouri electric rates. If approved by the MPSC, residential customers with an average monthly usage of 1,000 kWh will see an approximate increase of $7.85 per month, a change of 5.9 percent.

Customers qualifying for the Low Income Pilot Program will see an approximate increase of $1.85 per month.

It has been nearly four years since Liberty-Empire filed its last general rate case for Missouri electric customers. The MPSC will have up to 11 months to review this request. If approved, updated rates will go into effect by summer 2020.

Investments in Infrastructure and Reliability (Project Toughen Up)

Since April 2016, Liberty-Empire has invested approximately $338 million in upgrades to its Missouri electric transmission and distribution system. This investment includes the replacement of over 6,400 poles and the installation of over 11,000 sectionalizing devices, which has improved reliability of the system and helped significantly decrease the number of customers impacted during outages.

Other Components of Filing

- **Tax Cuts and Jobs Act** – A portion of this filing proposes to return $11 million tax dollars to customers.
- **Savings Opportunities for Customers** – Liberty-Empire has requested a continuation of the Low Income Pilot Program, which provides a credit for the customer charge for qualifying Missouri customers. Liberty-Empire has also proposed to continue its current energy efficiency programs, including rebate opportunities for Missouri electric customers.
- **Environmental Benefits** – Liberty-Empire will continue to offer its Solar Rebate Program, which has provided over $16 million to qualifying Missouri electric customers since its inception in 2015.

- **High Bill Protection During Harsh Temperatures** – Liberty-Empire is requesting the inclusion of a Weather Normalization Rider (WNR) to the bills of Missouri electric customers. The purpose of the WNR is to adjust customer bills to reflect normal weather conditions. For weather periods that are milder than normal, a WNR charge will be applied to the bill. For weather periods that are harsher than normal, a credit will be applied to the bill. This rider would prevent over or under-collection by the Company during abnormal weather conditions.

A Quote from Our President

"These investments are a necessary part of delivering the safe and reliable power that our Missouri electric customers expect. As a utility, the way we deliver power is changing at a rapid pace. It's important for us to innovate to ensure we're meeting our customers' needs now and in the future," says David Swain, President, Liberty Utilities-Central Region.

About Liberty Utilities

Liberty Utilities Co. owns and operates regulated water, wastewater, natural gas and electric transmission and distribution utilities in 12 states, delivering responsive and reliable essential services to nearly 780,000 customers across the United States. With a local approach to management, service and support, we deliver efficient, dependable services to meet the needs of our customers. Liberty Utilities provides a superior customer experience through walk-in customer centers, locally focused conservation and energy efficiency initiatives, and programs for businesses and residential customers. We measure our performance in terms of service reliability, an enjoyable customer experience, and an unwavering dedication to public and workplace safety. Liberty Utilities currently operates in Arizona, Arkansas, California, Georgia, Illinois, Iowa, Kansas, Massachusetts, Missouri, New Hampshire, Oklahoma and Texas. For more information, please visit www.LibertyUtilities.com.

###

Contact:

Jillian Curtis
Central Region Marketing & Communications
417-625-5180
Jillian.Curtis@libertyutilities.com

Liberty Utilities Missouri:

Rate case at a glance

- over 150,000 customers served
- Total request of $26.5 million
- Approximate monthly increase of $7.85 for an average customer using 1,000 kwh per month
- Serving Barton, Jasper, Newton, McDonald, St. Clair, Cedar, Dade, Lawrence, Barry, Hickory, Polk, Greene, Christian, Stone, Taney, and Dallas Counties

Liberty Utilities

On August 14, 2019, Liberty Utilities - Empire District submitted a request to the Missouri Public Service Commission (MPSC) to update the company's electric rates. If approved, an average residential customer using 1,000 kWh per month would see an approximate increase of $7.85 on their monthly bill. Qualifying low income customers would see an approximate increase of $1.85.

Components of Filing:

Providing Savings Opportunities for our Customers

In order to provide savings opportunities for customers, we have requested the continuation of our Low Income Pilot Program, which provides a credit for the customer charge for qualifying Missouri electric customers. In addition, we plan to continue offering energy efficiency rebate opportunities, as well as solar rebate opportunities, to our Missouri electric customers.

Making Power More Reliable for our Customers

At Liberty Utilities, we are committed to providing our customers with the safe and reliable power they expect. This means investing in our infrastructure and hardening our system against extreme weather and other causes of outages. Since 2016, we have invested approximately $338 million in our Missouri electric transmission and distribution system to help increase safety and reliability.

Normalizing Bills for Customers During Irregular Weather

Missouri weather can be unpredictable and this can affect customer bills. In this filing, we are requesting the inclusion of a Weather Normalization Rider (WNR) which will appear on bills as a credit during harsh weather periods and as a charge during mild weather periods. If approved, this would prevent over or under collection by the company during irregular weather. Credits would also benefit the customer during harsher than normal weather.

What is a rate case?
A rate case is a public regulatory review process in which a utility must demonstrate to its state public service commission why a proposed change in rates is needed. This independent public process helps ensure transparency and fair rates based on the costs to serve customers.

Who sets the rates customers pay for electricity?
Liberty Utilities is required to provide every customer in our service area with reliable electricity at rates approved by the public service commission of each state. In exchange, the utility is allowed the opportunity (not a guarantee) to earn a fair return for investors. Even though our regulators will ultimately determine any changes to customer rates, we pledge to do our part to keep rates as reasonable as possible.

What is the process? Will customers have a chance to share input?
First, Liberty Utilities must demonstrate to state utility regulators why a rate change is needed. The Missouri Public Service Commission and other interested stakeholders review our filings and vet the company's request. The commission then thoroughly reviews our request and holds public hearings to allow customers to comment. This process will take up to 11 months.

What is Liberty Utilities doing to help their customers reduce energy and manage their bills?
Liberty Utilities has implemented a variety of payment options to help customers manage their monthly bills. One option, the Average Payment Plan, creates an average based on the customer's previous year of energy usage, making their bill the same each month, despite fluctuations in temperatures. This allows customers to budget more easily. Liberty Utilities has also launched an Energy Analysis program that notifies customers when their bill is $30 higher or lower than the previous month and provides them tips through email to reduce their energy use.

Liberty Utilities

For more information visit: libertyutilities.com/rates

Stub Period Earnings Anaylsis
Tax Reform Revenue Requirement Impact Calculation

Line No.	Description Revenue Requirement Component	Missouri 21% Federal Income Tax Rate
1	Operating Expense	265,408,206
2	Rate Base	1,362,690,378
3	ROR	7.33%
4	Return on Rate Base	99,925,874
5	Interest Sync:	
6	Rate Base	1,362,690,378
7	Weighted Cost of Debt	2.72%
8	Interest Deduct	37,119,686
9	Return on Rate Base	99,925,874
10	Interest Deduct	(37,119,686)
11	Net Income (Equity Portion of Return)	62,806,188
12	Composite Tax Rate	25.12%
13	Equity x Tax Rate	15,775,972
14	GRCF	1.3354
15	Taxes	21,067,917
16	Total Revenue Requirement	386,401,997
17	Total Revenue YTD August 31, 2018	386,269,192
18	Deficiency	132,805
19	Stub Period Regulatory Liability	11,728,453
20	Total Deficiency	11,861,258

EXEMPLARY NOTICE

On August XX, 2019 The Empire District Electric Company, a Liberty Utilities Company, filed revised electric service tariff sheets with the Missouri Public Service Commission (PSC) which would increase the Company's Missouri jurisdictional annual gross revenues by $26.5 million or approximately 4.93 percent. For a residential customer using 1,000 kilowatt-hours of electricity a month, the proposed increase would be approximately $7.85 each month.

The Company is also asking to continue the use of the Fuel Adjustment Clause (FAC) with an updated base cost of energy. The difference between actually incurred fuel costs and base cost will be billed or credited to each customer based on the customer's monthly energy usage. The continuation of the FAC will allow the Company to adjust customers' bills twice each year, on June 1st and December 1st, based on the varying costs of fuel used to generate electricity at the Company's generating units and electric energy the Company purchases on behalf of its customers.

Local public hearings have been set before the PSC as follows:

dates, times, locations

Each public hearing will begin with a question-and-answer session.

If you wish to comment or secure information, you may contact the Office of the Public Counsel, P.O. Box 2230, Jefferson City, Missouri 65102, telephone (866) 922-2959, email opcservice@ded.mo.gov or the Missouri Public Service Commission, Post Office Box 360 Jefferson City, Missouri 65102, telephone 800-392-4211,email pscinfo@psc.mo.gov.

The Commission will also conduct an evidentiary hearing at its offices in Jefferson City during the weeks of (month) (day) through (month) (day), and (month) (day) through (month) (day), beginning at 8:30 a.m.

The hearings and local public hearings will be held in buildings that meet accessibility standards required by the Americans with Disabilities Act. If a customer needs additional accommodations to participate in these hearings, please call the Public Service Commission's Hotline at 1-800-392-4211 (voice) or Relay Missouri at 711 prior to the hearing.

Date Mailed: 02/09/18

1 Account Number: 000011-11-0

TOTAL AMOUNT DUE	**$135.00**
Delinquent after 2/27/18, add late fee of	$0.73
After 2/27/18, Pay	$135.73
TOTAL AMOUNT ENCLOSED	$

2 JOHN A. CUSTOMER
101 MAIN STREET
ANYWHERE, MO 11111

Remit to:
3 LIBERTY UTILITIES - EMPIRE DISTRICT
PO BOX 650689
DALLAS, TX 75265-0689

1294820394000000880000000088441

For account questions, call 800-206-2300. To pay your bill by phone, call 888-631-8973.

Liberty Utilities - Empire District (www.empiredistrict.com)
PO BOX 650689
Dallas, TX 75265-0689

4 **Account Number: 000011-11-0**

Summary as of 02/08/18:

5	Previous Bill	01/08/18		$135.00
	Payment Received	01/24/18	Check	($135.00) Thank you
	Balance Forward			$0.00
	Electric		000011-11-001	$135.00 ***
6	**TOTAL AMOUNT DUE**			**$135.00**

****** see Account Detail following message(s).***

7 If you have a question or problem with billing or service or need help managing your charges with a delayed payment agreement, we welcome your call or visit to your local office. The address and toll-free number are shown above.

You may pay your bill by credit or debit card by calling 888-631-8973 or online at www.empiredistrict.com. Select the Customer Service tab and Payment Information. There is a convenience fee for this service.

1) Nine-digit account number needed to make a payment.
2) Customer and billing location information.
3) Liberty Utilities - Empire's District's mailing address to remit payment. Information on additional payment methods can be found on the company's Web site, www.empiredistrict.com.
4) Customer account number.
5) Previous balance, recent payments, and remaining balance.
6) Total amount due for current month – detailed explanation on customer charges can be found on the back of the bill.
7) This area has important messages from the company.

Account Detail

8 **Electric 000011-11-001**	9 For Service at 101 Main Street, Anywhere, MO 11111		Rate: RG-Residential	
10 Read for: 00118237 From 01/05/18 to 01/30/18 (25 Days), Curr Read - 13701 Prev Read - 12701. Totaling 1,000 KwH				
11 02/05/18	Customer Charge	1 x 13.00	$13.00	
12 02/05/18	Usage Charge	600KWH x .13006	$78.04	
02/05/18	Usage Charge	400KWH x .10574	$42.30	
13 02/05/18	Energy Efficiency Program Cost	1000KWH x .00039	$0.39	
14 02/05/18	Tax Cuts and Jobs Act	600kwh x .00516	CR $3.10	
15 02/05/18	Franchise Fee	111.18 x .02	$2.22	
16 02/05/18	Fuel Adjust Charge	1000KWH x .00758	$7.58	
17 02/05/18	Anywhere County Tax	111.18 x .00875	$0.97	
		18 **Current Months Charges:**	**$141.40**	
02/05/18	19 APP Installment			$135.00
		20 **Billed Charges:**		**$135.00**

Contract Update

APP — 21 Status before payment is $141.40, after payment in full $6.40. This account will be reevaluated in October.

8) 11-digit location number to report outages or to use automated account information by phone.

9) Service address - this is important for customers who have multiple accounts with the company.

10) Meter number, previous meter read, current meter read, and usage information.

11) The company service includes a fixed monthly customer charge, no matter how much electricity is used.

12) The usage charge is for the kilowatt hours (KWH) used by a customer. The charge for each KWH used by a customer from June 16 through September 16 is $0.13006 per KWH. The charge for electricity for the other eight months of each year is $0.13006 per KWH for the first 600KWH and $0.10574 for each KWH thereafter.

13) The cost to provide programs for customers to improve the energy efficiency of their homes and businesses.

14) This credit is the result of a Missouri rate decrease stemming from the Tax Cuts and Jobs Act of 2017.

15) A contractual fee required for the company to use the city public right-of-ways.

16) The charge for the difference between fuel and purchased power costs established in the current rate structure and the actual fuel and purchased power costs incurred by the company. This rate changes twice a year. If fuel costs are less than what is established by the current rates, customers will see a credit in the Fuel Charge line. The cost includes no mark-up or profit for the company.

17) Taxes, fees, and other assessments.

18) Total charges for the billing period.

19) APP, average payment plan, is a payment contract that calculates a customer's expected annual usage and divides it into 12 equal payments. Each month one payment installment is due from the customer. At the end of 12 months the actual usage is reviewed and a customer's contract and installments are adjusted for the next 12 months.

20) The amount due from the customer by the due date.

21) Important information about a customer's payment contract.

Revised 10-19-18

2019 SHORT TERM DEBT SUMMARY

	ACTUAL				MODEL*		VARIANCE		ENERGY TRADING CASH PD OUT	
	End of Period	Average	Interest Expense	Effective Cost	End of Month Balance	Interest Cost	End of Month Balance	Interest Cost	Margin Account	Derivative OTC Settlements
JANUARY	18,750,000	13,362,903	32,366	2.81%	15,382,000	27,000	3,368,000	5,366	(75,000)	0
FEBRUARY	5,500,000	9,196,429	19,846	2.77%	23,972,000	49,000	(18,472,000)	(29,154)	0	0
MARCH	0	830,645	1,947	2.72%	5,691,000	14,000	(5,691,000)	(12,053)	0	0
1ST QTR	0	7,750,000	54,159	2.83%	15,015,000	90,000	(15,015,000)	(35,841)	(75,000)	0
APRIL	0	0	0	0.00%	31,139,000	0	(31,139,000)	0	(225,300)	(6,040)
MAY	4,000,000	1,838,710	4,266	2.69%	9,500,000	12,000	(5,500,000)	(7,734)	0	(34,840)
JUNE	1,250,000	4,806,667	10,658	2.66%	11,200,000	19,000	(9,950,000)	(8,342)	(1,123,875)	(29,240)
2ND QTR	1,250,000	2,210,989	14,924	2.67%	17,279,667	31,000	(16,029,667)	(16,076)	(1,349,175)	(70,120)
YTD	1,250,000		69,083		16,147,333	121,000	(14,897,333)	(51,917)	(1,424,175)	(70,120)
JULY							0	0		
AUGUST							0	0		
SEPTEMBER							0	0		
3RD QTR	0		0		0	0	0	0	0	0
YTD	0		69,083		10,764,889	121,000	(10,764,889)	(51,917)	(1,424,175)	(70,120)
OCTOBER							0	0		
NOVEMBER							0	0		
DECEMBER							0	0		
4TH QTR	0		0		0	0	0	0	0	0
YTD			69,083		8,073,667	121,000	(8,073,667)	(51,917)	(1,424,175)	(70,120)

Proposed List of Sub-Accounts Included and Excluded for FAC

GL	Descriptions
501	**Included:**
501042	Fuel -Coal
501045	Fuel -Oil
501054	Fuel -Natural Gas
501183	Sales Of Ash
501211	Ineffect (Gain)Loss Deri Steam
501212	Effective (Gn)Lss Deriv Steam
501216	NonFAS133Deriv(Gain)/LossSteam
501300	Fuel -Tires
501401	Ops Mtls-Fuel Handling
501607	Fuel Adm E Trader Commission
501	**Excluded:**
501011	Conv & Seminar-Fuel
501400	Ops Labor-Fuel Handling
501601	Fuel Administration -Asbury
501604	Fuel Administration -Riverton
501605	Fuel Administration Plum Point
547	**Included:**
547205	Natural Gas SLCC Tolling
547206	Nat Gas-Toling SLCC In effectiv
547207	Nat Gas-Tolling SLCC Effective
547208	Comb Turb Fuel Sales -Nat Gas
547210	Combust Turb Fuel Natural Gas
547211	Ineffect (Gain)Loss Deriv Gas
547212	Effective (Gain)Loss Deriv Gas
547213	Fuel -No 2 Oil Fuel
547301	NonFAS133 Deriv (Gain)/Loss
547607	Fuel Adm E Traders Commission
547	**Excluded:**
547605	Fuel Adm State Line
547606	Fuel Adm Energy Center
547210	Natural gas fix ed transportation & fixed storage only
411	**Included:**
411800	Gains-Disposition Emmi ss Allow
509	**Included:**
509052	Emission Allowance Exp

GL	Descriptions
506	**Included:**
506127	Limestone Expense -Iatan
506128	Powdered Activated Carbon
506129	Ammonia Expense
506201	Limestone Expense
506202	Ammonia Expense
506203	Powdered Activated Carbon
506204	Lime Expense
548	**Included:**
548202	Ammonia Expense
447	**Included:**
447113	Gen Ark Off-Sys Sale-Resale
447124	Gen Ks Off-System Sale-Resale
447133	Gen Mo Off -Sys Sale -Resale
447143	Gen Ok Off -Sys Sales-Resale
447810	SPP IM Revenue -AR
447820	SPP IM Revenue -KS
447830	SPP IM Revenue -MO
447840	SPP IM Revenue -OK
447850	SPP IM Revenue
447860	Bilateral/ Off Line Aux Revenue
447	**Excluded:**
447430	Aec -Off-Sys-Missouri
447540	Oklahoma GRDA Off-System
447610	Energy Imbalance -Arkansas
447620	Energy Imbalance -Kansas
447630	Energy Imbalance -Missouri
447640	Energy Imbalance -Oklahoma
457	**Excluded:**
457137	Ot El RvOffSys LTFSTF PTP Trns
457138	Ot El RvOffSys NnFrm PTP Trns
457139	Ot El RvOffSys NITS Rev
457140	0th El Rev-Off-Sys Losses
457141	Sch 11 NITS
457142	Sch 11 PTP
457160	Sch 1 PTP

GL	Descriptions
555	**Included:**
555430	Direct Purchases
555431	Purchase Power Tolling Fees
555432	Energy Imbalance
555437	Interrupt Svc Compensation
555 800	DA Asset Energy
555810	DA Non-Asset Energy
555820	DA Virtual Energy
555840	DA Reg -Up
555850	DA Reg -Down
555860	DA Spinning
555870	DA Supplemental
555880	DA Other
555900	RT Asset Energy
555910	RT Non-Asset Energy
555920	RT Virtual Energy
555940	RT Reg-Up
555950	RT Reg-Down
555960	RT Spinning
555970	RT Supplemental
555980	RT Other
555990	TCR Activity
555995	ARR Activity
565	**Included:**
565413	Trans Of Electricity By Others
565414	SPP Fixed Chg -Native Load
565415	SPP Var Chg Schedule 12
565416	Non SPP Fixed Chg -Native Load
565417	PP Non SPP Var -Native Load
565418	Gen Non SPP Var -Native Load
565419	Off Sys Sales Trans Costs
456	**Included:**
456071	Misc Elec Rev-Green Credits-AR
456072	Misc Elec Rev-Green Credits-KS
456073	Misc Elec Rev-Green Credits-MO
456074	Misc Elec Rev-Green Credits-OK
456075	REC Revenue

** Confidential In Its Entirety **

Environmental Matters

We are subject to various federal, state, and local laws and regulations with respect to air and water quality and with respect to hazardous and toxic materials and hazardous and other wastes, including their identification, transportation, disposal, record-keeping and reporting, as well as remediation of contaminated sites and other environmental matters. We believe that our operations are in material compliance with present environmental laws and regulations. While we are not in a position to accurately estimate compliance costs for any new requirements, we expect these costs to be material, although recoverable in rates.

Electric Segment

The federal Clean Air Act (CAA) and comparable state laws regulate air emissions from stationary sources such as electric power plants through permitting and/or emission control and related requirements. These requirements include maximum emission limits on our facilities for sulfur dioxide (SO_2), particulate matter, nitrogen oxides (NO_x), and hazardous air pollutants including mercury. In the future the requirements will include limitations on greenhouse gases (GHG) such as carbon dioxide (CO_2) from our coal-fired plant.

Liberty-Empire also operates under the Kansas and Missouri Water Pollution Plans that were implemented in response to the Federal Clean Water Act ("CWA"). Liberty-Empire operates its generation facilities in compliance with applicable regulations, and all facilities have received necessary discharge permits.

Liberty-Empire operates under the Missouri Public Service Commission's renewable energy standards (RES) rule, 4 CSR 240-20.100(8). Liberty-Empire complies with the non-solar portion of the RES through purchased power contracts with Elk River Windfarm, LLC and generation from the Ozark Beach Hydroelectric facility. For the solar portion of the RES, Liberty-Empire expects to obtain solar renewable energy credits transferred from qualified customer-generator's operational solar electric systems as a condition of receiving the solar rebate.

Compliance Plan

In order to comply with current and forthcoming environmental regulations, we will implement our Integrated Resource Plan (IRP) filed with the MPSC in 2019. The Air Emissions, Water Related Impacts, and Renewable Energy sections below describe the regulations and actions of the EPA and states with anticipated responses. Compliance costs we have incurred associated with the regulations are being recovered in our rates and we anticipate any future costs to continue to be recoverable in our rates.

Air Emissions

National Ambient Air Quality Standards

The Clean Air Act ("CAA") requires the EPA to set National Ambient Air Quality Standards ("NAAQS") for four air pollutants associated with fossil-fuel generation, including particulate matter, ground-level ozone, sulfur dioxide (SO_2), and nitrogen dioxides (NO_x). These air pollutants are regulated by setting human health-based or environmentally-based criteria for permissible levels. The EPA is reviewing the current 2015 ozone NAAQS to evaluate whether to reconsider, modify or maintain the standards by the required five-year deadline (October 2020).

Particulate Matter

In 2013, the EPA strengthened the PM standard. The Jasper County area is currently in attainment of the 2013 PM NAAQS. No additional emission control equipment is currently needed to comply with this standard. It is not known whether the Jasper County area will remain in attainment of a future revision of the standard. Future non-attainment of revised standards could require additional reduction technologies, emission limits, or both on fossil-fueled units.

Ozone

In 2015, the EPA strengthened the NAAQS for ground-level ozone. The Jasper County area is currently in attainment of the 2015 Ozone NAAQS. No additional emission control equipment is currently needed to comply with this standard.

Future non-attainment of revised standards could result in regulations requiring additional NO_X reduction technologies, emission limits, or both on fossil-fueled units.

Sulfur Dioxide

In 2010, the EPA strengthened the NAAQS for SO_2. The Jasper County area is currently in attainment of the 2010 SO_2 NAAQS. No additional emission control equipment is currently needed to comply with this standard. Future non-attainment of revised standards could result in regulations requiring additional SO_2 reduction technologies, emission limits or both on fossil-fueled units.

Nitrogen Dioxides

In 2010, the EPA strengthened the NAAQS for NO_X. The Jasper County area is currently in attainment of the 2010 NO_X NAAQS. No additional emission control equipment is currently needed to comply with this standard. Future non-attainment of revised standards could result in regulations requiring additional NO_X reduction technologies, emission limits or both on fossil-fueled units.

Cross-State Air Pollution Rule

In 2011, the EPA finalized the Cross-State Air Pollution Rule ("CSAPR"), requiring eastern and central states to significantly reduce power plant emissions that cross state lines and contribute to ground-level ozone and fine particle pollution in other states. The CSAPR Update Rule took effect in 2017 with more stringent ozone-season NO_X emission budgets for electric generating units ("EGUs") in many states to address significant contribution and maintenance issues with respect to the ozone NAAQS established in 2008. No additional emission control equipment is currently needed to comply with this rule. The Company complies through a combination of trading allowances within or outside its system in addition to changes in operations as necessary. Future, strengthened ozone, NO_X, or SO_2 standards could result in additional cross-state rule updates requiring additional trading of allowances, emission reduction technologies or reduced generation on fossil-fueled units.

Regional Haze

In June 2005, the EPA finalized amendments to the July 1999 Regional Haze Rule. These amendments apply to the provisions of the Regional Haze Rule that require emission controls known as best available retrofit technology ("BART") for industrial facilities emitting air pollutants that reduce visibility by causing or contributing to regional haze.

The pollutants that reduce visibility include $PM_{2.5}$ and compounds which contribute to $PM_{2.5}$ formation, such as NO_X, SO_2, and under certain conditions, volatile organic compounds and ammonia. Under the 1999 Regional Haze Rule, states are required to set periodic goals for improving visibility in natural areas. As states work to reach these goals, they must develop regional haze implementation plans that contain enforceable measures and strategies for reducing visibility-impairing pollution.

The Regional Haze Rule directs state air quality agencies to identify whether visibility-reducing emissions from sources subject to BART are below limits set by the state or whether retrofit measures are needed to reduce emissions. It also directs these agencies to file Regional Haze plans with the EPA for approval.

Future visibility progress goals could result in additional SO_2, NO_X, and PM controls or reduction technologies on fossil-fired units.

Affordable Clean Energy Rule

On Wednesday, June 19, 2019, EPA issued the Affordable Clean Energy rule (ACE), an effort to provide existing coal-fired electric utility generating units, or EGUs, with achievable and realistic standards for reducing greenhouse gas (GHG) emissions. This action was finalized in conjunction with related rulemakings including the repeal of the Clean Power Plan (CPP), the revised implementing regulations for ACE, ongoing emission guidelines, and all future emission guidelines for existing sources issued under the authority of Clean Air Act (CAA) section 111(d).

ACE provides states with new emission guidelines that will inform the state's development of standards of performance to reduce carbon dioxide (CO_2) emissions from existing coal-fired EGUs.

Mercury and Air Toxics Standards

In 2011, the EPA finalized a rule to reduce emissions of toxic air pollutants from power plants. These MATS for power plants reduced emissions from new and existing coal and oil-fired electric EGUs. Control equipment was installed at Liberty-Empire facilities to comply with this rule. No additional emission control equipment is currently needed to comply with this standard. It is not known whether the rule will be strengthened in the future. Future strengthening of the rule could require additional reduction technologies, emission limits, or both on coal and oil-fired units.

Water Related Impacts

Clean Water Act Section 316(b)

On September 17, 2018, the Kansas Department of Health and Environment ("KDHE") issued a Certificate of Determination stating that the Riverton Generating Station cooling water intake structure ("CWIS") is in compliance with Section 316(b) of the CWA. The location, design, construction and capacity of the CWIS reflects the best technology available ("BTA") for minimizing adverse environmental impacts. Additionally, Iatan 2 and Plum Point Unit 1 also meet the BTA standard. Future modifications at the Iatan 1 facility could range from flow velocity reductions, traveling screen modifications, or the installation of a closed cycle cooling tower retrofit.

Surface Impoundments

Liberty-Empire owns and maintains a coal ash impoundment at the Asbury Power Plant. Additionally, Liberty-Empire owns a 12 percent interest in a coal ash impoundment at the Iatan Generating Station and a 7.52 percent interest in a coal ash impoundment at Plum Point. Future closure of all surface impoundments is anticipated.

Effluent Limitation Guidelines ("ELGs") for Steam Electrical Power Generating Point Sources are currently incorporated into all facilities' wastewater discharge permits. The EPA rule defines bottom ash transport water, fly ash transport water, and scrubber wastes as wastewaters which cannot be discharged after December 21, 2023.

Coal Combustion Residuals

In compliance with the EPA published final rule to regulate the disposal of coal combustion residuals ("CCRs") as a non-hazardous solid waste under subtitle D of the Resource Conservation and Recovery Act, Liberty-Empire has published a Closure Plan for the Asbury Plant CCR Impoundment. The plan schedule assumes Closure Initiation in November 2020 with completion of closure by October 2025. Liberty-Empire will need to construct at least one cell of a new landfill and complete the conversion of the existing bottom ash handling from a wet to a dry system at a potential cost of up to \$3 million and \$17 million, respectively, if Asbury continues to operate. The closure cost of the existing impoundment is estimated at \$15 million.

Liberty-Empire has posted a \$5.5 million asset retirement obligation ("ARO") for the Asbury pond closure costs. Liberty-Empire expects resulting costs to be recoverable in rates. Final closure of the other existing ash impoundment, for which an asset retirement obligation of \$4.4 million has been recorded for Liberty-Empire's interest in the coal ash impoundment at the Iatan Generating Station, has been accounted for in Liberty-Empire's ARO. In December 2016, The Missouri Department of Natural Resources ("MDNR") granted Liberty-Empire a Utility Waste Disposal Area Construction Permit that can be used for CCR waste disposal. Construction of the landfill is not expected in the immediate future, as Liberty-Empire anticipates that the existing Asbury impoundment will be closed by leaving all accumulated CCR in place.

In 2014, the former Riverton Plant impoundment was closed as a CCR landfill in accordance with Kansas Department of Health and Environment regulations.

Water Discharges

We operate under the Kansas and Missouri Water Pollution Plans pursuant to the Federal Clean Water Act (CWA). Our plants are in material compliance with applicable regulations and have received all necessary discharge permits. On September 17, 2018 KDHE issued a Certificate of Determination stating the Riverton Generating Station cooling water intake structure (CWIS) is in compliance with the EPA final rule under the CWA Section 316(b) for existing CWIS, which became effective on October 14, 2014, to meet new regulatory requirements for aquatic life protections. An industry coalition has filed an appeal of the rule and additional court challenges are expected. Impacts at Iatan 1 could range from flow velocity reductions, traveling screen modifications or the installation of a closed cycle cooling tower retrofit. Iatan Unit 2 and Plum Point Unit 1 are covered by the regulation, but were constructed with cooling towers, the proposed Best Technology Available. We expect them to be unaffected or minimally affected by the final rule.

Renewable Energy

Missouri

On November 4, 2008, Missouri voters approved the Clean Energy Initiative (Proposition C) which currently requires Liberty-Empire and other investor-owned utilities in Missouri to generate or purchase electricity from renewable energy sources, such as solar, wind, biomass and hydro power, or purchase Renewable Energy Credits (RECs), in amounts equal to at least 5 percent of retail sales in 2014, increasing to at least 15 percent by 2021. Liberty-Empire is currently in compliance with this regulatory requirement as a result of generation from the Ozark Beach Hydroelectric Project and purchased power agreements with Elk River Windfarm, LLC. Proposition C also requires that 2 percent of the energy from renewable energy sources must be solar. Liberty-Empire complies with this requirement utilizing customer-generated Solar Renewable Energy Credits (SRECs) which Liberty-Empire retains as a requirement of the rebate agreement. By the end of 2018, a total of 1,829 Missouri solar net metering customers have been connected to the Liberty-Empire system. In addition, rebate applications resulting in solar rebate-related costs totaled approximately $15.9 million under the tariff. The law provides a number of methods that may be utilized to recover the associated expenses. Liberty-Empire expects any costs to be recoverable in rates.

Missouri passed SB 564 in 2018 which impacts renewable energy development and energy efficiency programming for Missouri's investor owned utilities including Liberty-Empire. Additional solar rebates are mandated for new or expanded solar systems for residential and non-residential customers. Liberty-Empire will also be required to invest in utility scale solar facilities. It is anticipated a portion of the solar renewable energy credits from these additions can be used for compliance with the RES. The bill also changes the rate-making policy for Liberty-Empire, allowing decoupling revenue from electric sales. It is anticipated that costs for these initiatives will be recoverable in rates

For future compliance, Liberty-Empire's Customer Savings Plan will add additional wind energy resources which will generate RECs. A portion of these credits can be used for compliance with the RES in the future.

Kansas

Legislation was adopted that altered the Kansas renewable portfolio standard (RPS), ending all mandatory requirements in 2015. The mandate, which required 20 percent of Liberty-Empire's Kansas retail customer peak capacity requirements to be sourced from renewables by 2020, has been changed to a voluntary goal. One of the reasons for the change is that Kansas utilities have certified that they are already meeting the 20 percent target. Liberty-Empire is currently in compliance as a result of purchased power agreements with Cloud County Windfarm, LLC and Elk River Windfarm, LLC.

Projected Position for Allowances 2019-2022

SO_2 Acid Rain

	2019	2020	2021	2022
Allowances allocated	11,741	11,741	11,741	11,741
Estimated allowances needed for emissions	1,230	1,020	1,095	1,085
Allowances allocated less allowances needed for emissions	10,511	10,721	10,646	10,656

SO_2 CSAPR Group 1

	2019	2020	2021	2022
Allowances allocated	4,688	4,574	4,574	4,574
Estimated allowances needed for emissions	1,227	1,017	1,092	1,082
Allowances allocated less allowances needed for emissions	3,461	3,557	3,482	3,492

SO_2 CSAPR Group 2

	2019	2020	2021	2022
Allowances allocated	1,079	678	1	1
Estimated allowances needed for emissions	3	3	3	3
Allowances allocated less allowances needed for emissions	1,076	675	-2	-2

NO_x Annual CSAPR

	2019	2020	2021	2022
Allowances allocated	2,077	1,818	1,416	1,416
Estimated allowances needed for emissions	1,594	1,584	1,639	1,617
Allowances allocated less allowances needed for emissions	483	234	-179	-201

NO_x Ozone Season CSAPR

	2019	2020	2021	2022
Allowances allocated	674	674	674	627
Estimated allowances needed for emissions	577	619	647	625
Allowances allocated less allowances needed for emissions	97	55	27	2

SO_2 Acid Rain, all units included
SO_2 CSAPR group 1 includes all MO units
SO_2 CSAPR group 2, Riverton only
Plum Point is not included in this summary

Unit: Asbury
Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	97.5%	98.3%	92.6%	63.0%	99.9%	98.5%	100.0%	89.6%	38.8%	0.0%	67.1%	78.0%	76.9%
2015	69.5%	99.4%	100.0%	68.0%	80.8%	93.2%	99.9%	79.1%	73.3%	41.1%	94.6%	96.0%	82.8%
2016	96.3%	75.2%	88.3%	11.2%	74.4%	95.6%	94.2%	99.1%	42.5%	48.2%	94.8%	54.2%	73.0%
2017	89.0%	81.0%	76.0%		84.0%	100.0%	100.0%	99.0%	67.0%	94.0%	96.0%	100.0%	82.3%
2018	94.0%	81.0%	44.0%	98.0%	89.0%	97.0%	89.0%	95.0%	100.0%	59.0%	16.0%		71.8%
2019	76.0%	85.0%	90.0%	57.0%	43.0%	98.0%							

Unit: Asbury
Data: Equivalent Forced Outage Rate (%)

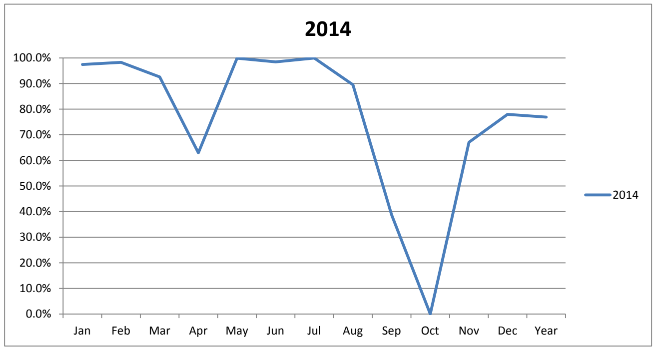
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	2.5%	1.7%		2.7%							20.8%	25.7%	6.0%
2015	30.0%				19.0%	7.0%		21.0%	22.0%		6.0%	4.0%	9.9%
2016		32.2%	6.9%		25.1%		1.6%		46.7%	29.1%		35.7%	15.7%
2017	11.2%	24.9%		100.0%	13.2%			0.6%		2.7%			9.4%
2018	1.6%	13.0%	7.6%	1.3%	5.6%	3.8%	11.1%	4.8%		35.7%	89.1%	100.0%	26.1%
2019	16.0%	7.0%	8.0%	9.0%	12.0%	2.0%							

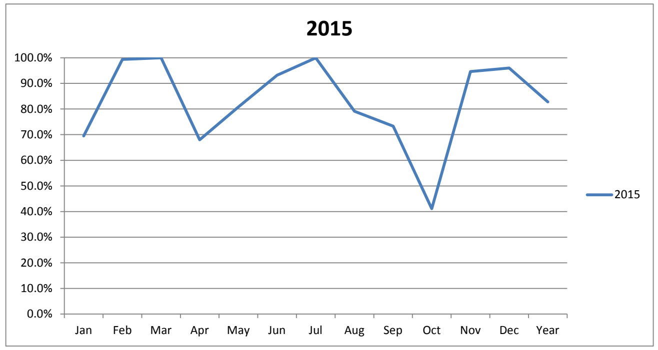
Unit: Asbury
Data: Length and timing of planned outages - Scheduled Outage Hours

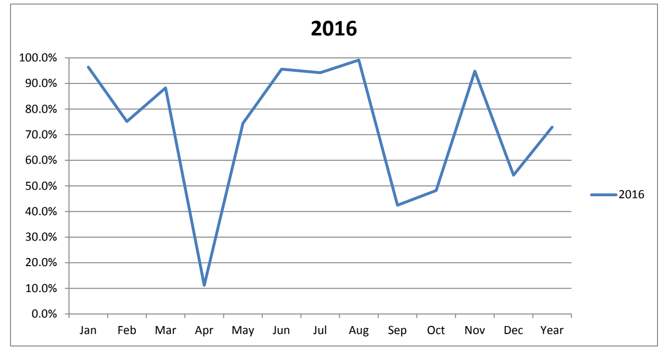
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	260	-	-	-	61	432	744	110	-	1,607
2015	-	-	-	227	-	-	-	-	40	438	-	-	705
2016	-	-	-	640	-	-	-	-	-	216	-	-	856
2017	-	-	169	552	-	-	-	-	192	24	-	-	937
2018	37	65	399	-	48	-	-	-	-	91	-	-	640
2019	99	60	-	263	398	-							

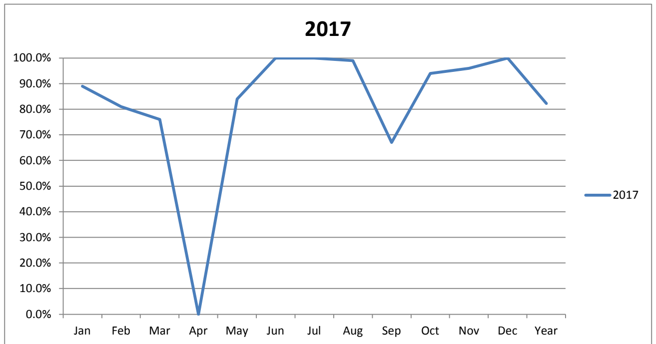
Data through June, 2019

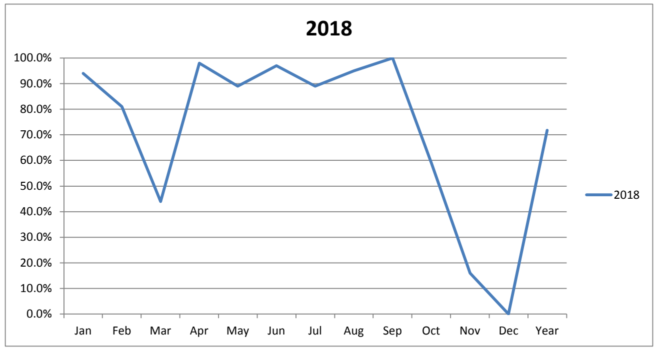
Unit: Asbury
Data: Equivalent Availability Factor (%)

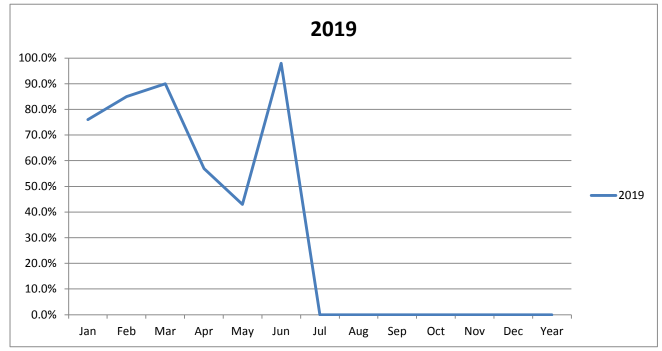




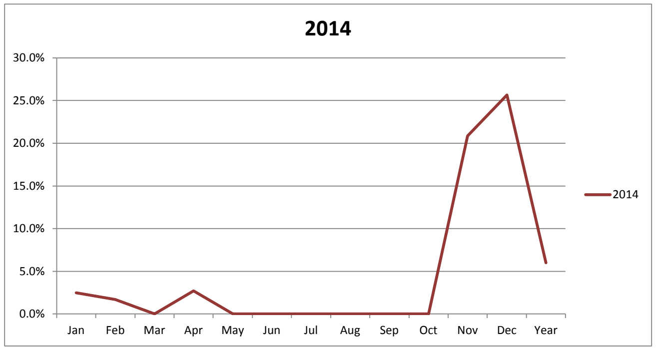


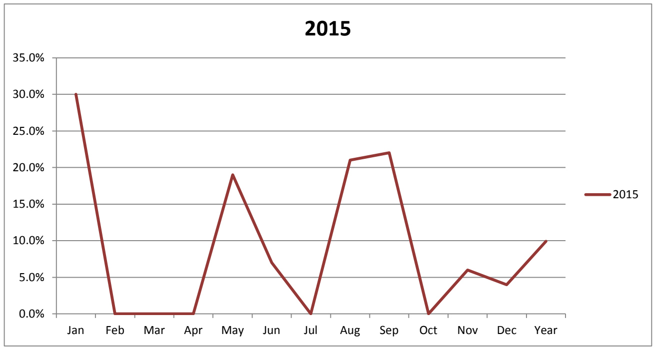


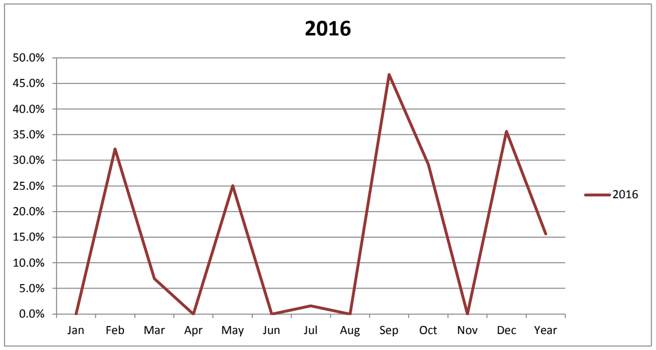


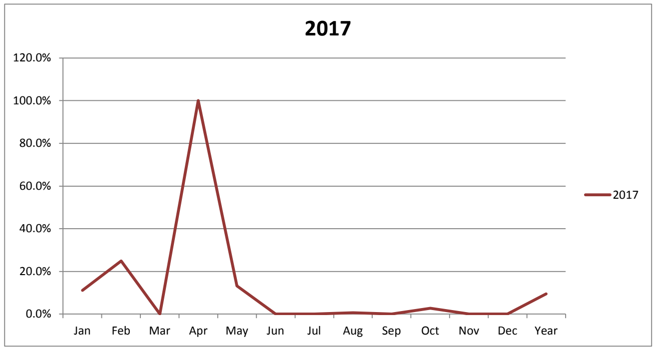


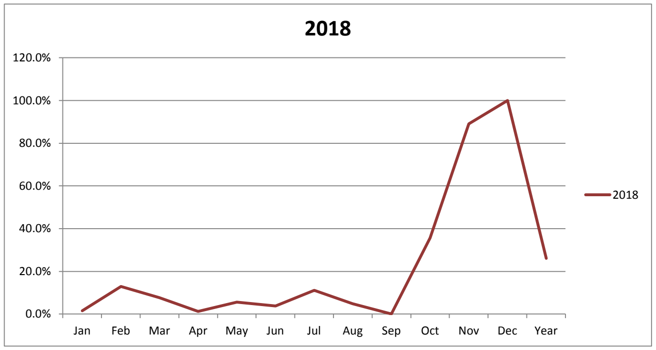
Unit: Asbury
Data: Equivalent Forced Outage Rate (%)

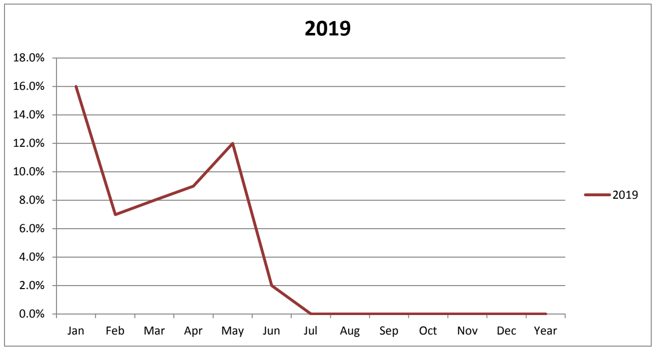




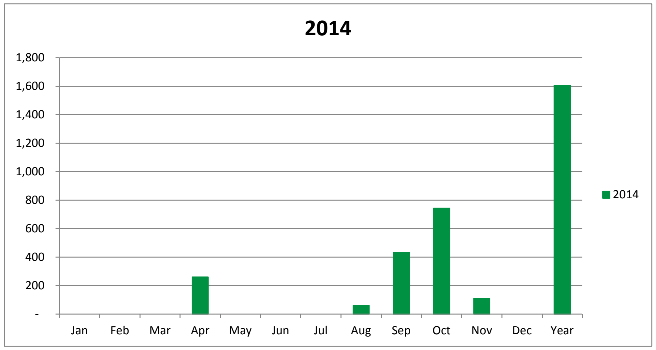


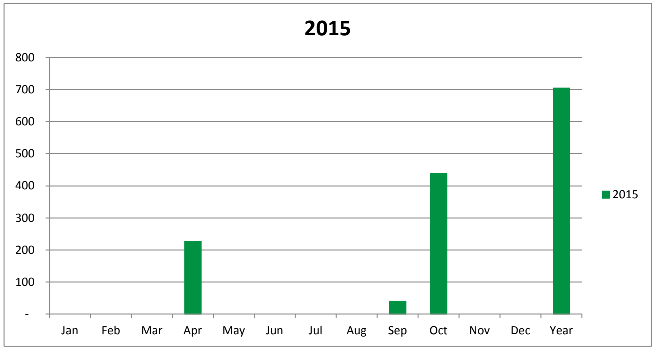


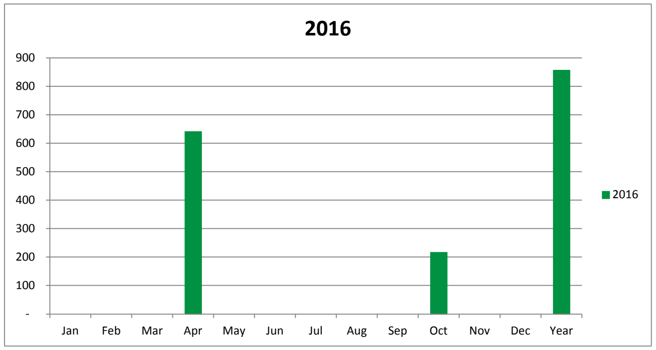


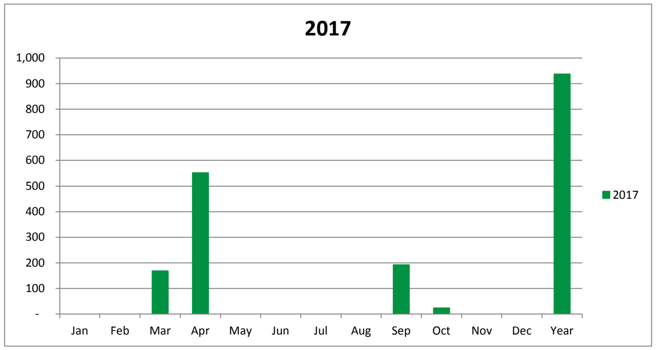


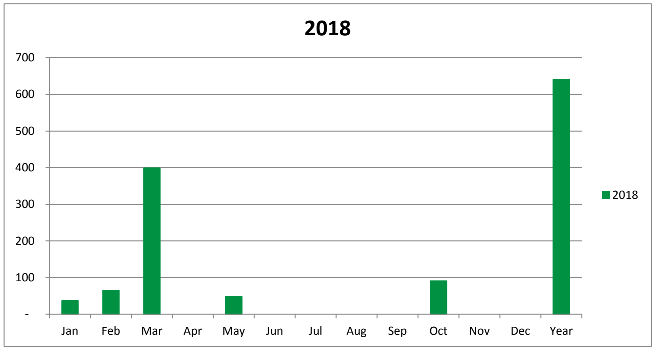
Unit: Asbury
Data: Length and timing of planned outages - Scheduled Outage Hours

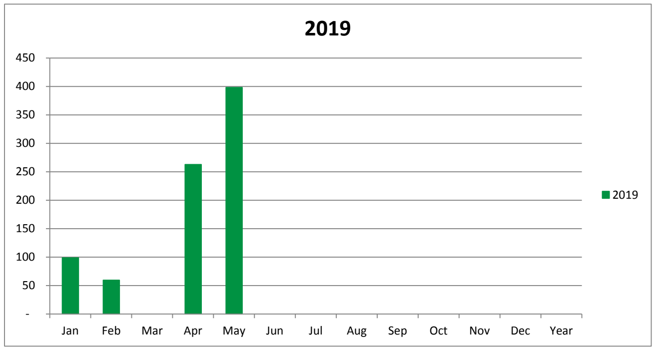












Data through June, 2019

Unit: Energy Center 1
Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	100.0%	29.9%	91.4%	99.1%	100.0%	100.0%	10.6%	45.4%	97.2%	7.8%	50.3%	69.1%
2015	97.8%	100.0%	100.0%	76.7%	98.8%	99.7%	90.2%	100.0%	100.0%	100.0%	95.1%	100.0%	96.5%
2016	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.7%	100.0%	100.0%	100.0%	99.9%
2017	100.0%	100.0%	100.0%	89.0%	100.0%	71.0%	100.0%	100.0%	58.0%	-	-	-	68.0%
2018	5.0%	14.0%	99.0%	100.0%	67.0%	100.0%	100.0%	100.0%	93.0%	100.0%	100.0%	100.0%	81.9%
2019	100.0%	100.0%	99.0%	100.0%	48.0%	11.0%							

Unit: Energy Center 1
Data: Equivalent Forced Outage Rate (%)

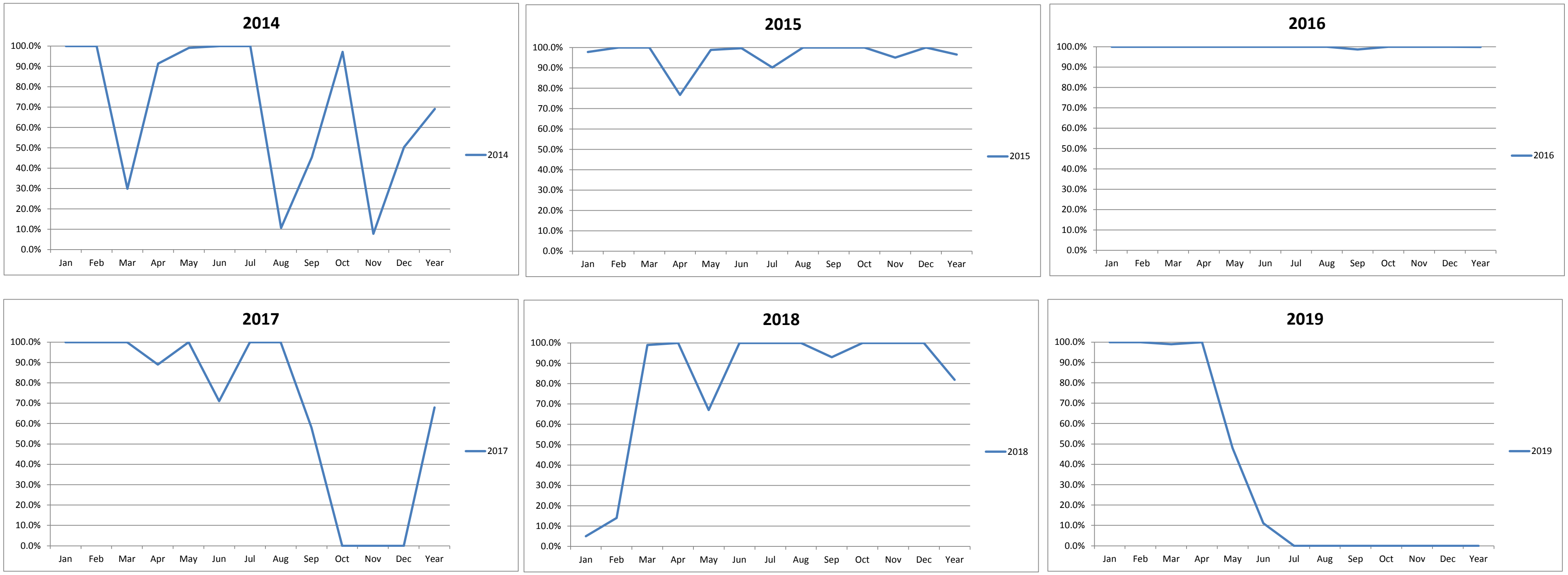
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014									50.5%	100.0%			34.4%
2015	68.0%					4.0%	55.0%						27.9%
2016		32.2%	6.9%		25.1%		1.6%		46.7%	29.1%		35.7%	1.3%
2017										100.0%	100.0%	100.0%	83.7%
2018		97.0%											82.5%
2019				8.0%	97.0%								

Unit: Energy Center 1
Data: Length and timing of planned outages - Scheduled Outage Hours

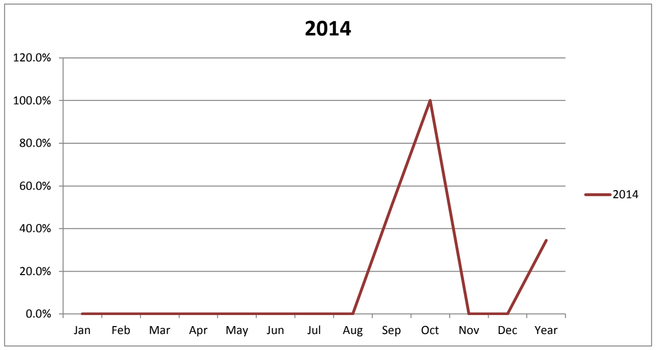
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	521	62	7	-	-	665	377	-	665	370	2,666
2015	6	-	-	168	9	-	-	-	-	-	36	-	219
2016	-	-	-	-	-	-	-	-	6	-	-	-	6
2017	-	-	-	83	-	207	-	3	306	648	-	-	1,247
2018	709	-	8	3	243	-	-	-	52	-	-	-	1,014
2019	-	-	4	-	-	638							

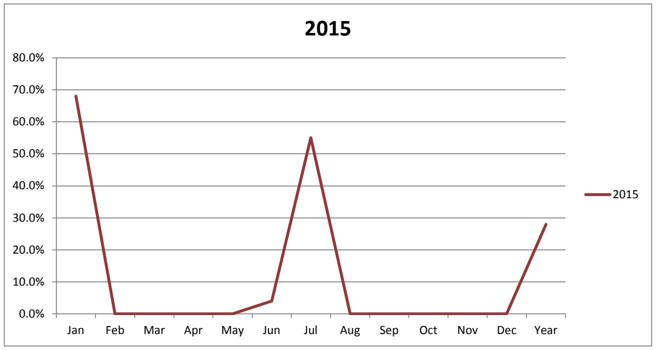
Data through June, 2019

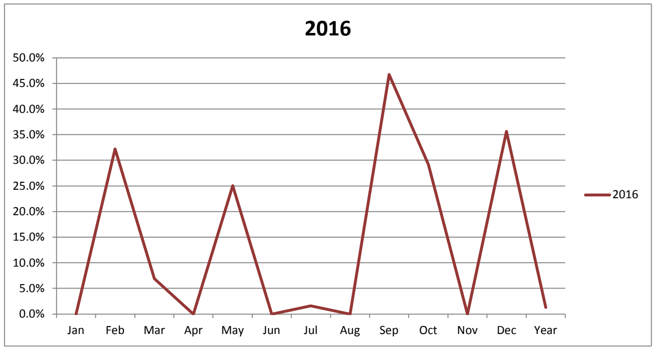
Unit: Energy Center 1
Data: Equivalent Availability Factor (%)

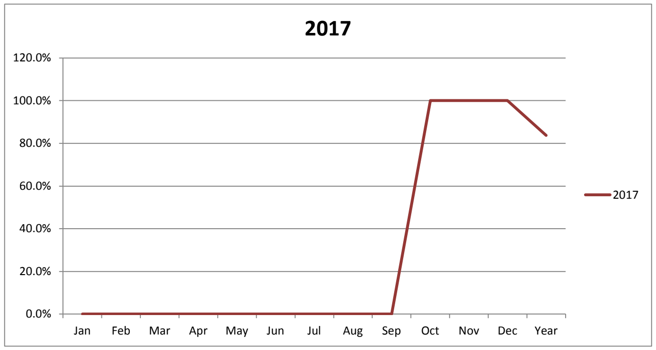


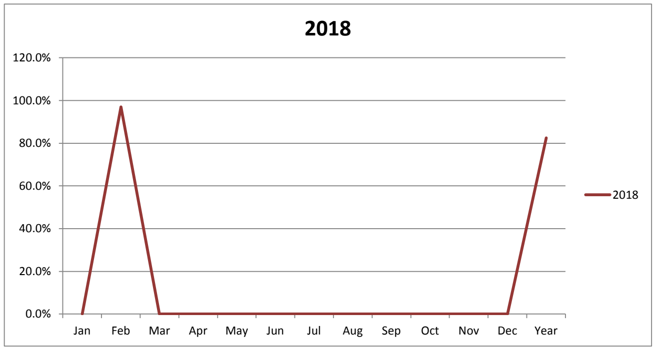
Unit: Energy Center 1
Data: Equivalent Forced Outage Rate (%)

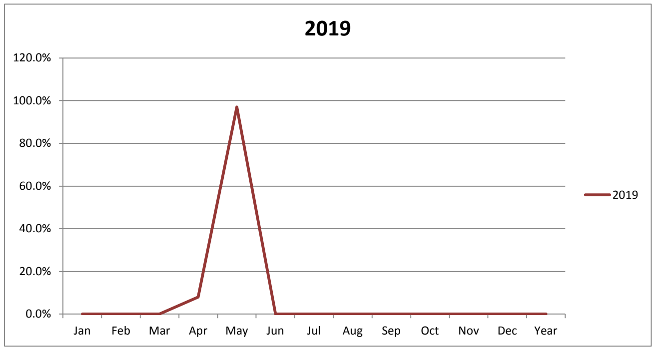




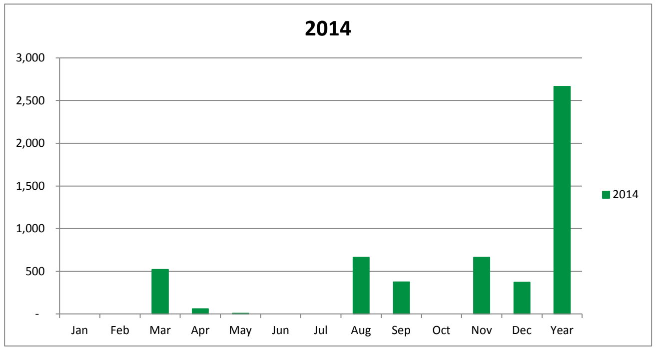


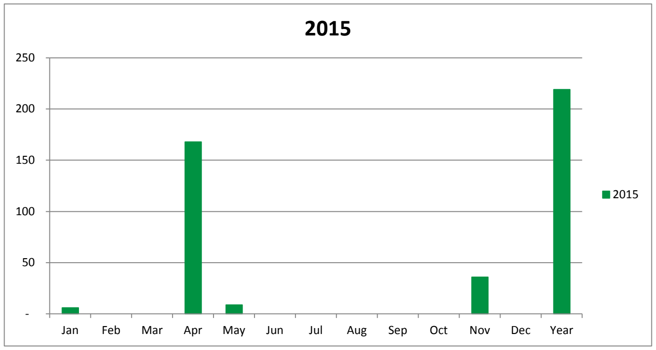


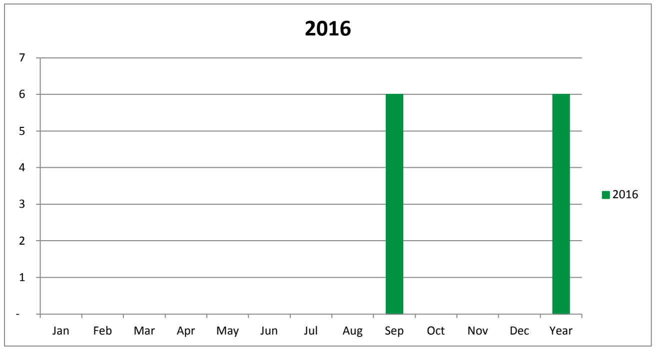


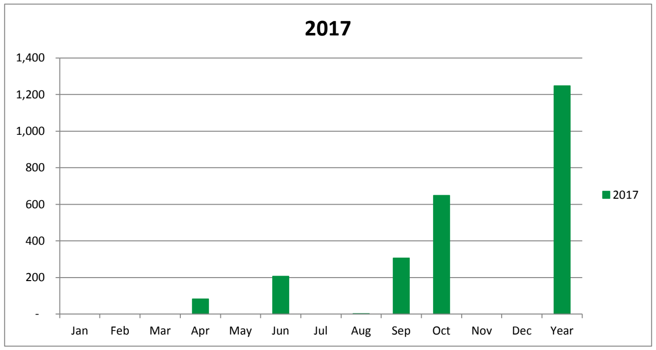


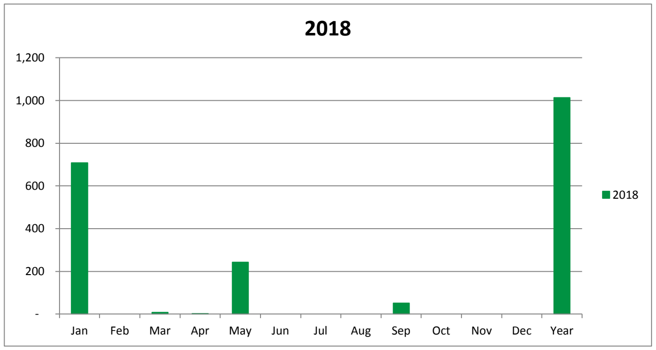
Unit: Energy Center 1
Data: Length and timing of planned outages - Scheduled Outage Hours

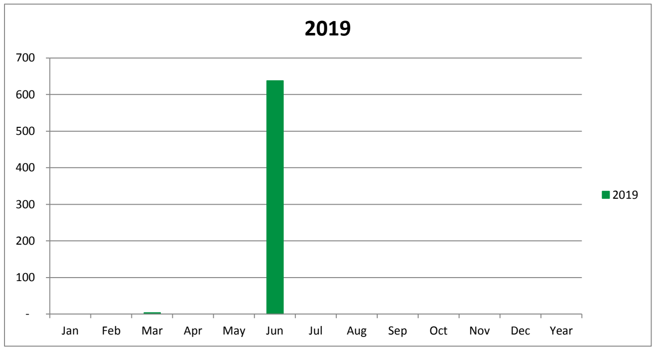












Data through June, 2019

Unit: Energy Center 2
Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	97.5%	99.8%	29.9%	98.9%	96.3%	12.2%	8.6%	93.7%	100.0%	96.1%	100.0%	95.4%	77.2%
2015	96.3%	95.2%	100.0%	100.0%	98.8%	100.0%	100.0%	95.7%	99.8%	89.1%	100.0%	100.0%	97.9%
2016	100.0%	100.0%	100.0%	100.0%	100.0%	95.3%	68.8%	68.8%	68.8%	64.4%	92.2%	100.0%	88.1%
2017	100.0%	99.0%	92.0%	98.0%	100.0%	70.0%	69.0%	100.0%	82.0%	78.0%	68.0%	99.0%	87.9%
2018	76.0%	94.0%	100.0%	100.0%	68.0%	100.0%	100.0%	100.0%	89.0%	100.0%	100.0%	96.0%	93.5%
2019	100.0%	97.0%	32.0%										

Unit: Energy Center 2
Data: Equivalent Forced Outage Rate (%)

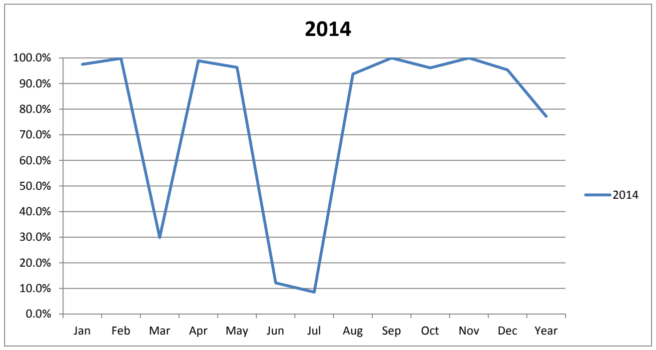
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	97.2%					100.0%	99.3%	74.4%				79.5%	91.4%
2015	30.0%	71.0%							100.0%				27.5%
2016						36.4%							20.6%
2017			1.0%						74.8%	58.7%	67.3%		35.0%
2018	4.5%												2.7%
2019		58.0%											

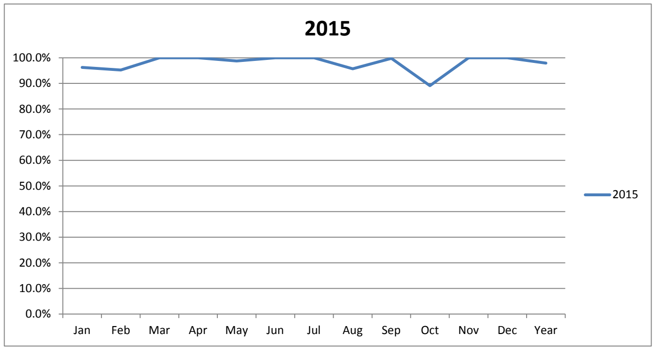
Unit: Energy Center 2
Data: Length and timing of planned outages - Scheduled Outage Hours

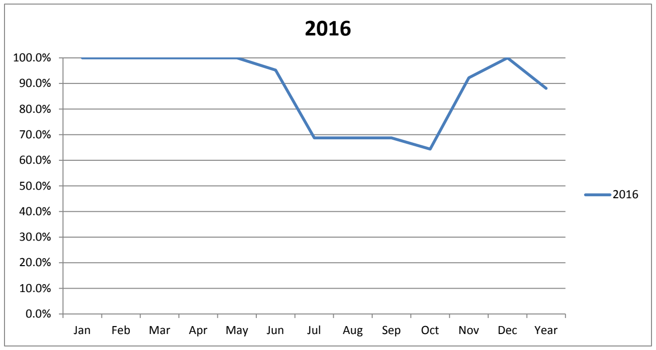
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	2	1	521	8	27	-	-	-	-	29	-	-	588
2015	24	-	-	-	9	-	-	32	-	81	-	-	146
2016	-	-	-	-	-	-	-	-	-	33	9	-	42
2017	-	5	56	12	-	216	232	3	86	-	-	11	621
2018	168	39	-	-	241	-	-	-	82	-	-	30	560
2019	-	-	504	720	744	720							

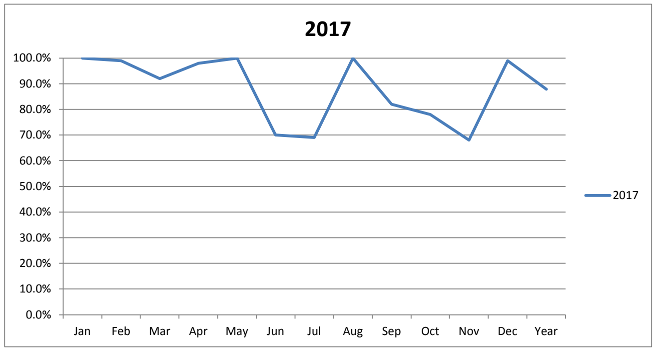
Data through June, 2019

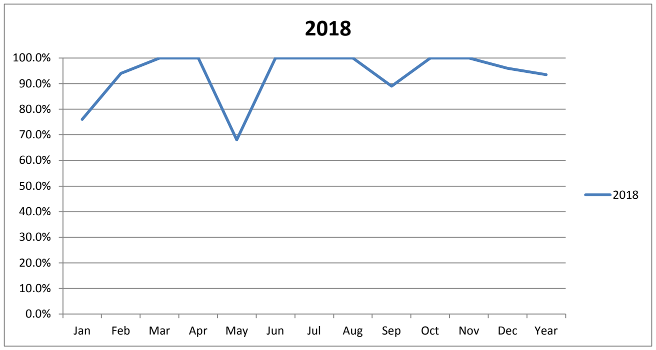
Unit: **Energy Center 2**
Data: **Equivalent Availability Factor (%)**

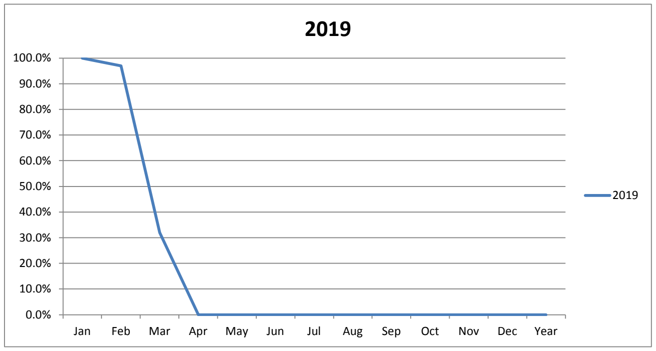




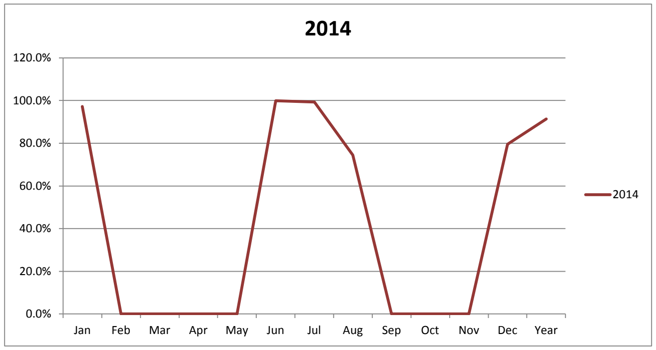


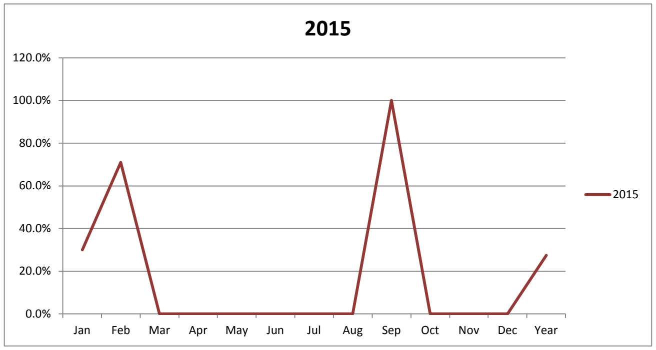


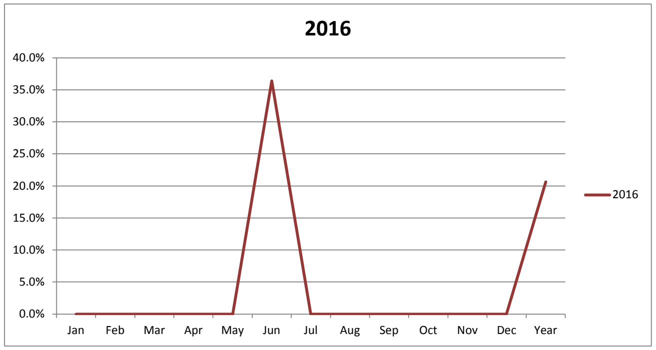


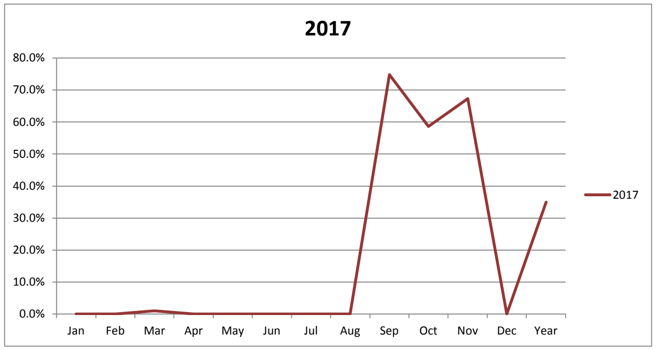


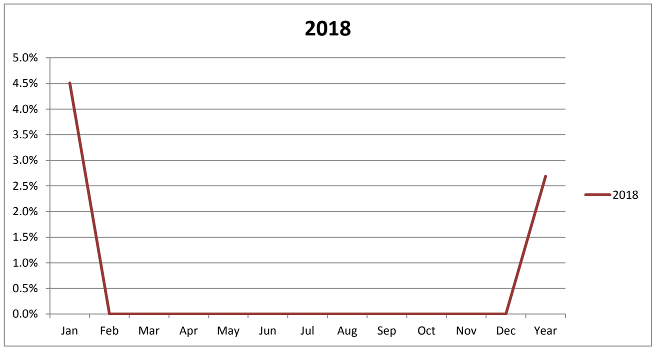
Unit: Energy Center 2
Data: Equivalent Forced Outage Rate (%)

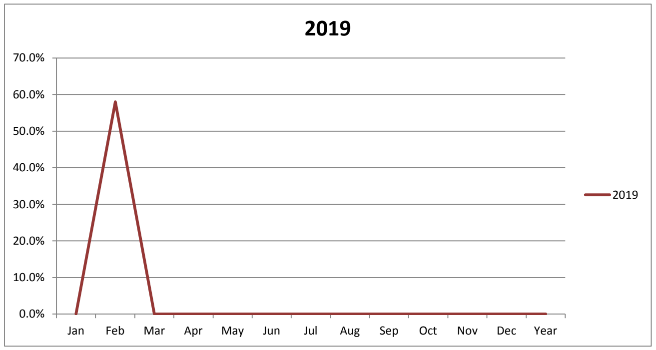




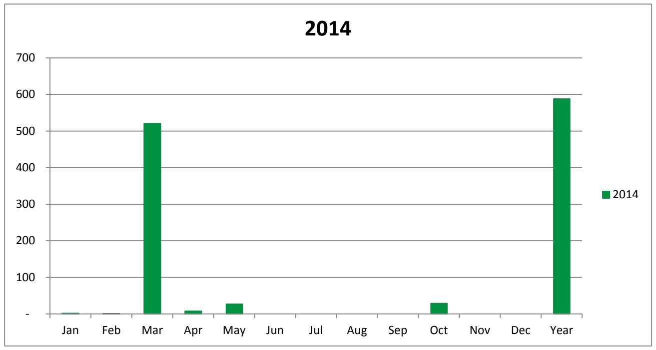


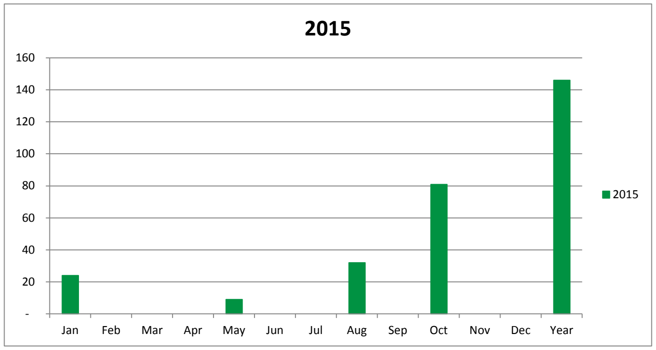


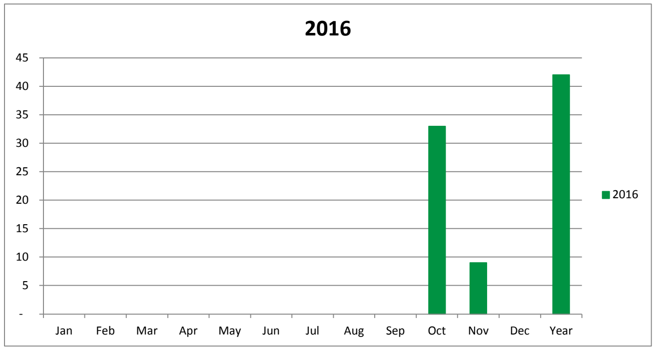


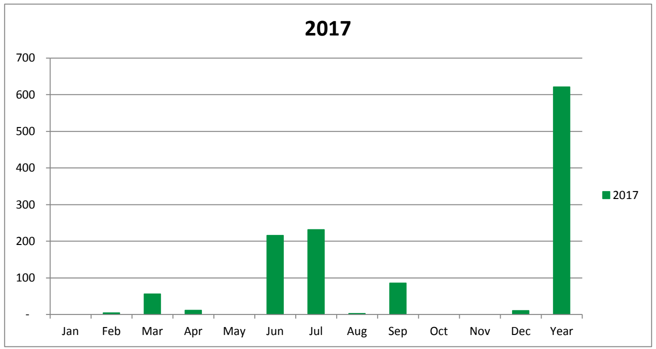


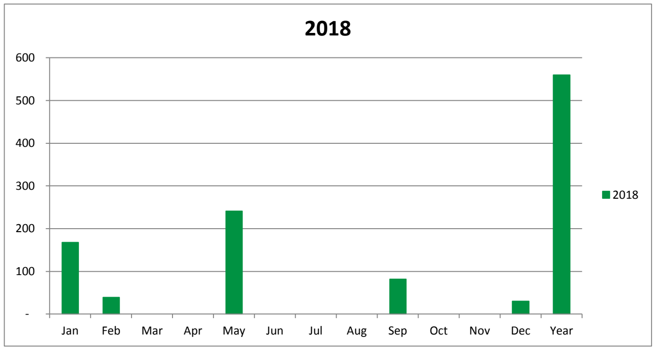
Unit: Energy Center 2
Data: Length and timing of planned outages - Scheduled Outage Hours

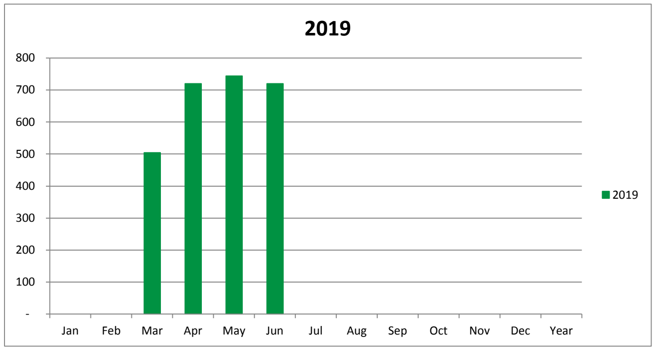












Data through June, 2019

Unit: Energy Center 3
Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	98.5%	97.4%	88.6%	97.4%	99.8%	99.9%	99.3%	99.0%	95.1%	99.0%	100.0%	97.8%
2015	100.0%	93.2%	76.2%	99.3%	98.8%	95.1%	92.8%	99.0%	99.6%	89.1%	99.1%	100.0%	95.2%
2016	99.5%	98.4%	100.0%	99.4%	20.8%	100.0%	100.0%	98.4%	90.7%	77.6%	50.1%	50.0%	82.0%
2017	91.0%	100.0%	100.0%	100.0%	93.0%	99.0%	100.0%	99.0%	100.0%	15.0%	20.0%	20.0%	77.9%
2018	76.0%	78.0%	27.0%	62.0%	86.0%	87.0%	87.0%	87.0%	87.0%	79.0%	91.0%	90.0%	78.1%
2019	37.0%	72.0%	90.0%	91.0%	91.0%	91.0%							

Unit: Energy Center 3
Data: Equivalent Forced Outage Rate (%)

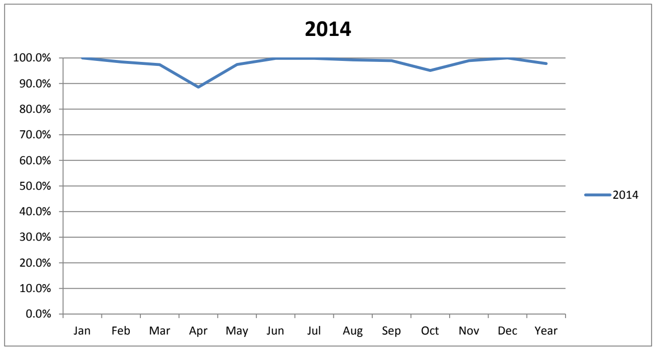
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014			2.3%		1.2%					2.8%			0.6%
2015		26.0%				15.0%	22.0%	1.0%			5.0%		6.2%
2016								3.3%		34.3%			6.7%
2017	40.6%							0.5%					43.4%
2018	40.4%	56.2%	90.8%	77.4%	42.9%	29.3%	31.0%	36.9%	44.7%	37.5%	20.9%	41.6%	46.4%
2019	44.0%	45.0%	27.0%	18.0%	13.0%	22.0%							

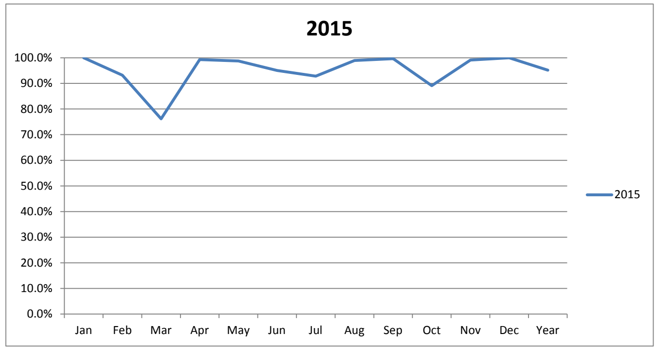
Unit: Energy Center 3
Data: Length and timing of planned outages - Scheduled Outage Hours

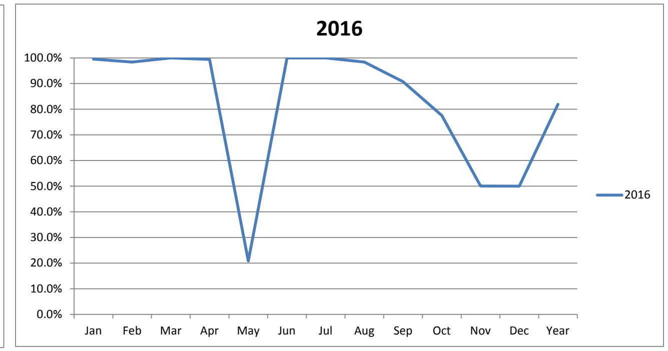
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	10	17	82	18	1	-	6	8	33	8	-	182
2015	-	3	177	5	9	-	-	7	-	81	5	-	286
2016	-	7	-	4	589	-	-	9	-	18	-	-	627
2017	-	-	-	-	48	7	-	10	-	40	3	-	108
2018	1	5	254	31	7	-	-	-	-	84	-	12	394
2019	444	111	4	-	-	-							

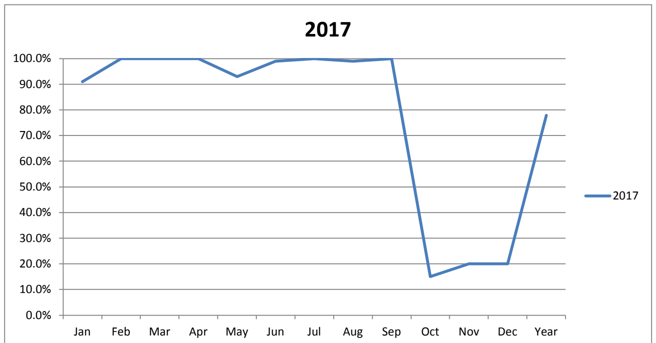
Data through June, 2019

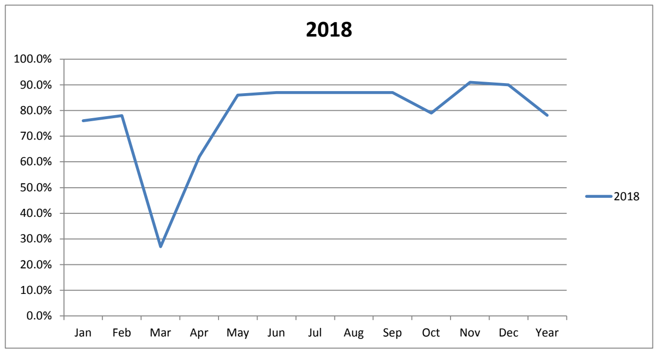
Unit: Energy Center 3
Data: Equivalent Availability Factor (%)

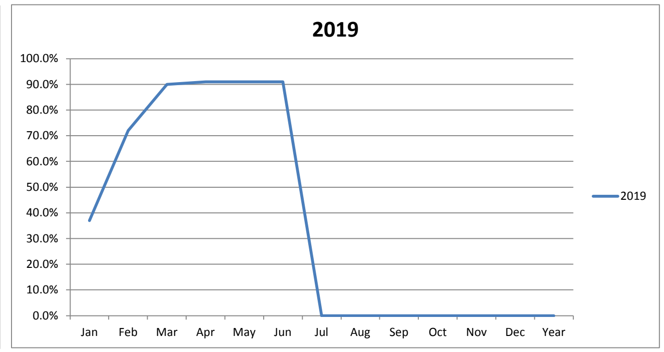




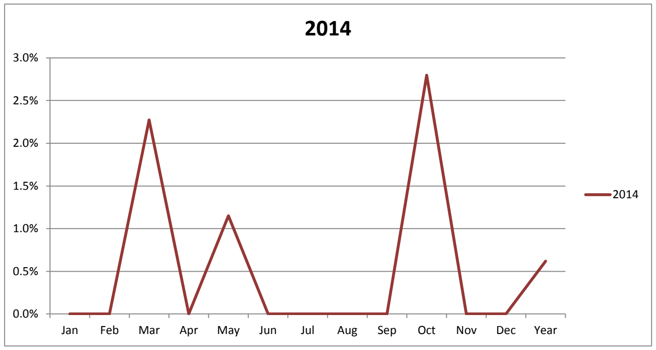


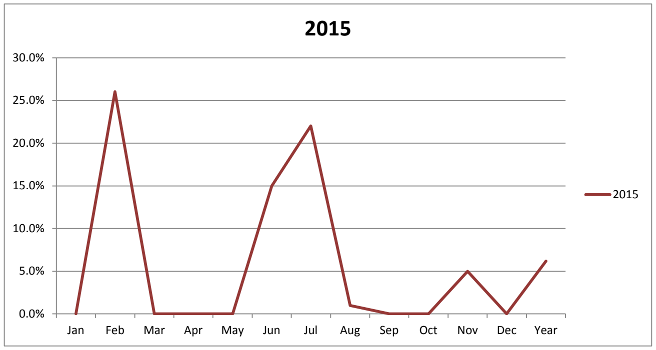


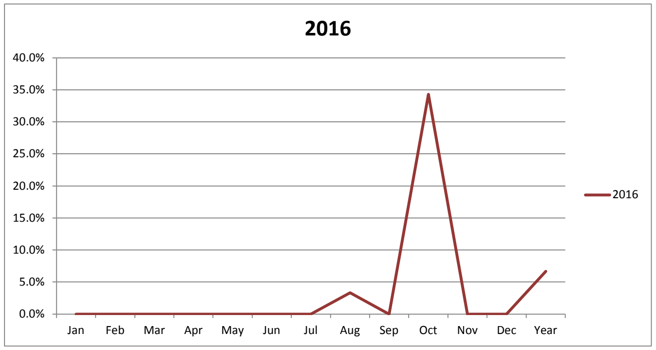


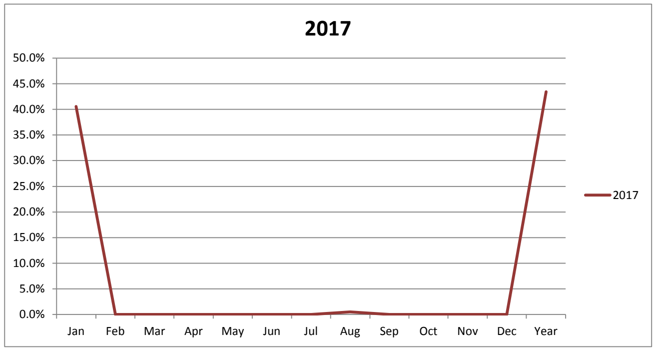


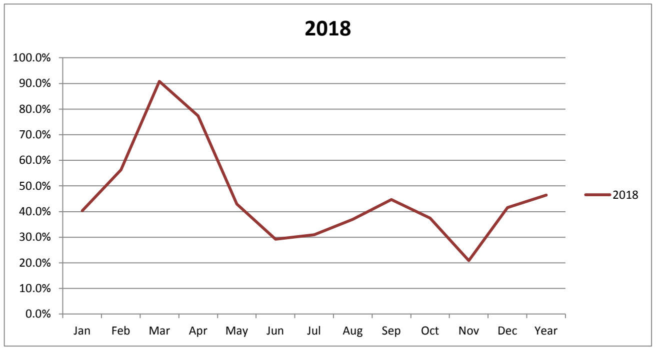
Unit: Energy Center 3
Data: Equivalent Forced Outage Rate (%)

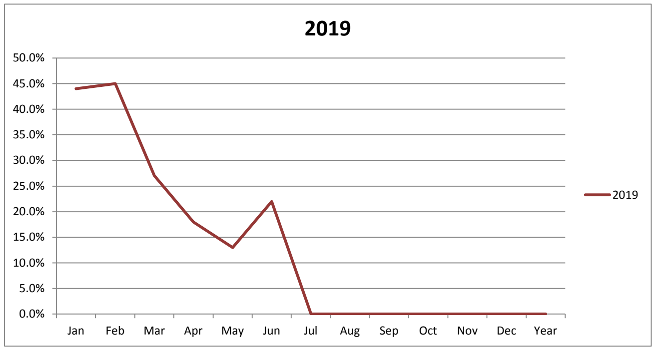




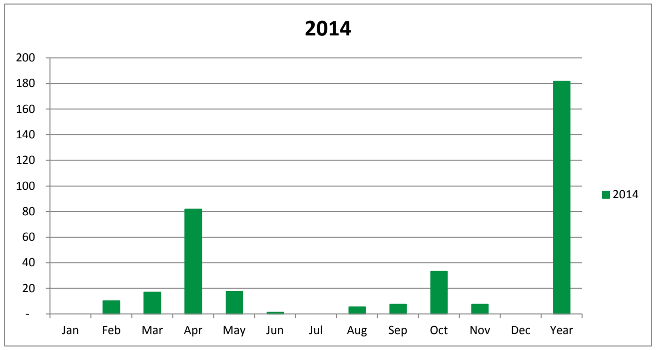


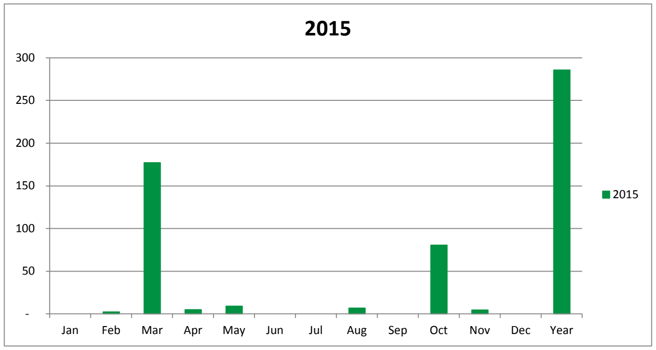


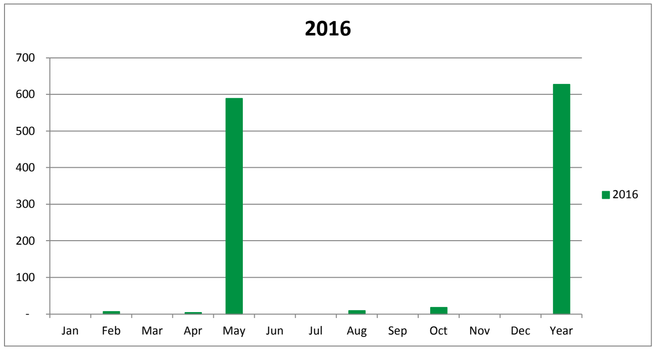


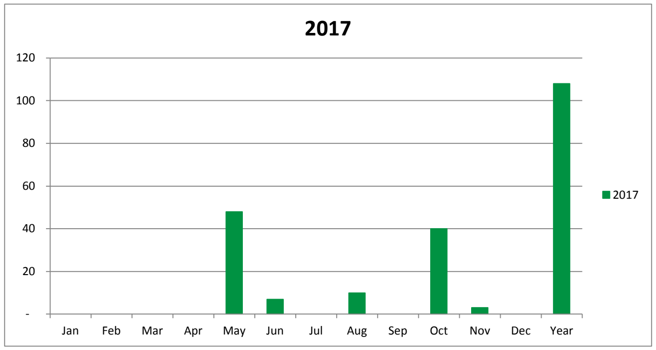


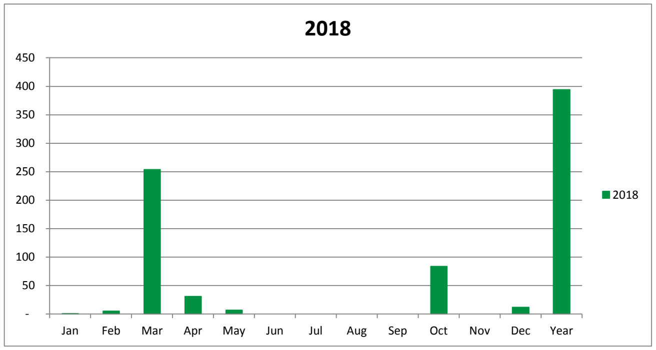
Unit: Energy Center 3
Data: Length and timing of planned outages - Scheduled Outage Hours

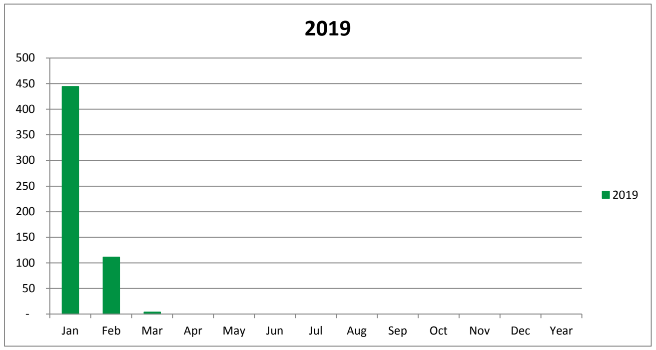












Data through June, 2019

Unit: Energy Center 4
Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	98.9%	100.0%	95.4%	98.5%	100.0%	100.0%	99.5%	99.2%	94.9%	99.3%	100.0%	98.8%
2015	100.0%	98.2%	99.5%	64.4%	45.2%	49.7%	45.5%	51.1%	60.1%	90.9%	98.6%	100.0%	75.2%
2016	99.5%	99.0%	98.9%	99.7%	68.6%	100.0%	100.0%	99.1%	99.0%	89.9%	100.0%	100.0%	96.1%
2017	100.0%	98.0%	94.0%	100.0%	96.0%	99.0%	100.0%	99.0%	100.0%	4.0%	89.0%	28.0%	83.6%
2018	80.0%	82.0%	73.0%	64.0%	41.0%	41.0%	70.0%	83.0%	83.0%	77.0%	72.0%	86.0%	70.9%
2019	87.0%	31.0%	9.0%			53.0%							

Unit: Energy Center 4
Data: Equivalent Forced Outage Rate (%)

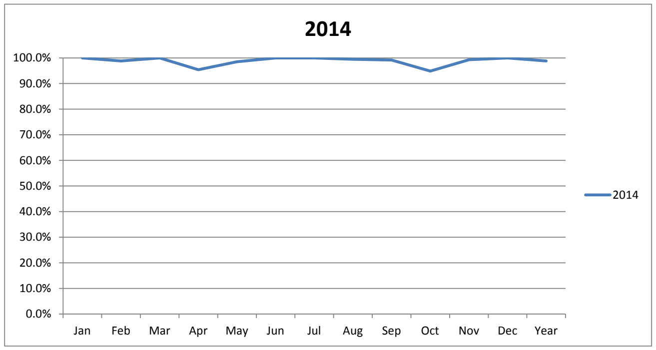
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014													0.3%
2015		11.0%			83.0%	73.0%	80.0%	87.0%	78.0%				1.0%
2016										34.0%			5.3%
2017								3.8%			0.8%	1.9%	34.6%
2018	34.4%	49.7%	46.3%	78.3%	87.1%	80.2%	49.6%	45.2%	54.9%	37.6%	48.3%	52.6%	58.0%
2019	51.0%	38.0%	35.0%			58.0%							

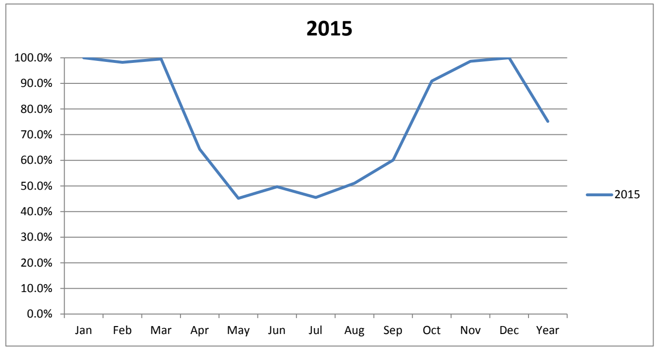
Unit: Energy Center 4
Data: Length and timing of planned outages - Scheduled Outage Hours

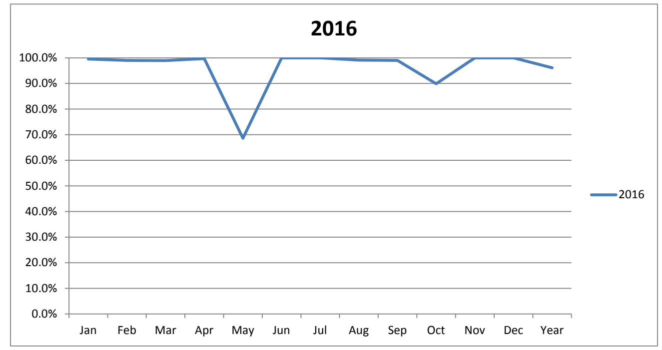
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	8	-	33	11	-	-	4	6	33	5	-	100
2015	-	3	3	257	92	3	-	4	33	68	10	-	473
2016	-	-	8	2	234	-	-	7	4	9	-	-	264
2017	-	-	12	-	30	6	-	6	-	94	3	5	156
2018	-	4	87	10	4	-	20	-	-	83	14	5	227
2019	-	436	668	720	744	270							

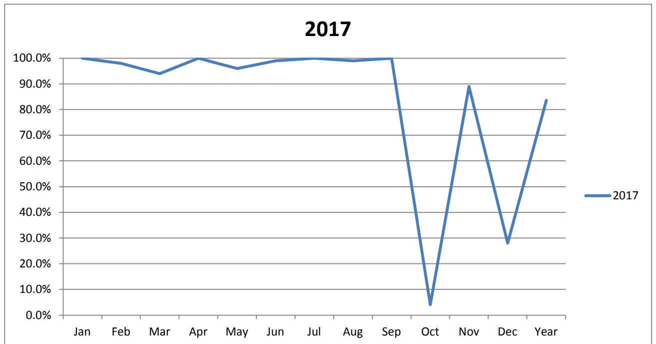
Data through June, 2019

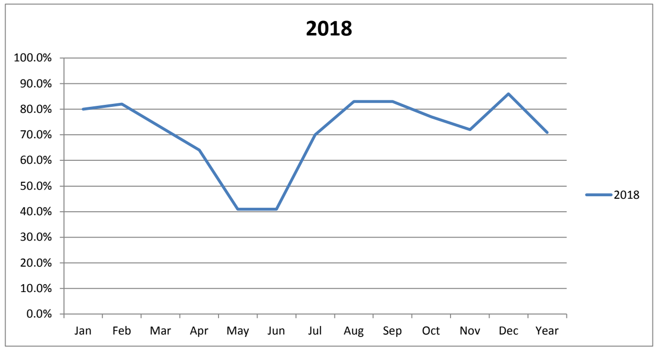
Unit: Energy Center 4
Data: Equivalent Availability Factor (%)

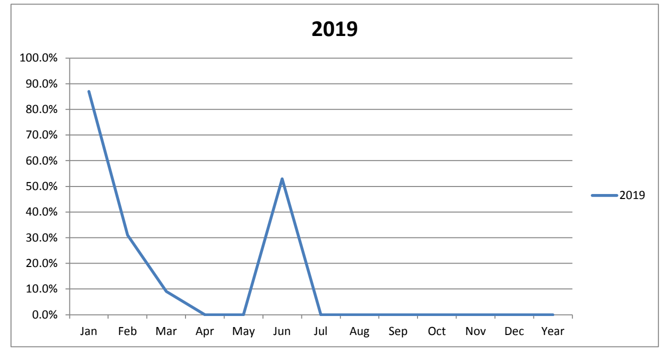




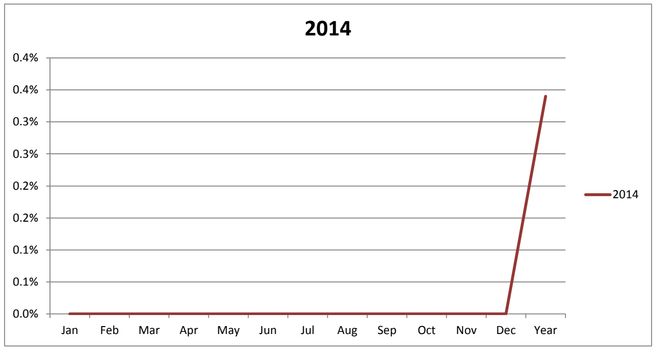


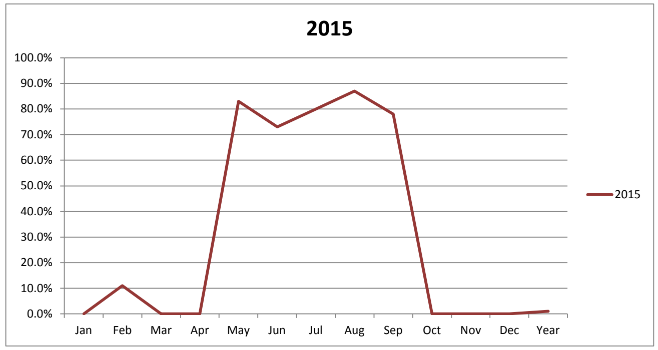


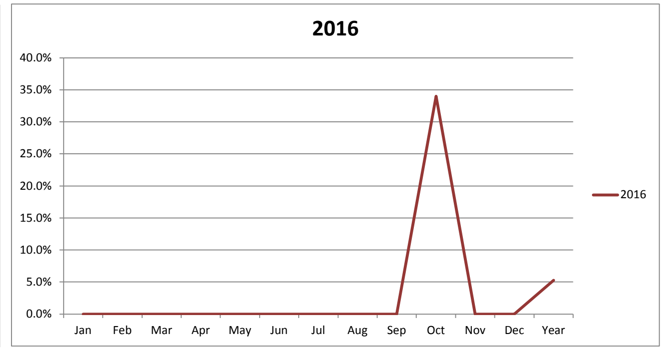


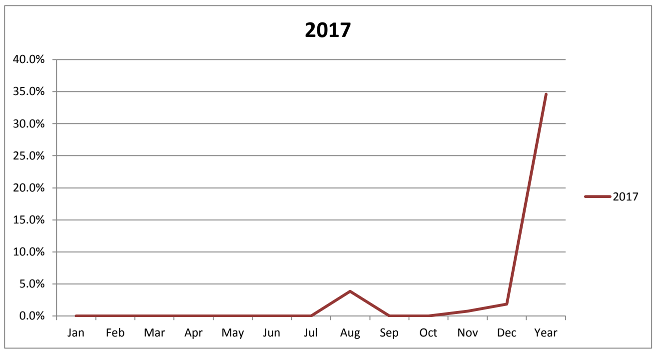


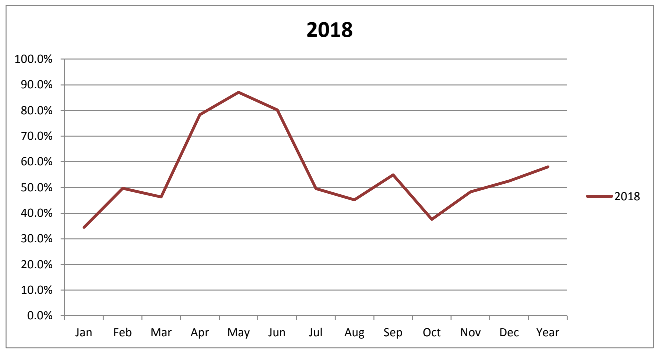
Unit: Energy Center 4
Data: Equivalent Forced Outage Rate (%)

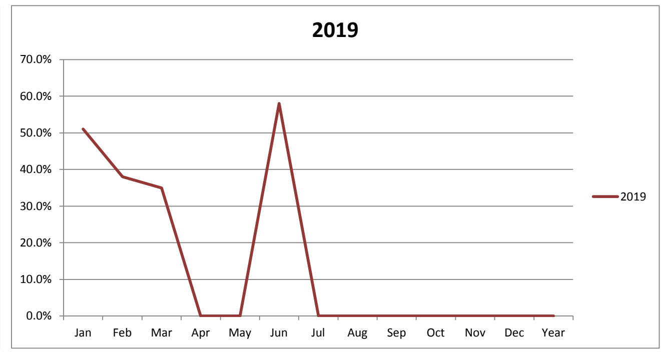




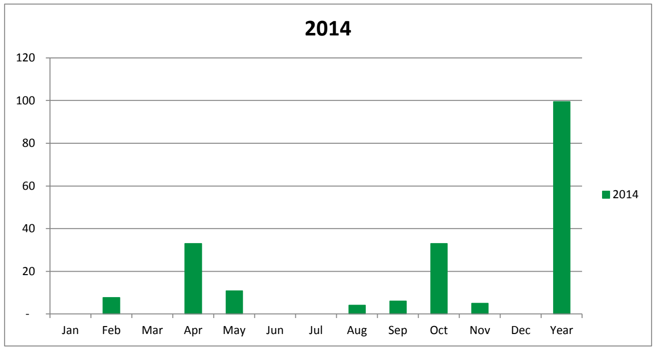


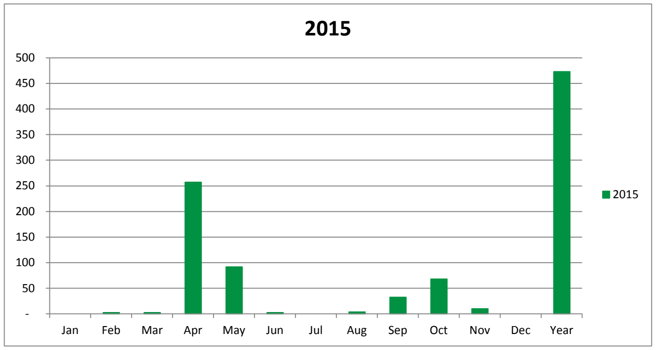


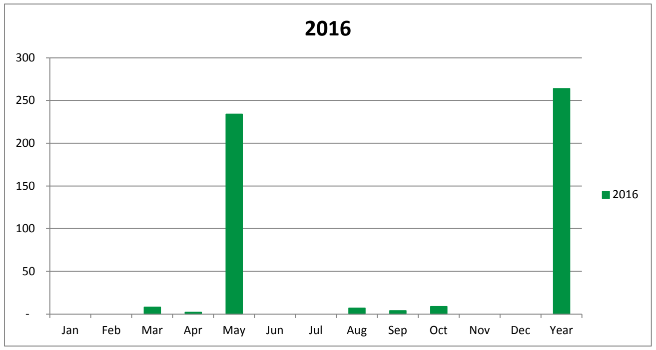


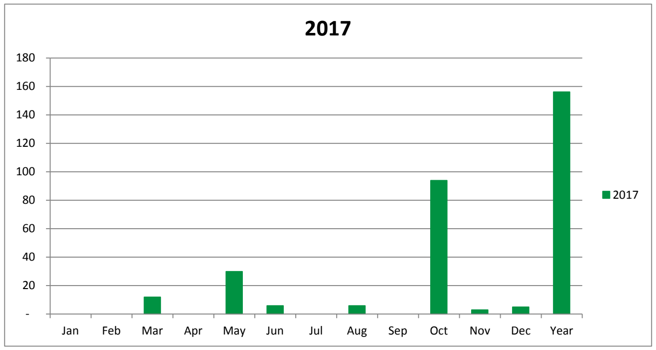


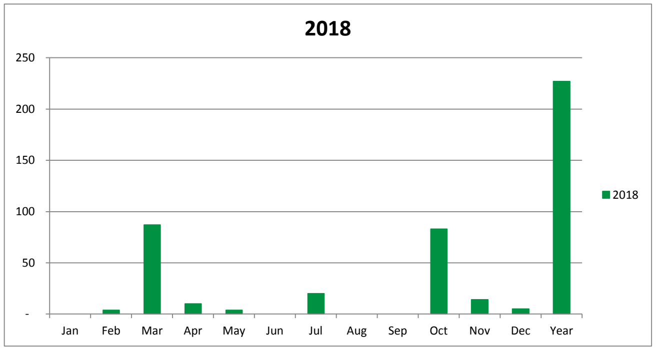
Unit: Energy Center 4
Data: Length and timing of planned outages - Scheduled Outage Hours

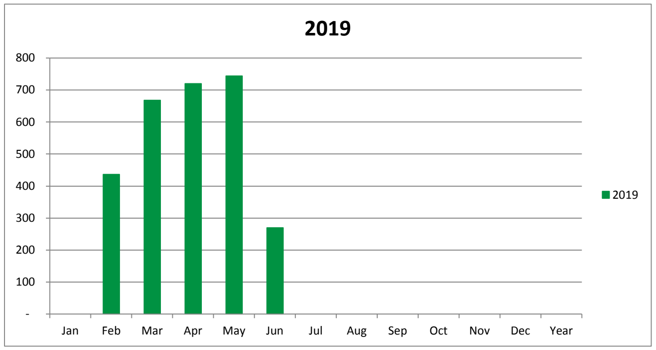












Data through June, 2019

Unit: Iatan 1
Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	48.5%	54.4%	76.6%	99.3%	98.3%	77.9%	94.1%	98.6%	92.4%	69.4%	77.9%	97.2%	82.3%
2015	92.9%	85.6%			55.3%	96.1%	92.5%	82.3%	99.7%	72.6%	53.3%	70.8%	66.7%
2016	88.2%	99.8%	99.6%	68.1%	94.2%	99.9%	99.9%	74.2%	98.9%	92.2%	100.0%	98.2%	92.8%
2017	98.0%	86.0%	99.0%	99.0%	93.0%	99.0%	99.0%	100.0%	84.0%	14.0%	1.0%	72.0%	78.8%
2018	72.0%	99.0%	98.0%	100.0%	100.0%	100.0%	96.0%	97.0%	69.0%	33.0%	68.0%	2.0%	77.6%
2019	74.0%	79.0%	68.0%	70.0%	89.0%	99.0%							

Unit: Iatan 1
Data: Equivalent Forced Outage Rate (%)

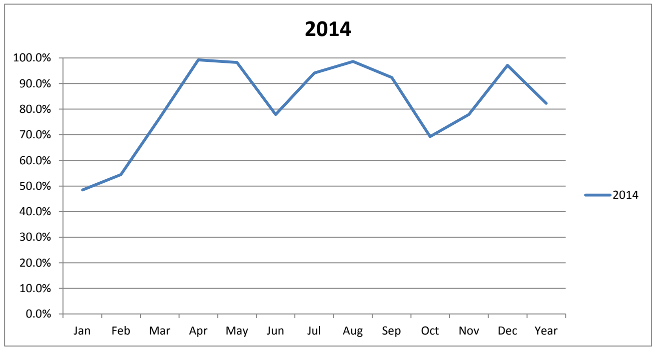
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	50.1%	43.6%	23.6%	0.0%	1.7%	21.1%	0.0%	1.2%	5.0%	1.2%	17.7%	2.0%	15.3%
2015	7.0%	10.0%			43.0%	4.0%	6.0%	17.0%		15.0%	47.0%	25.0%	14.2%
2016	6.2%				1.4%			25.8%					2.9%
2017		12.0%			4.1%				15.2%	27.9%	88.6%	3.2%	8.0%
2018	19.5%	0.7%	1.6%				3.6%	3.2%	20.8%	67.6%	25.9%	97.4%	20.3%
2019	22.0%	21.0%	32.0%	30.0%	11.0%	2.0%							

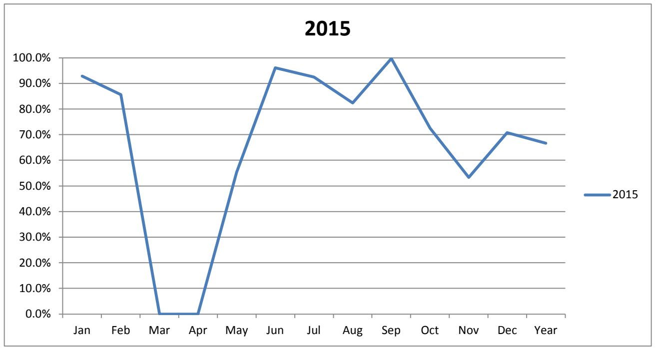
Unit: Iatan 1
Data: Length and timing of planned outages - Scheduled Outage Hours

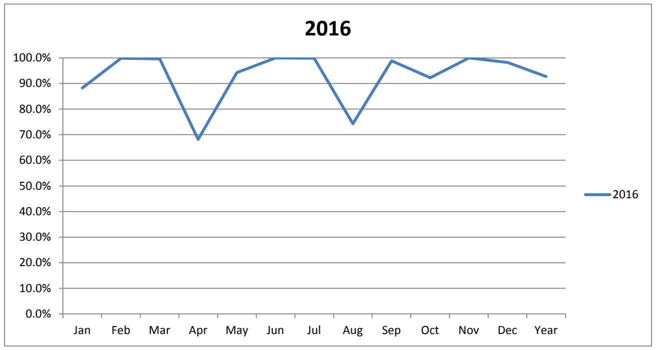
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	1	-	-	-	-	-	-	-	200	-	-	202
2015	-	24	743	720	-	-	-	-	-	111	-	-	1,598
2016	-	-	-	227	-	-	-	-	-	-	-	-	227
2017	-	-	-	-	-	-	-	-	-	599	629	-	1,228
2018	42	-	-	-	-	-	-	-	89	-	-	-	131
2019	-	-	-	-	-	-							

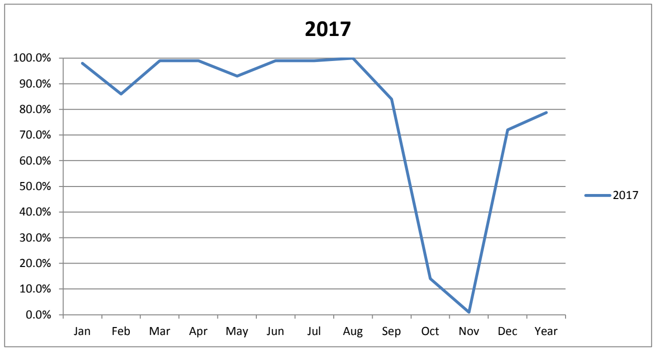
Data through June, 2019

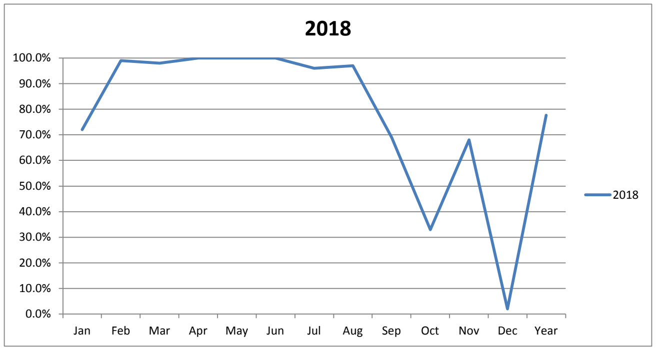
Unit: Iatan 1
Data: Equivalent Availability Factor (%)

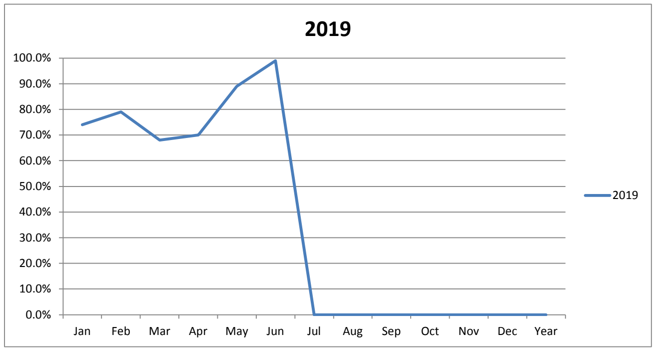




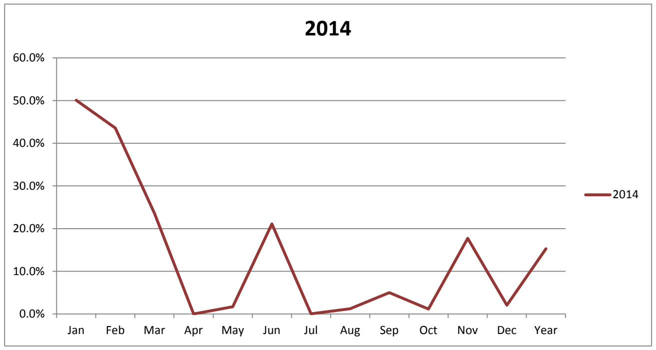


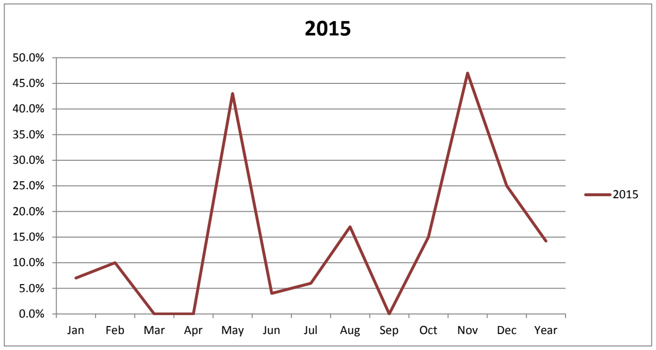


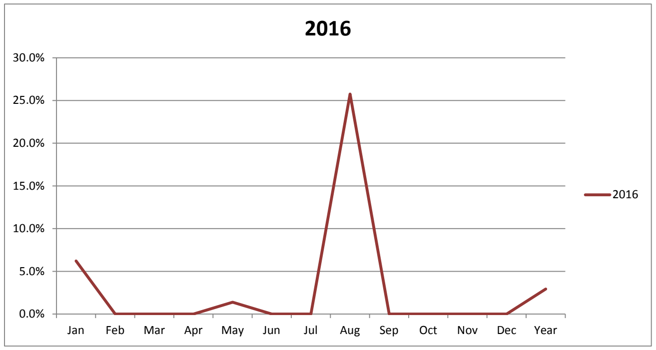


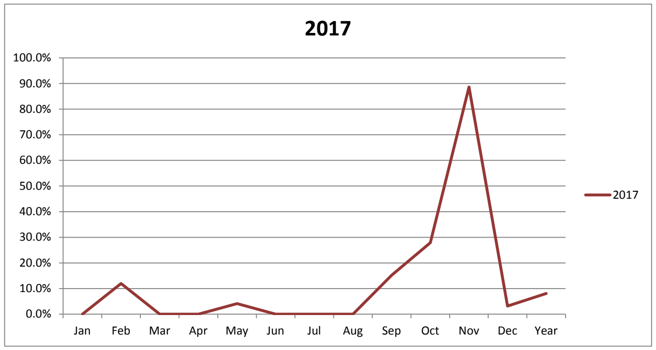


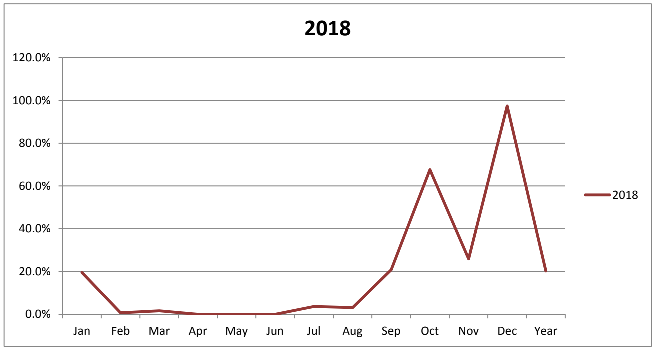
Unit: Iatan 1
Data: Equivalent Forced Outage Rate (%)

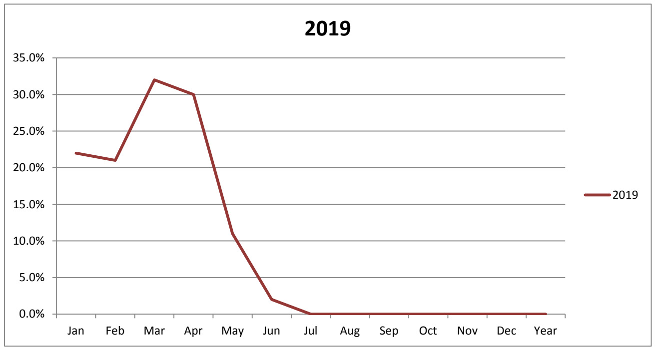




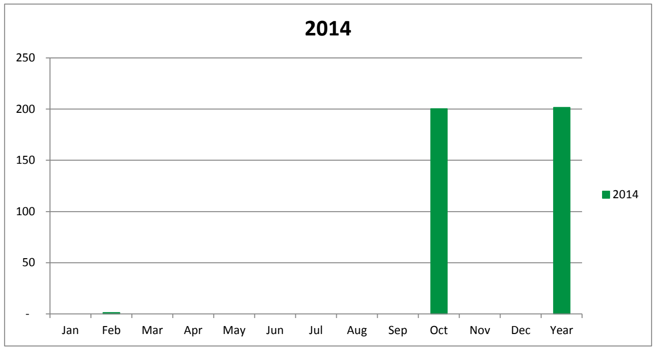


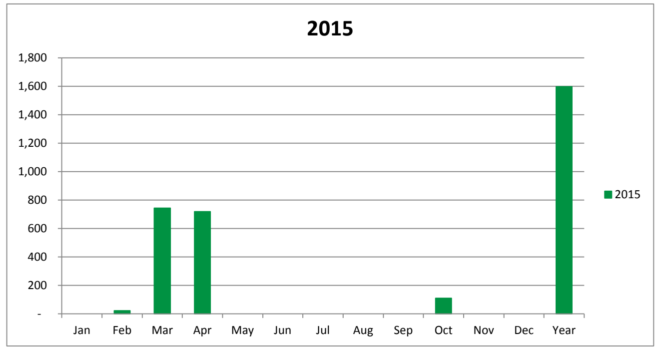


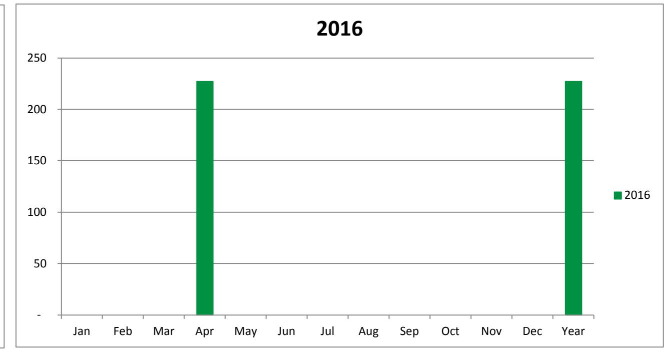


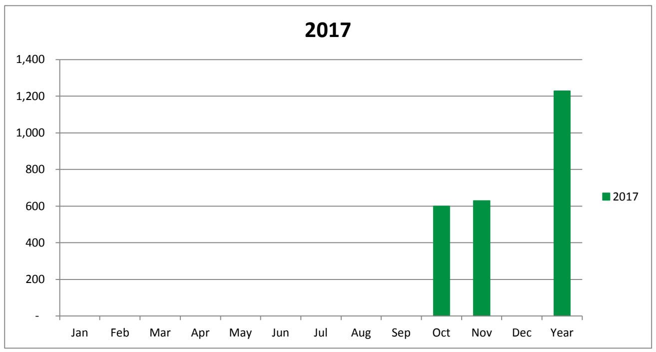


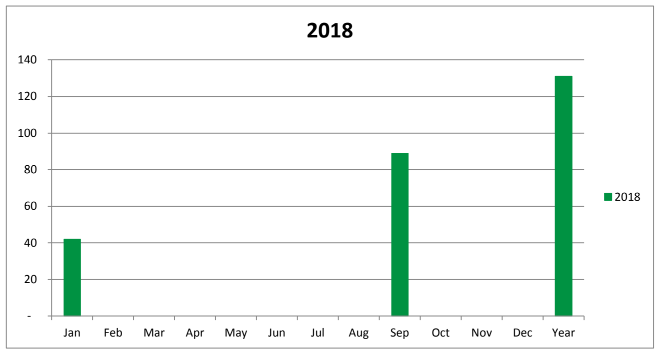
Unit: Iatan 1
Data: Length and timing of planned outages - Scheduled Outage Hours

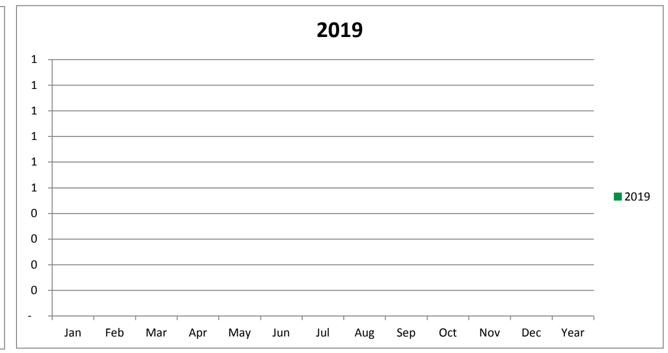












Data through June, 2019

Unit: Iatan 2
Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	99.5%	99.6%	99.8%	57.3%	49.8%	83.8%	70.4%	98.5%	63.6%		10.1%	70.0%	66.7%
2015	74.7%	85.8%	100.0%	99.7%	47.0%	83.6%	41.6%	96.5%	96.5%	96.3%	59.6%	100.0%	81.7%
2016	81.2%	29.2%	99.6%	84.8%	82.7%	100.0%	100.0%	100.0%	85.9%		1.9%	41.0%	67.4%
2017	100.0%	86.0%	98.0%	99.0%	99.0%	100.0%	99.0%	100.0%	100.0%	99.0%	100.0%	75.0%	96.4%
2018	90.0%	79.0%	6.0%			4.0%	68.0%	100.0%	100.0%	100.0%	51.0%	100.0%	58.2%
2019	98.0%	95.0%	91.0%	39.0%		74.0%							

Unit: Iatan 2
Data: Equivalent Forced Outage Rate (%)

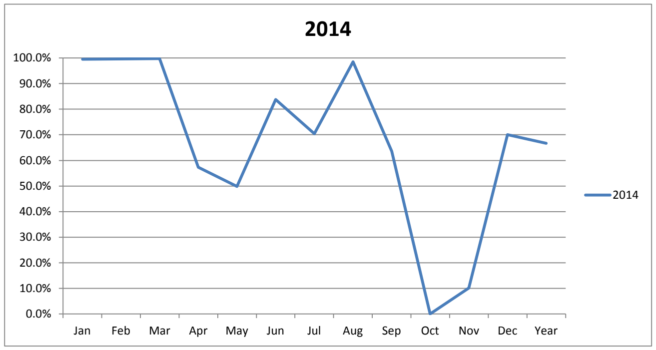
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	0.5%				43.3%	11.9%	10.9%	1.5%			82.4%	29.3%	16.1%
2015	25.0%	14.0%			43.0%	16.0%	57.0%	3.0%	3.0%	4.0%	40.0%		15.6%
2016	18.8%	69.0%		14.9%	16.5%				14.1%	100.0%	96.0%	57.0%	24.1%
2017		13.8%	1.5%							0.7%		23.6%	3.6%
2018	9.6%	20.5%				89.2%	31.6%				13.7%		15.8%
2019	2.0%	5.0%	8.0%	21.0%		28.0%							

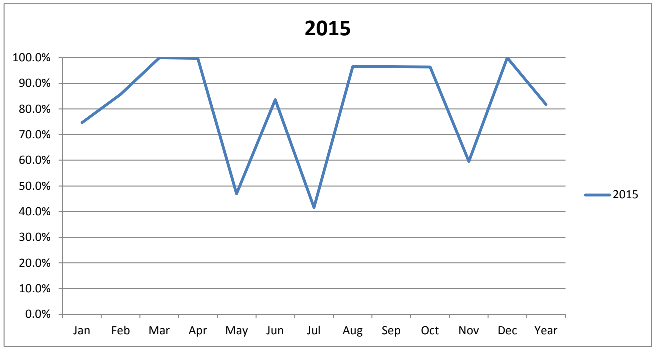
Unit: Iatan 2
Data: Length and timing of planned outages - Scheduled Outage Hours

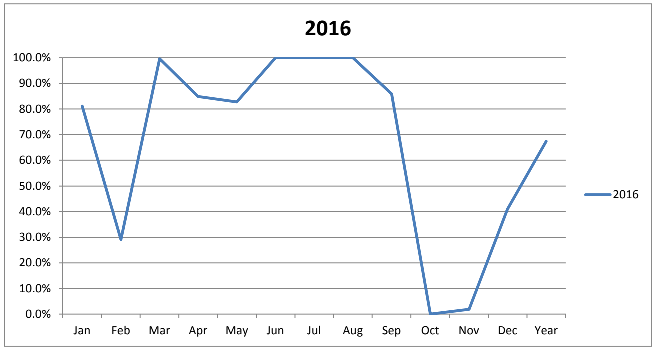
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	308	106	-	96	-	262	744	252	-	1,768
2015	-	-	-	-	132	-	-	-	-	-	-	-	132
2016	-	-	-	-	-	-	-	-	-	696	232	-	928
2017	-	-	-	-	-	-	-	-	-	-	-	-	-
2018	-	-	700	720	744	234	-	-	-	-	296	-	2,694
2019	-	-	-	353	-	-							

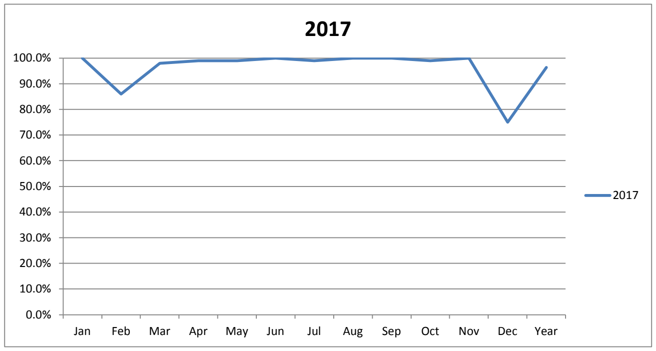
Data through June, 2019

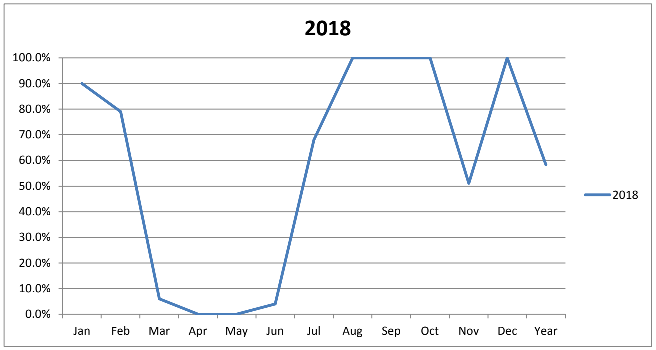
Unit: Iatan 2
Data: Equivalent Availability Factor (%)

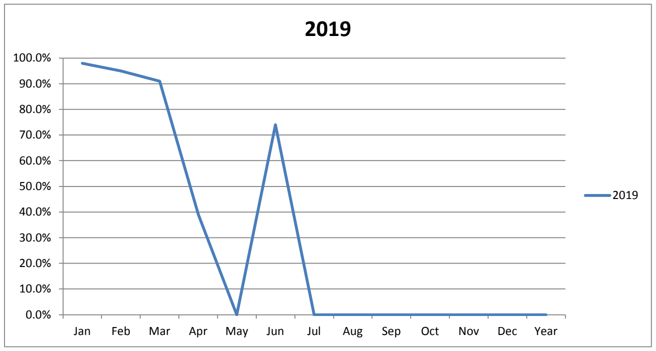




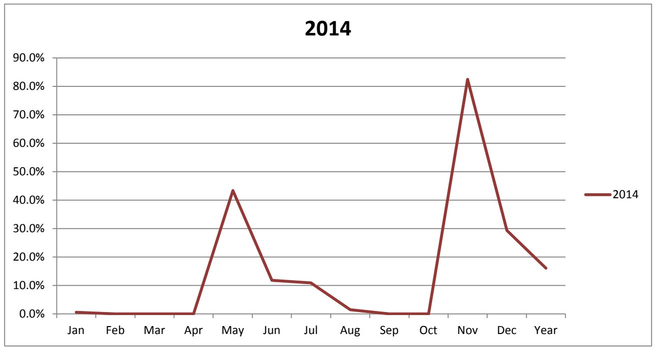


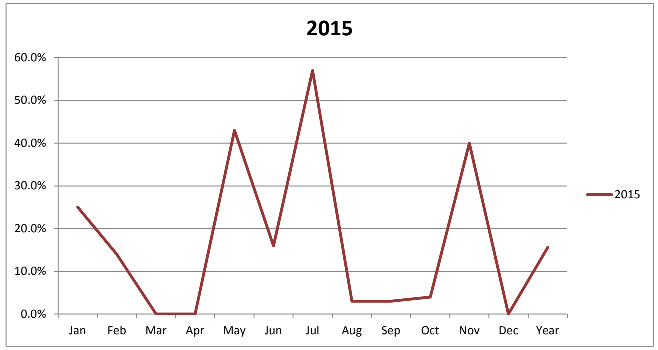


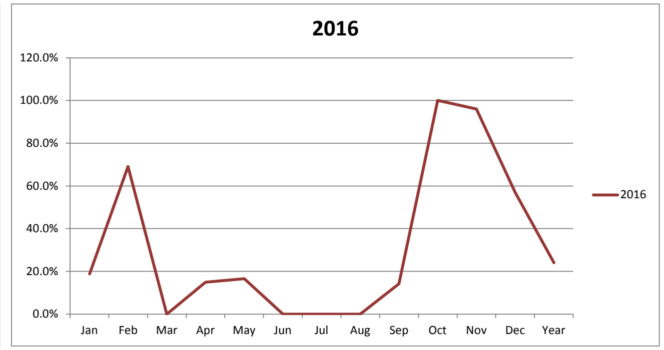


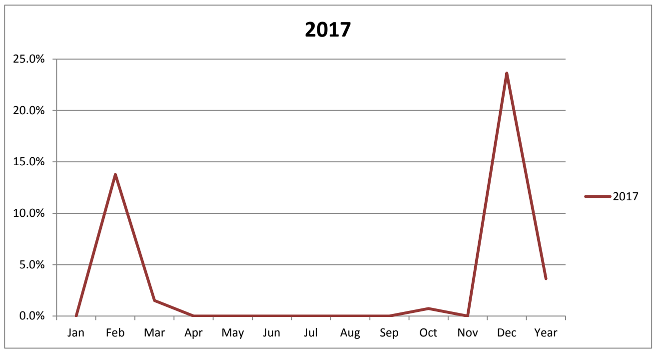


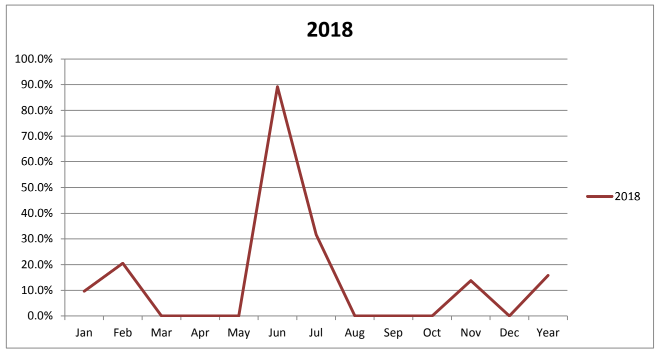
Unit: Iatan 2
Data: Equivalent Forced Outage Rate (%)

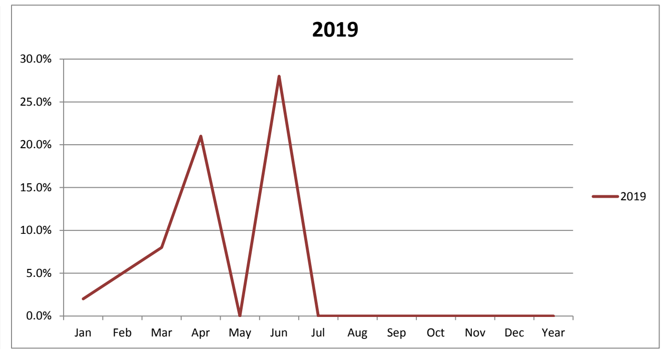




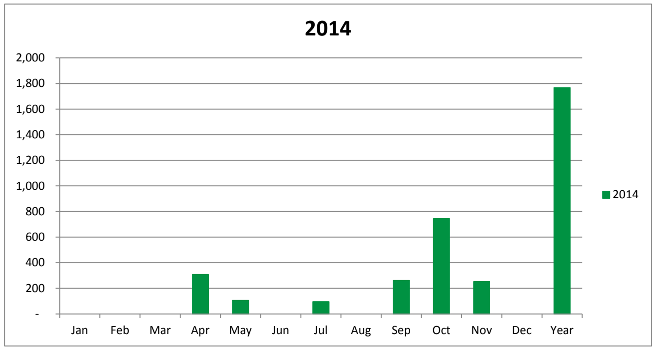


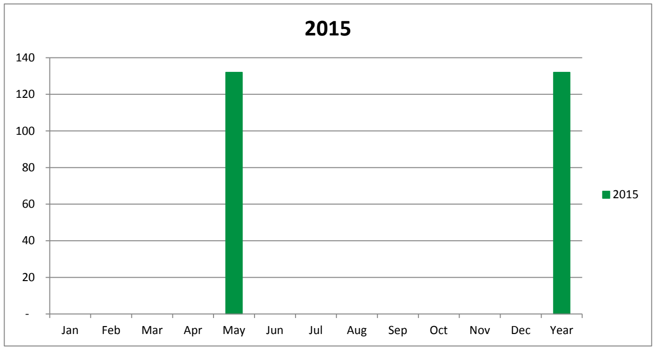


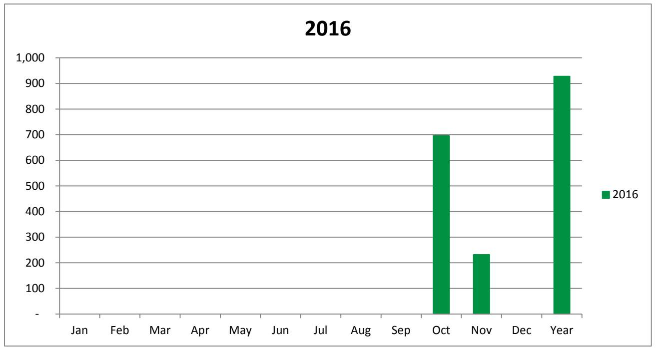


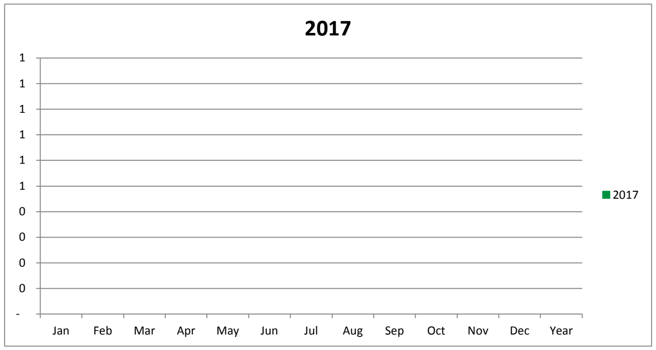


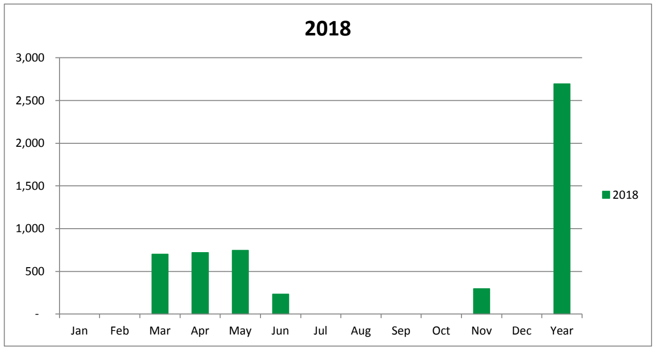
Unit: Iatan 2
Data: Length and timing of planned outages - Scheduled Outage Hours

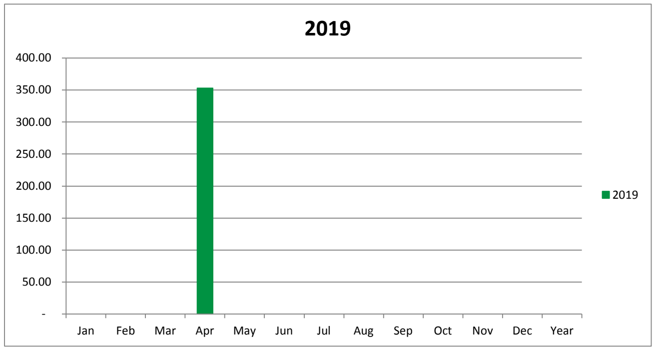












Data through June, 2019

Unit: Ozark Beach
Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	88.3%	75.0%	75.0%	75.0%	75.0%	75.0%	100.0%	100.0%	100.0%	100.0%	75.0%	100.0%	88.7%
2015	100.0%	100.0%	99.8%	100.0%	99.4%	65.7%	0.0%	0.0%	39.5%	99.6%	99.8%	84.8%	73.8%
2016	100.0%	100.0%	83.8%	87.7%	94.7%	99.7%	99.8%	100.0%	98.4%	100.0%	70.0%	100.0%	92.1%
2017	99.2%	100.0%	36.7%	100.0%	4.7%	0.0%	0.0%	47.4%	75.0%	74.6%	99.9%	99.7%	61.1%
2018	74.0%	75.0%	75.0%	74.0%	63.0%	77.0%	95.0%	81.0%	100.0%	98.0%	100.0%	100.0%	84.4%
2019	100.0%	100.0%	100.0%	96.0%	50.2%	0.0%							

Unit: Ozark Beach
Data: Equivalent Forced Outage Rate (%)

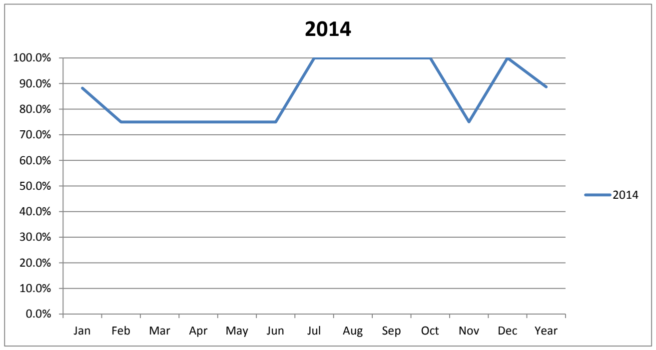
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	11.8%	30.0%	0.0%	0.0%	32.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.0%
2015	0.0%	0.0%	0.0%	0.0%	1.0%	38.0%	100.0%	100.0%	65.0%	1.0%	0.0%	16.0%	34.6%
2016	91.4%	1.4%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.3%	0.3%	0.3%	0.0%	10.8%
2017	3.1%	0.0%	0.0%	0.0%	95.3%	100.0%	100.0%	49.3%	30.1%	40.7%	0.0%	0.4%	47.4%
2018	30.3%	29.8%	0.0%	0.1%	13.8%	28.9%	10.4%	39.0%	0.0%	6.6%	0.0%	0.0%	14.0%
2019	0.0%	0.0%	0.0%	4.0%	48.2%	100.0%							

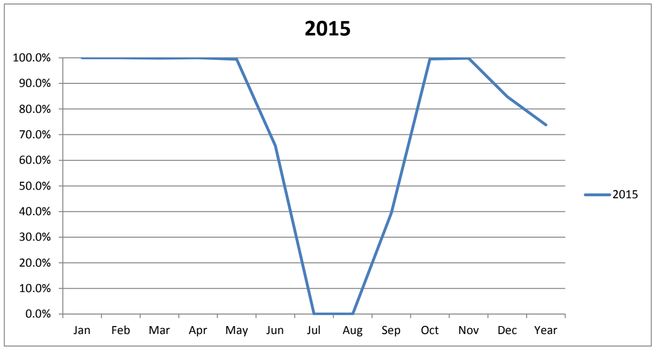
Unit: Ozark Beach
Data: Length and timing of planned outages - Scheduled Outage Hours

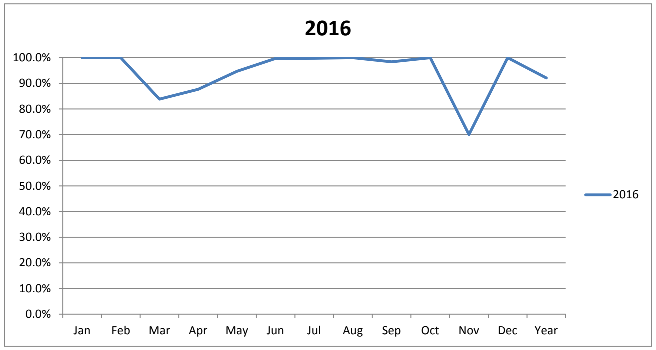
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	288	90	-	-	-	6	-	-	35	418
2015	-	-	-	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	3	-	-	3
2018	-	-	-	8	-	-	-	-	-	-	-	-	8
2019	-	-	-	-	2	-							

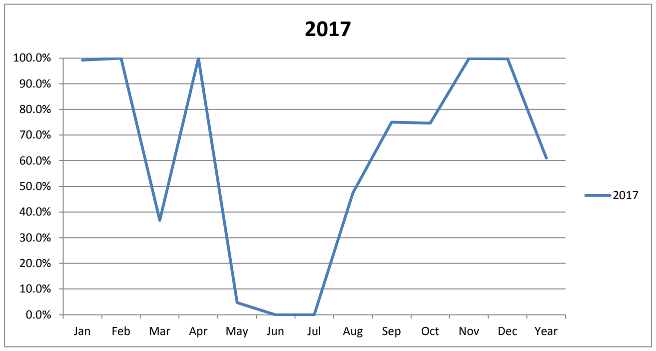
Data through June, 2019

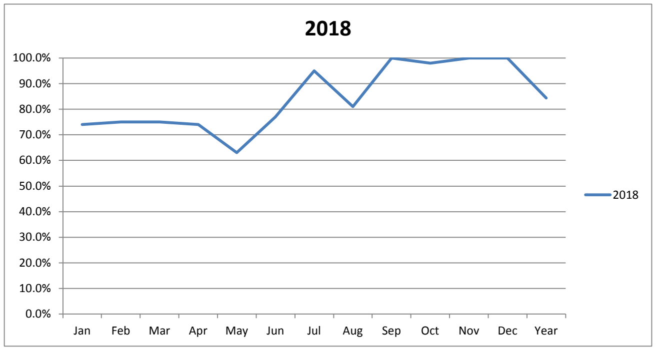
Unit: Ozark Beach
Data: Equivalent Availability Factor (%)

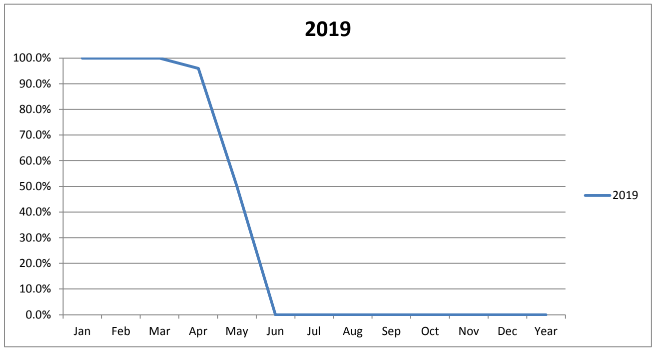




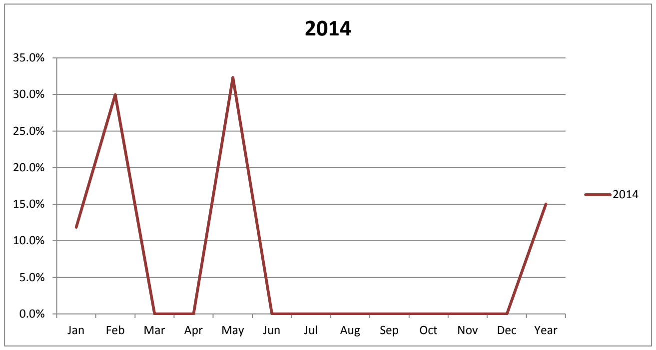


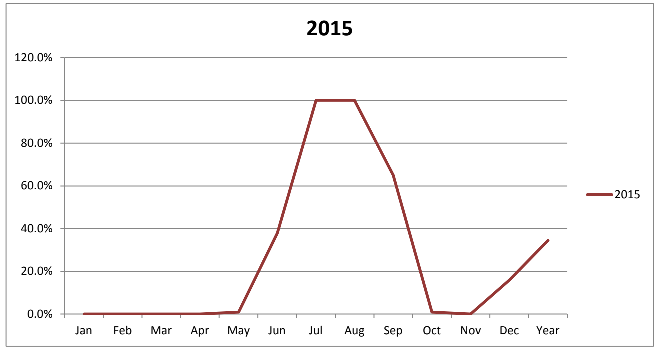


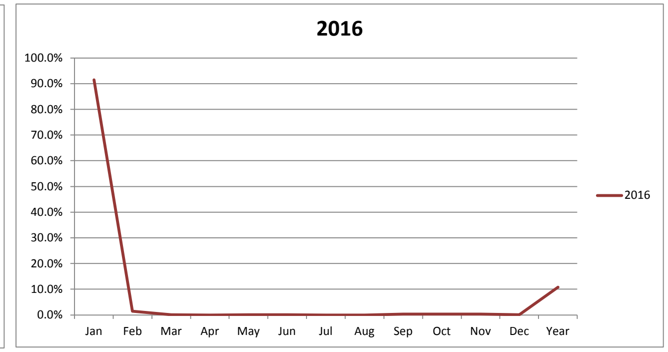


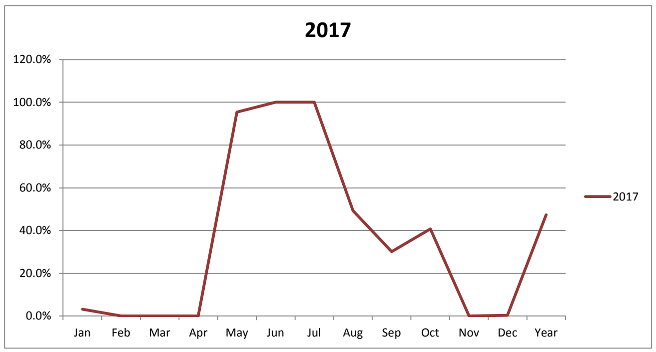


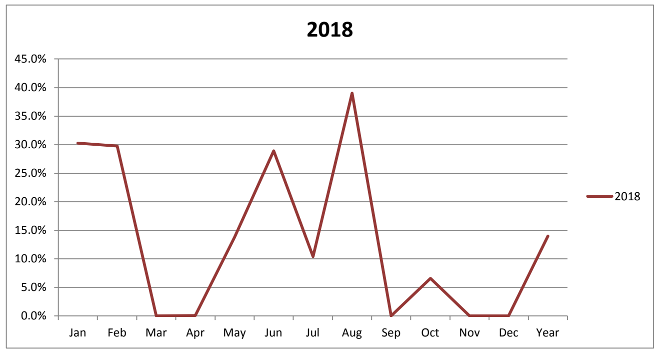
Unit: Ozark Beach
Data: Equivalent Forced Outage Rate (%)

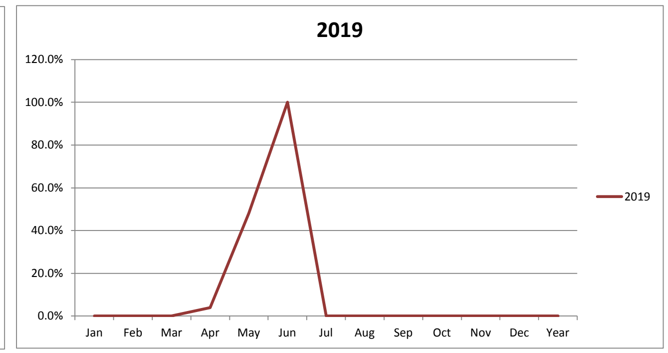




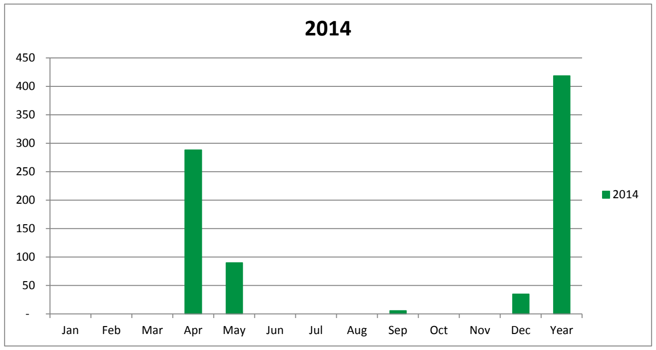


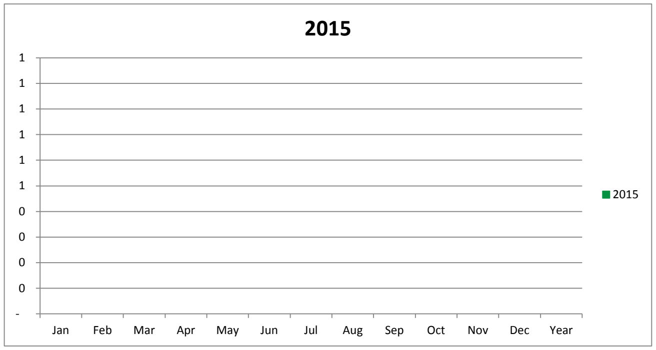


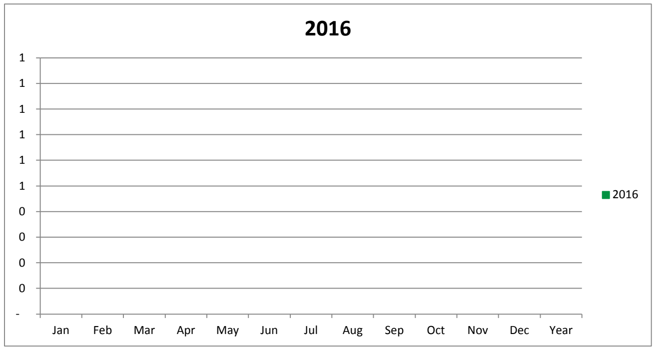


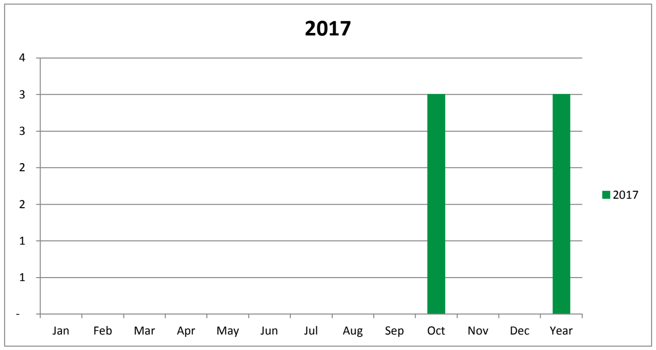


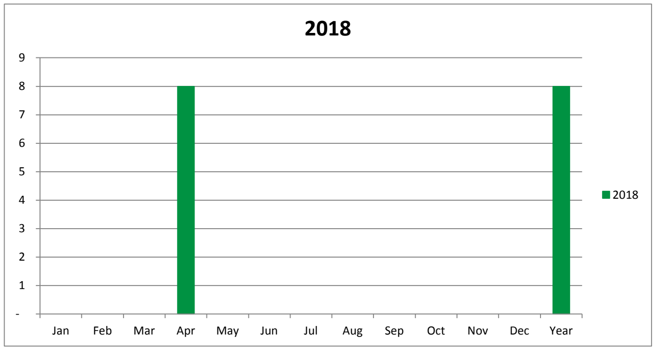
Unit: Ozark Beach
Data: Length and timing of planned outages - Scheduled Outage Hours

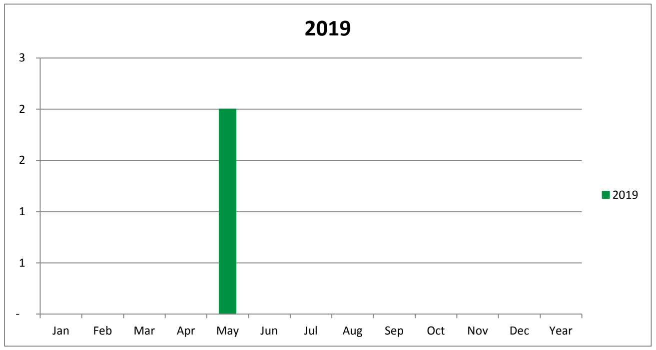












Data through June, 2019

Unit: Plum Point
Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	96.8%	97.6%	98.0%	96.9%	32.9%			78.6%	99.9%	99.3%	79.9%		64.9%
2015	13.1%	100.0%	99.9%	74.7%	81.1%	100.0%	100.0%	100.0%	89.2%	48.1%	70.8%	67.3%	78.5%
2016	99.8%	100.0%	99.9%	73.1%	48.7%	74.8%	100.0%	97.5%	99.1%	99.4%	99.8%	97.7%	90.8%
2017	60.0%	69.0%	4.0%	-	23.0%	89.0%	84.0%	97.0%	100.0%	73.0%	100.0%	100.0%	66.3%
2018	99.0%	100.0%	99.0%	39.0%	99.0%	99.0%	99.0%	83.0%	100.0%	100.0%	100.0%	99.0%	93.1%
2019	53.0%	100.0%	70.0%	5.0%	65.0%	100.0%							

Unit: Plum Point
Data: Equivalent Forced Outage Rate (%)

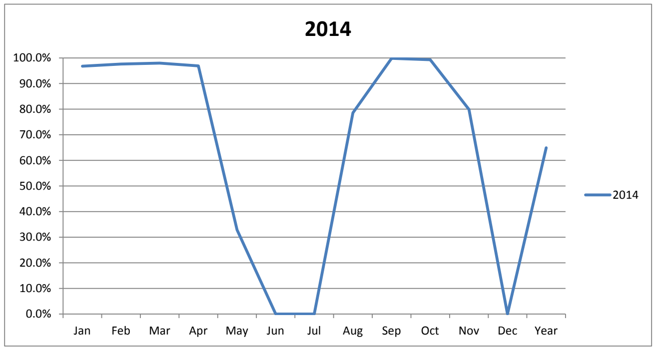
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	3.1%	2.3%			65.4%	100.0%	100.0%	20.8%			14.6%	100.0%	32.0%
2015	87.0%			1.0%	19.0%				11.0%	7.0%		32.0%	13.5%
2016					26.5%	19.5%							3.5%
2017	38.8%				74.6%	5.9%	14.5%						14.5%
2018	0.8%		0.7%	0.9%		1.2%	1.3%	17.2%				0.6%	2.0%
2019	44.0%		1.0%		4.0%								

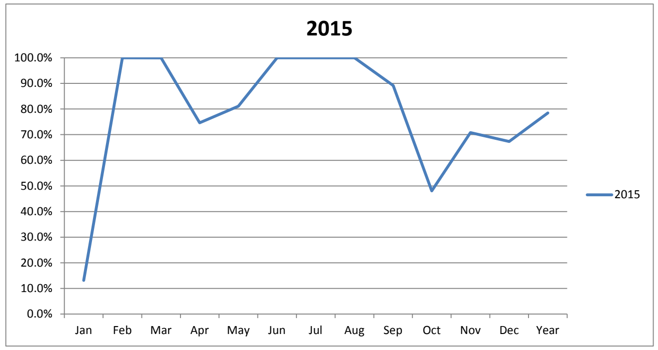
Unit: Plum Point
Data: Length and timing of planned outages - Scheduled Outage Hours

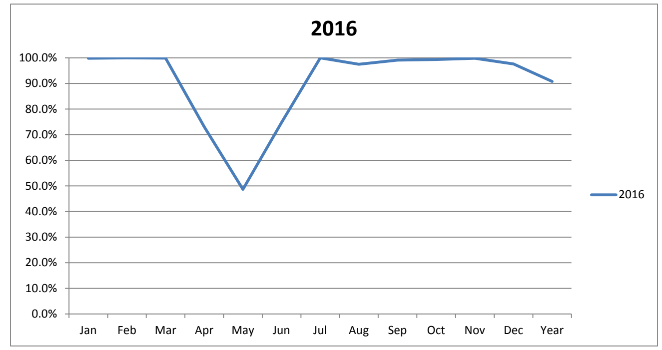
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	-	-	-	-	-	-	-	46	314	360
2015	-	-	-	177	-	-	-	-	-	359	210	-	746
2016	-	-	-	192	68	-	-	-	-	-	-	-	260
2017	-	-	671	720	-	-	-	-	-	155	-	-	1,546
2018	-	-	-	435	-	-	-	-	-	-	-	-	435
2019	-	-	118.00	648.00	239.00	-							

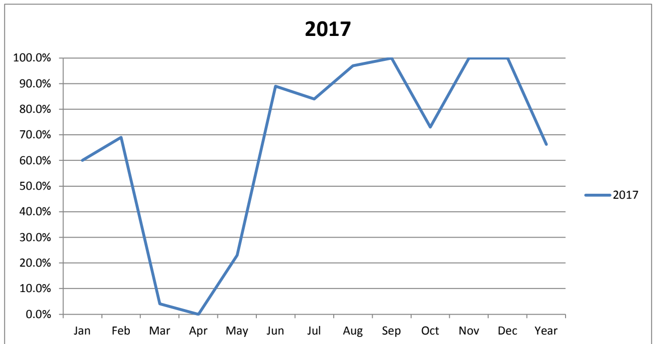
Data through June, 2019

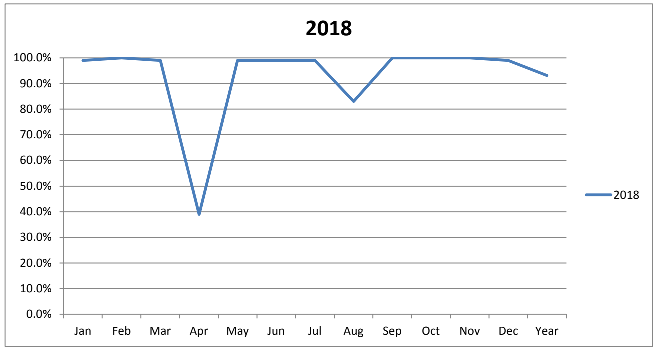
Unit: Plum Point
Data: Equivalent Availability Factor (%)

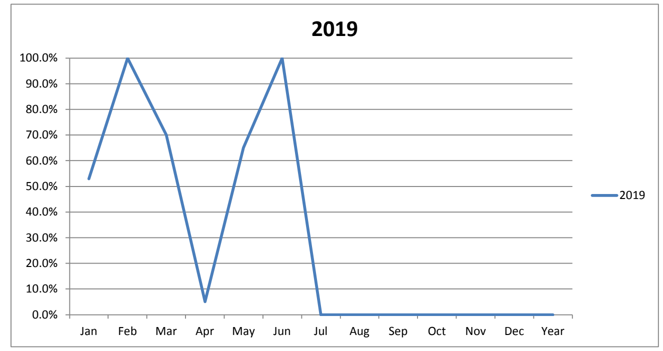




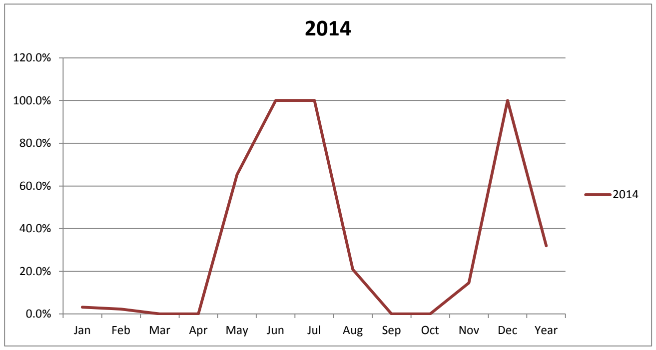


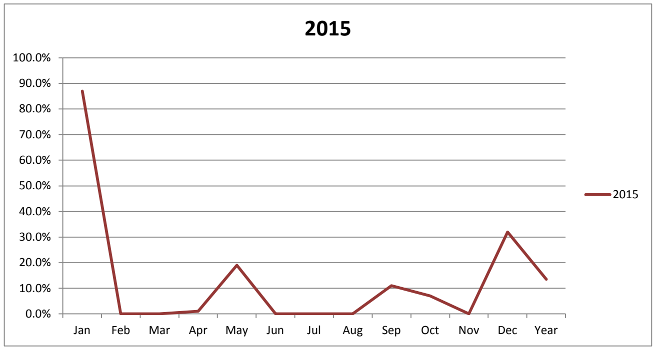


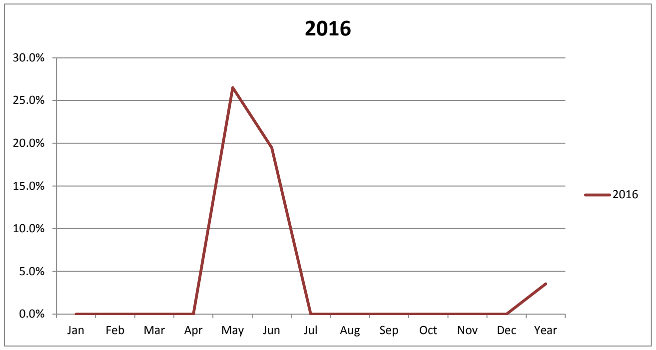


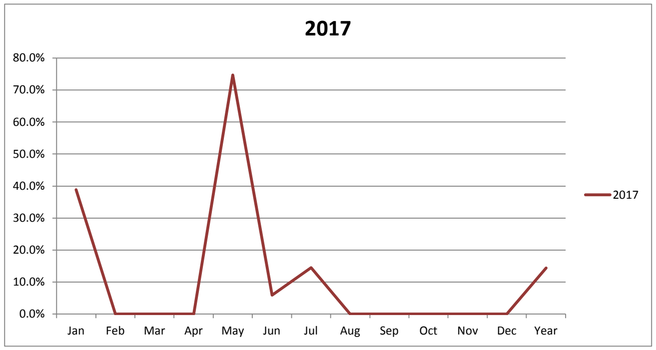


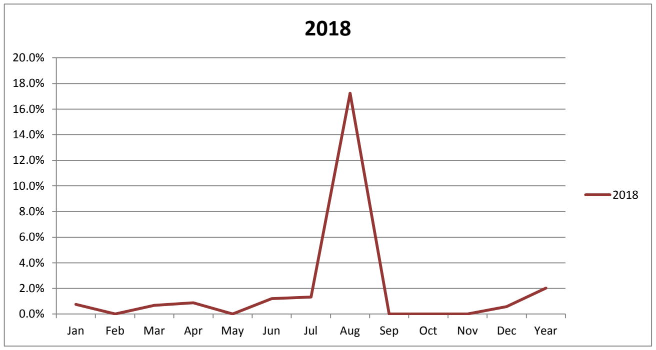
Unit: Plum Point
Data: Equivalent Forced Outage Rate (%)

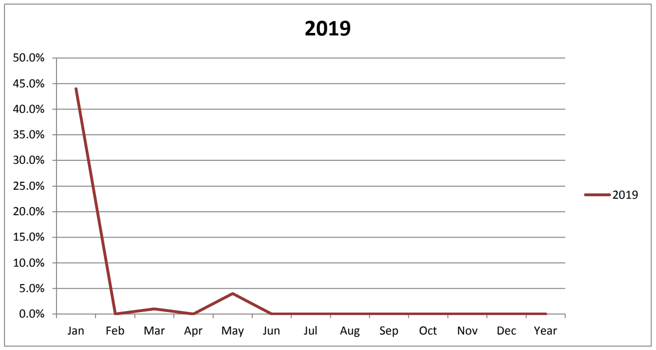




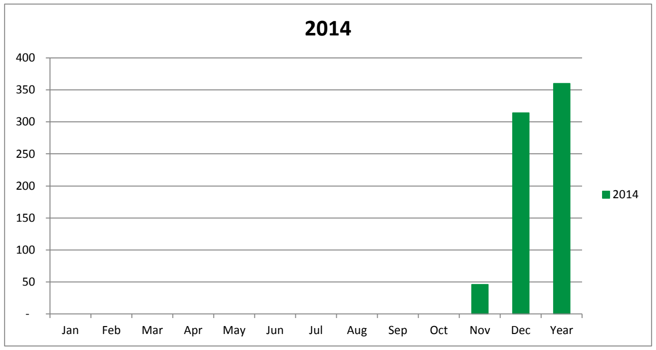


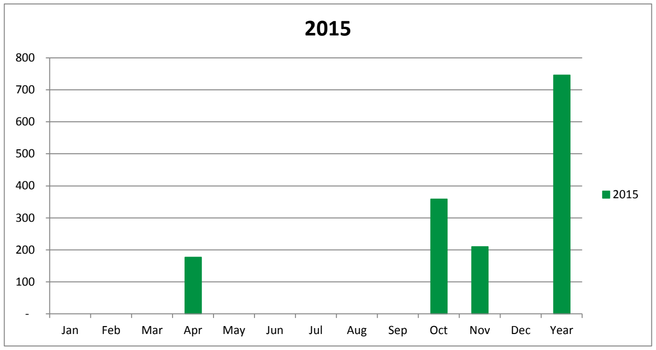


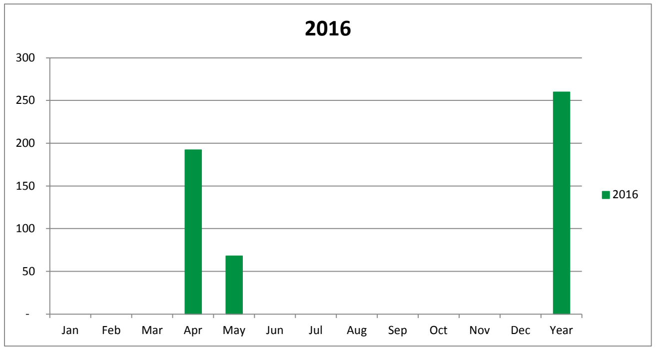


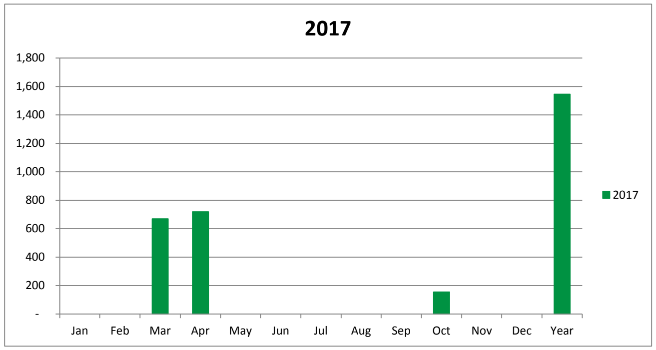


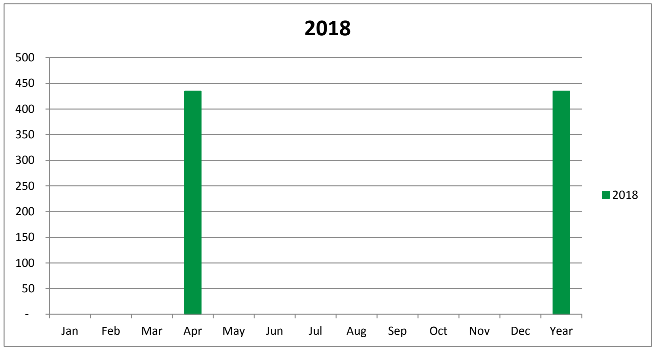
Unit: Plum Point
Data: Length and timing of planned outages - Scheduled Outage Hours

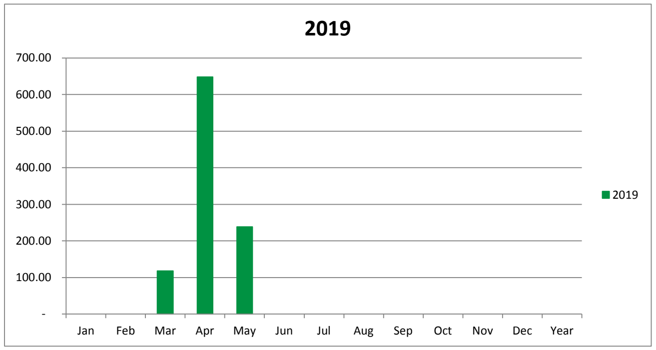












Data through June, 2019

Unit: Riverton 7
Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	92.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%					0.0%
2015													0.0%
2016													0.0%
2017													0.0%
2018													0.0%
2019													

Unit: Riverton 7
Data: Equivalent Forced Outage Rate (%)

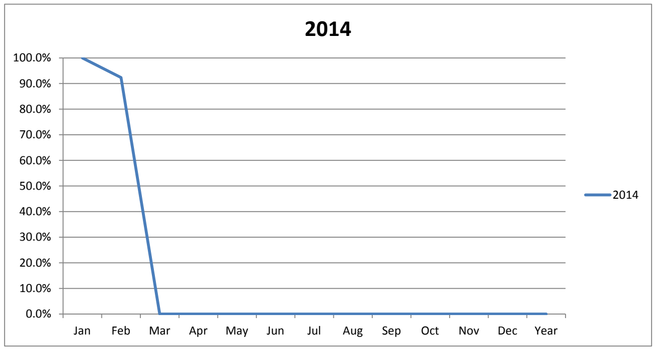
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014		100.0%	100.0%	100.0%	100.0%	100.0%							0.0%
2015													0.0%
2016													0.0%
2017													0.0%
2018													0.0%
2019													

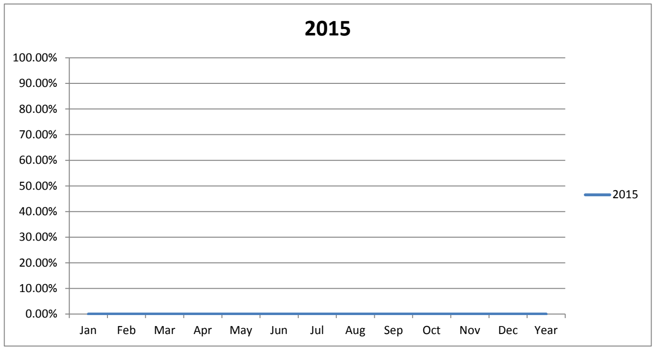
Unit: Riverton 7
Data: Length and timing of planned outages - Scheduled Outage Hours

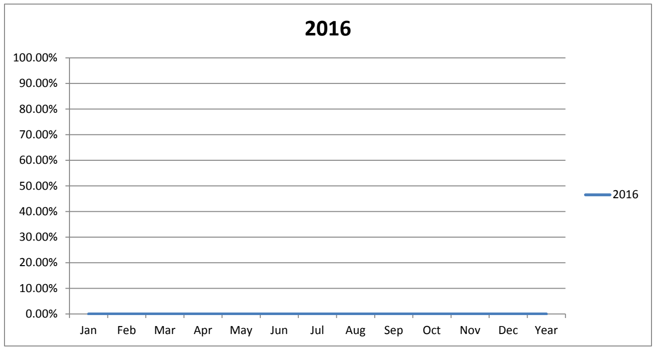
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	-	-	-	-	-					-
2015													-
2016													-
2017													-
2018													-
2019													

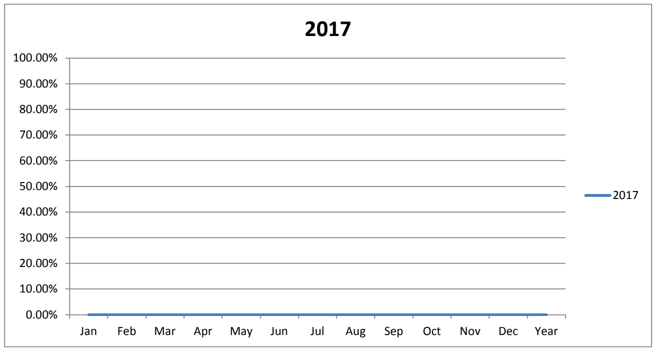
Riverton Unit 7 retired on June 30, 2014 following its transition to natural gas only operation in September, 2012

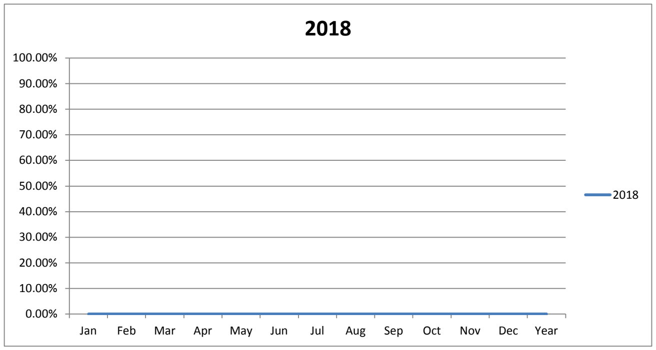
Unit: Riverton 7
Data: Equivalent Availability Factor (%)

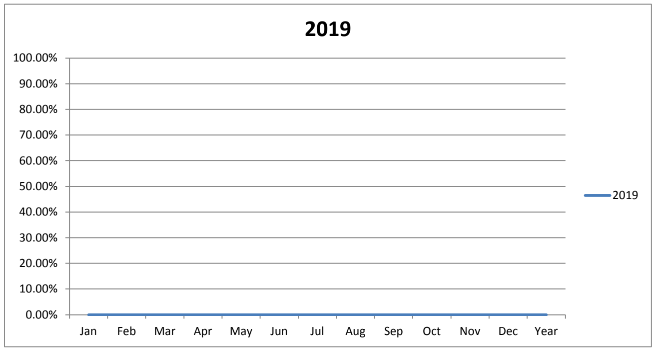




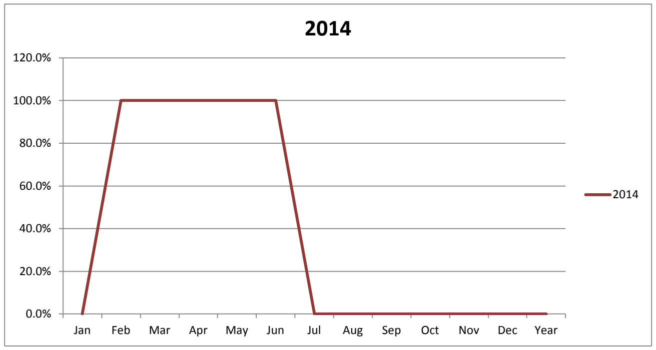


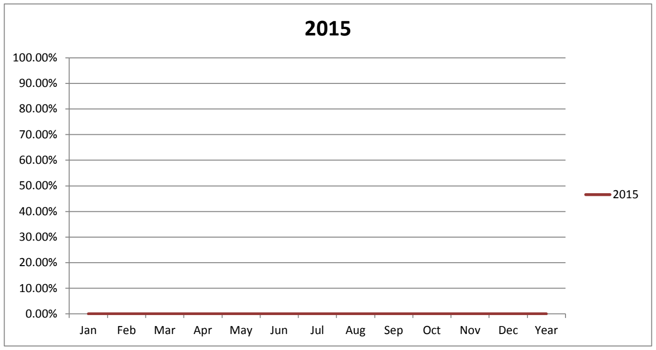


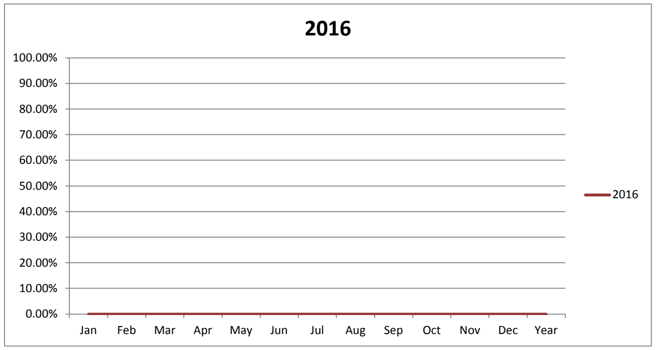


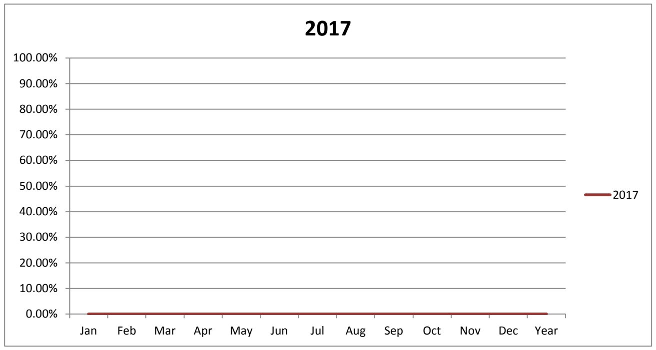


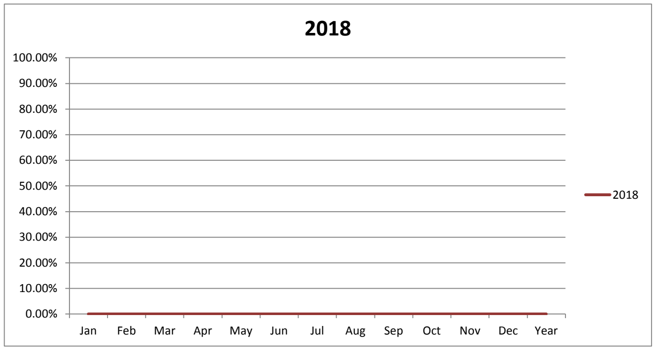
Unit: Riverton 7
Data: Equivalent Forced Outage Rate (%)

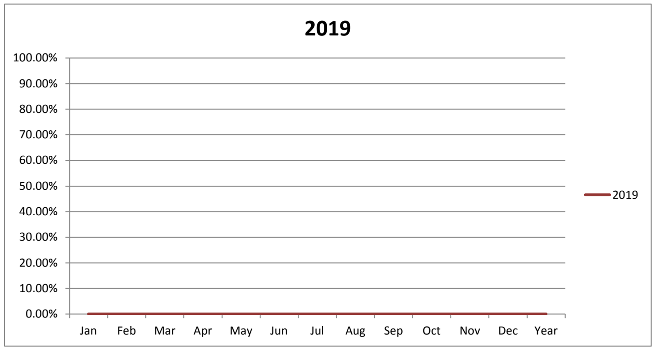




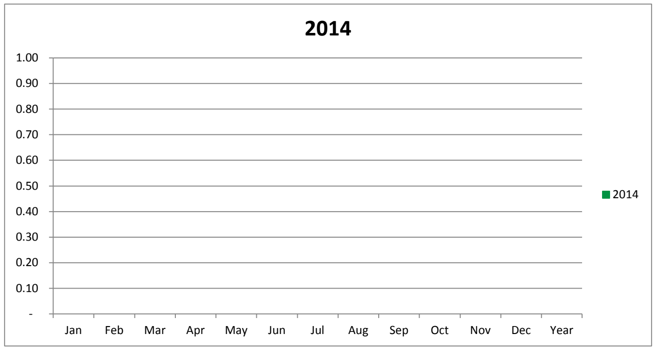


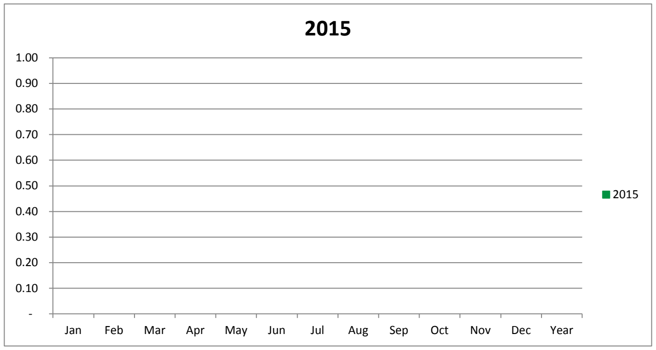


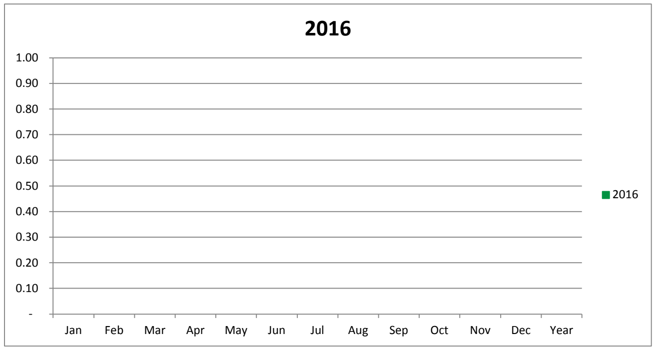


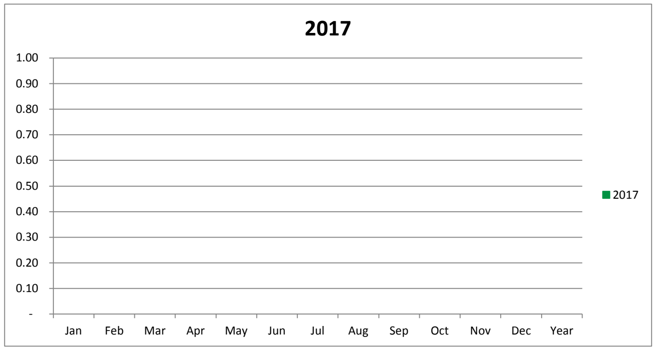


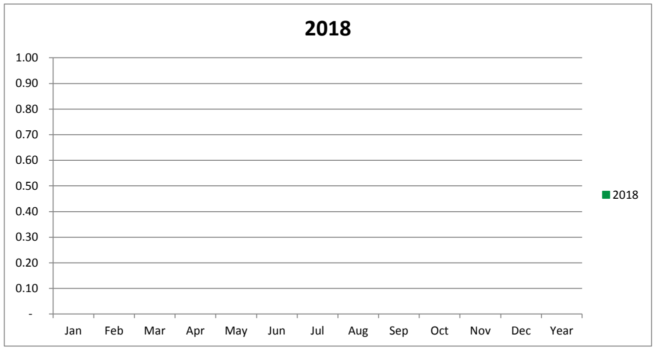
Unit: Riverton 7
Data: Length and timing of planned outages - Scheduled Outage Hours

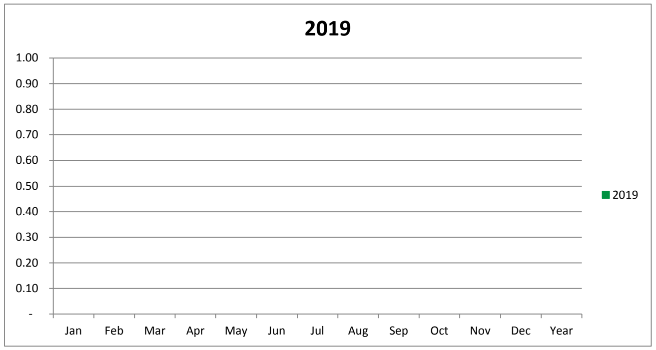












Riverton Unit 7 retired on June 30, 2014 following its transition to natural gas only operation in September, 2012

Unit: Riverton 8
Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	79.7%	100.0%	100.0%	100.0%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	98.0%	98.3%
2015	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
2016													0.0%
2017													0.0%
2018													0.0%
2019													

Unit: Riverton 8
Data: Equivalent Forced Outage Rate (%)

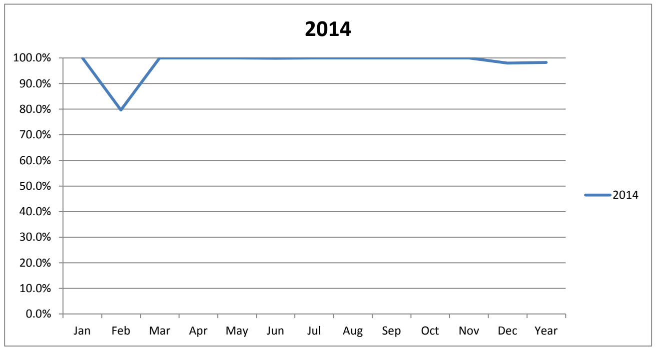
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014		100.0%				100.0%	0.0%		0.0%			100.0%	89.4%
2015	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%							100.0%
2016													0.0%
2017													0.0%
2018													0.0%
2019													

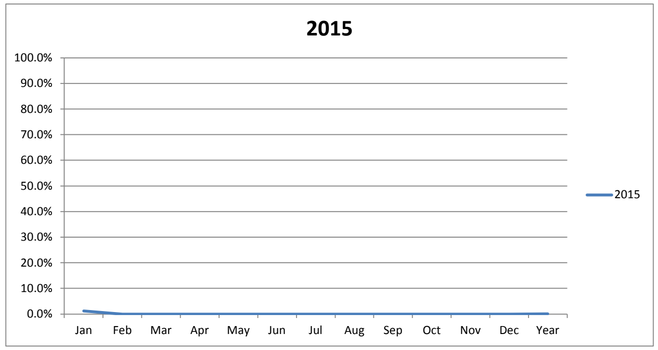
Unit: Riverton 8
Data: Length and timing of planned outages - Scheduled Outage Hours

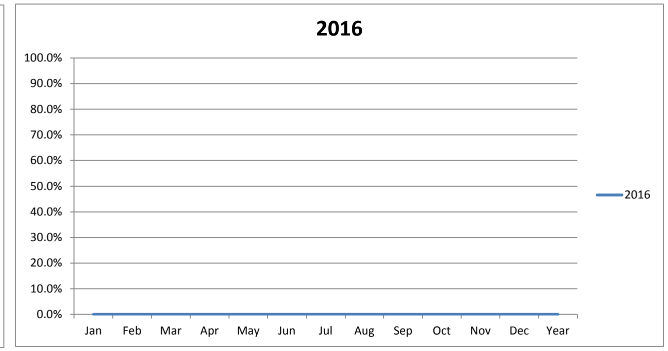
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-	-	-
2016													-
2017													-
2018													-
2019													

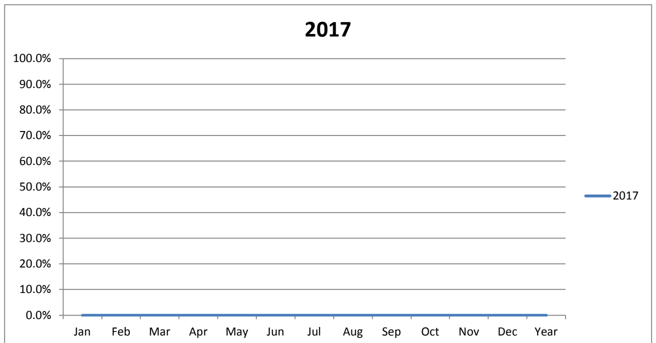
Riverton Units 8 and 9 retired on June 30, 2015. Unit 8 transitioned to natural gas only operation in September, 2012

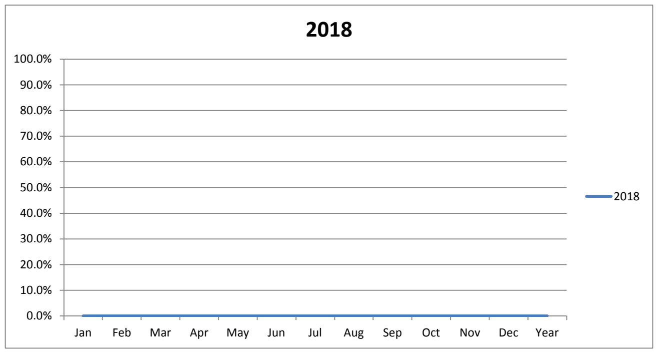
Unit: Riverton 8
Data: Equivalent Availability Factor (%)

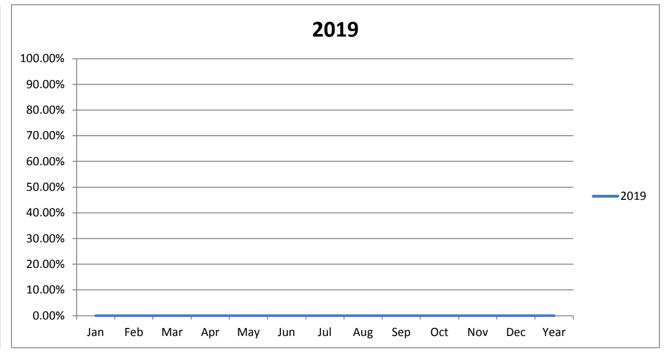




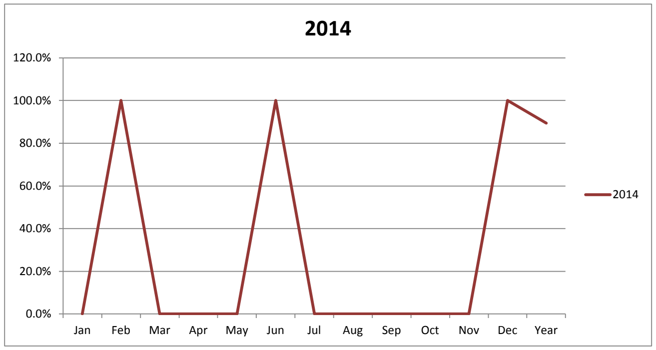


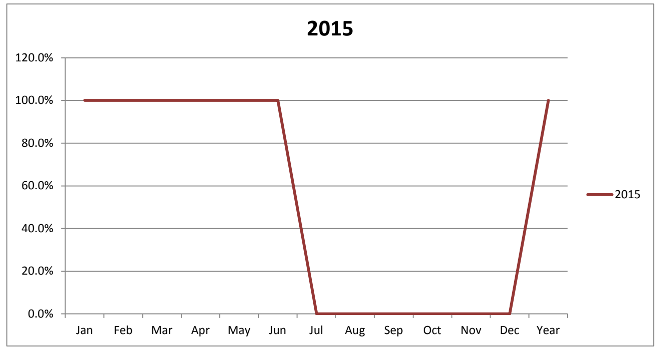


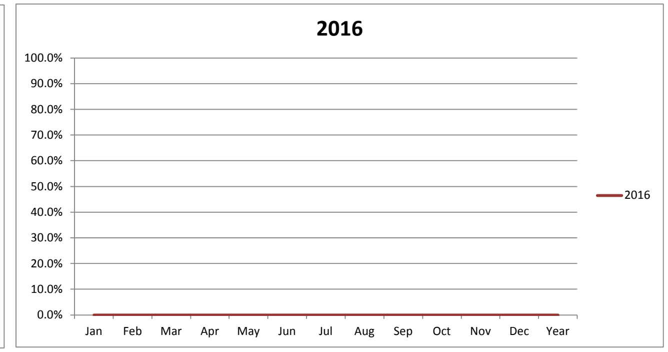


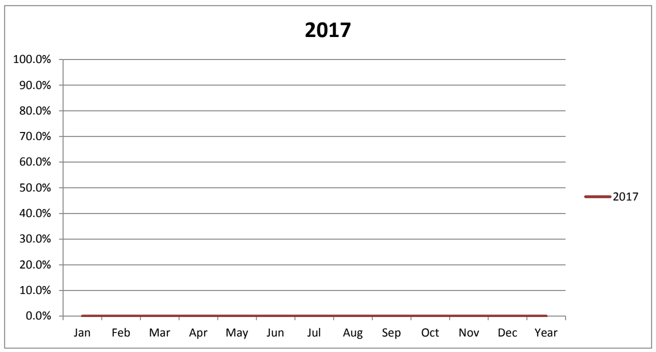


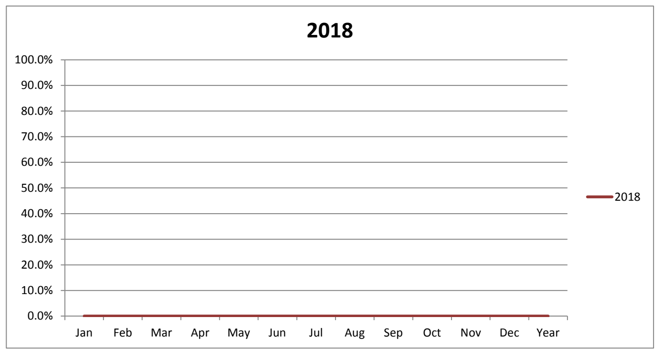
Unit: Riverton 8
Data: Equivalent Forced Outage Rate (%)

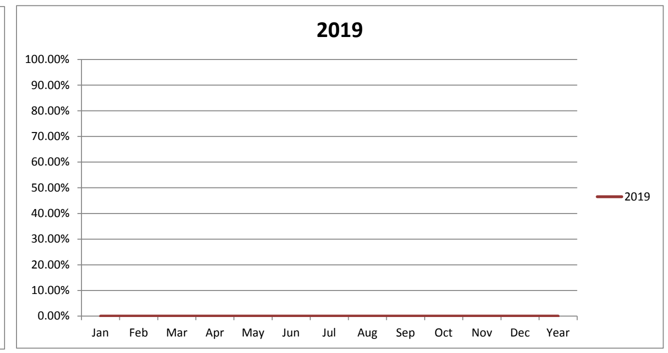




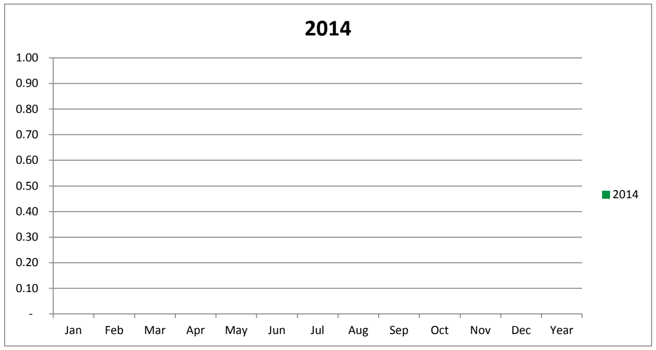


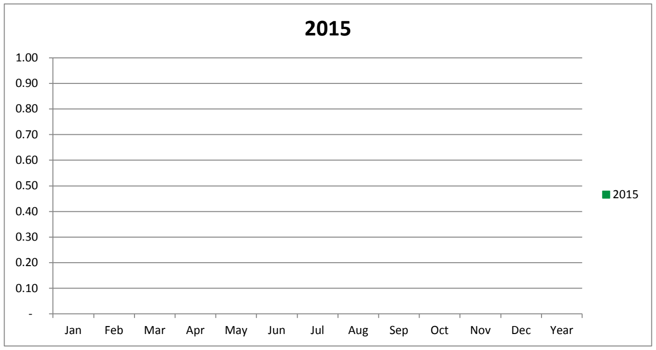


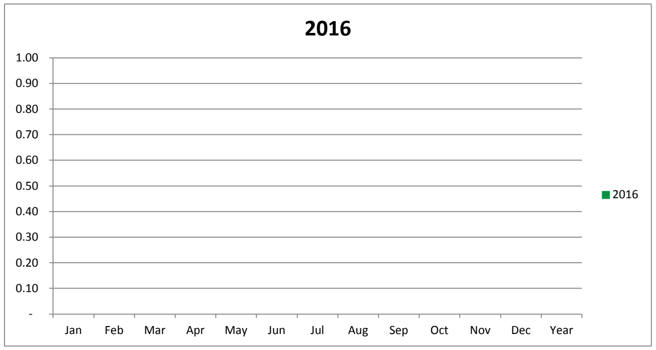


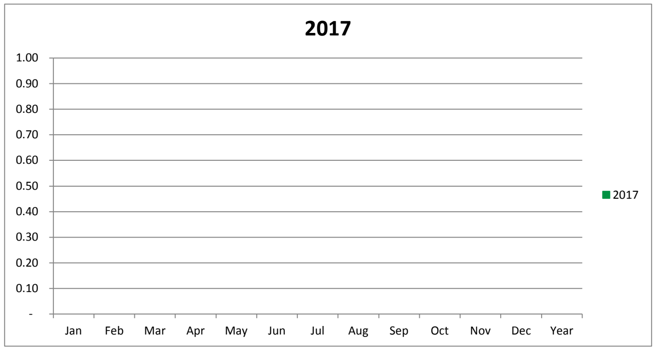


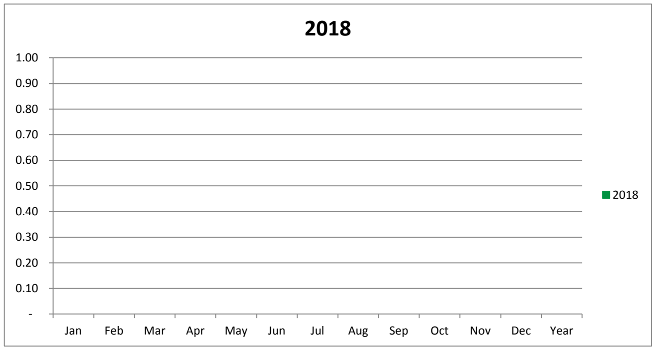
Unit: Riverton 8
Data: Length and timing of planned outages - Scheduled Outage Hours

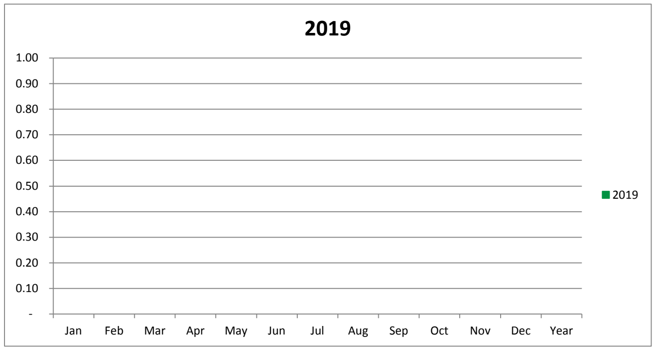












Riverton Units 8 and 9 retired on June 30, 2015. Unit 8 transitioned to natural gas only operation in September, 2012

Unit: Riverton 9
Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	79.7%	100.0%	100.0%	100.0%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	98.0%	98.3%
2015	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
2016													0.0%
2017													0.0%
2018													0.0%
2019													

Unit: Riverton 9
Data: Equivalent Forced Outage Rate (%)

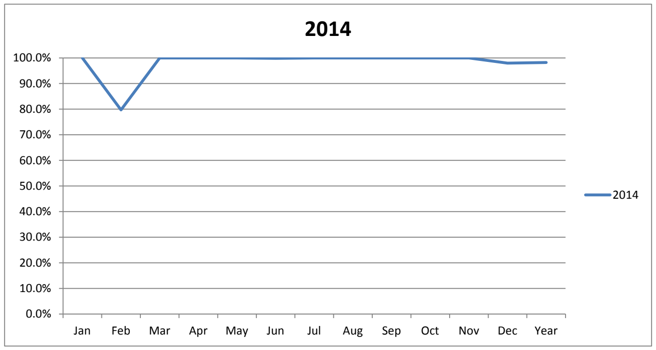
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014		100.0%				100.0%	0.0%		0.0%			100.0%	89.4%
2015	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%							100.0%
2016													0.0%
2017													0.0%
2018													0.0%
2019													

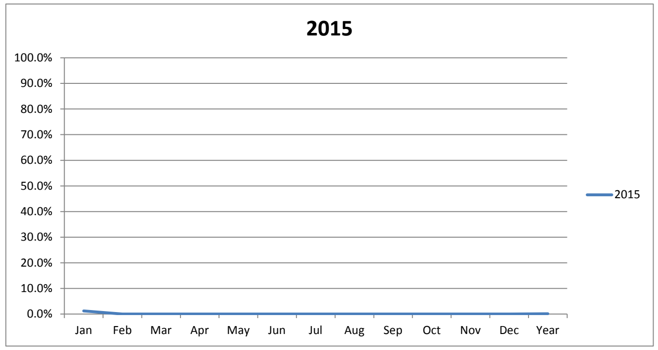
Unit: Riverton 9
Data: Length and timing of planned outages - Scheduled Outage Hours

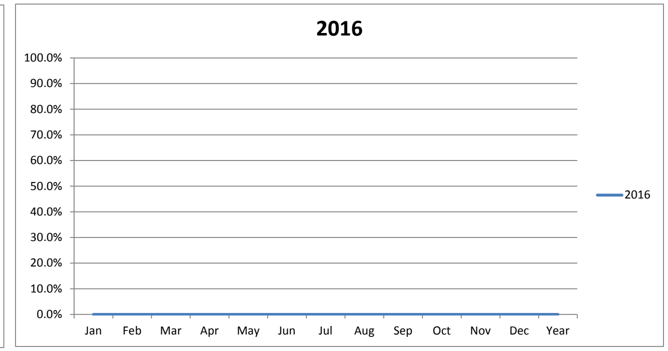
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-	-	-
2017													-
2018													-
2019													

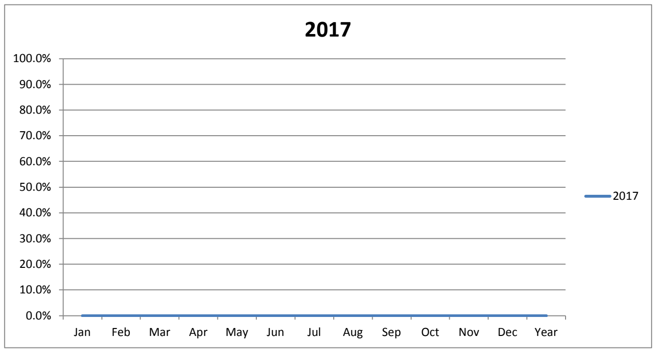
Riverton Units 8 and 9 retired on June 30, 2015. Unit 8 transitioned to natural gas only operation in September, 2012

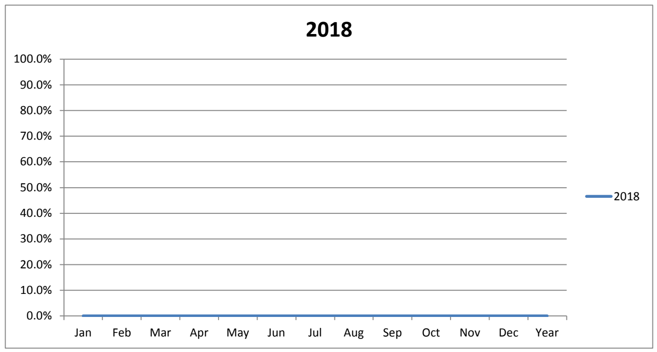
Unit: Riverton 9
Data: Equivalent Availability Factor (%)

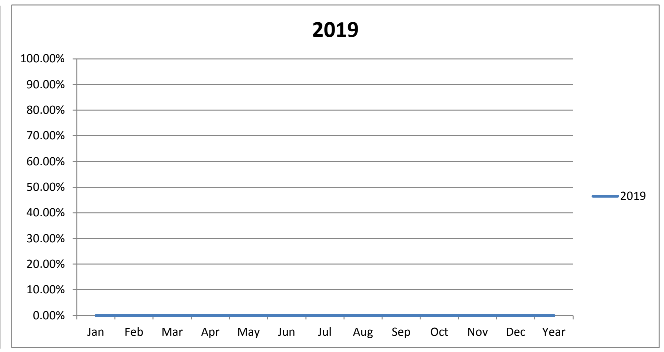




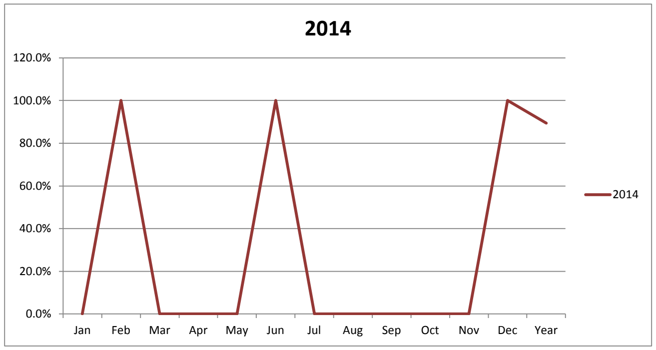


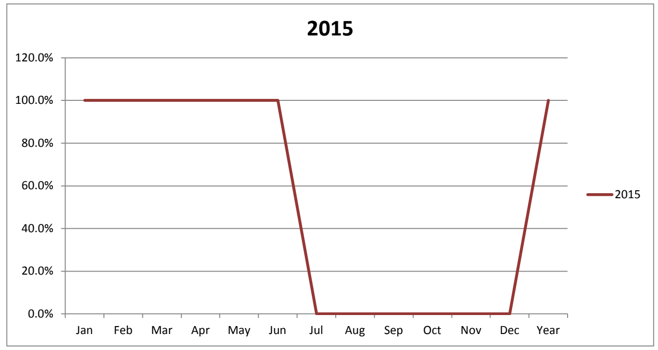


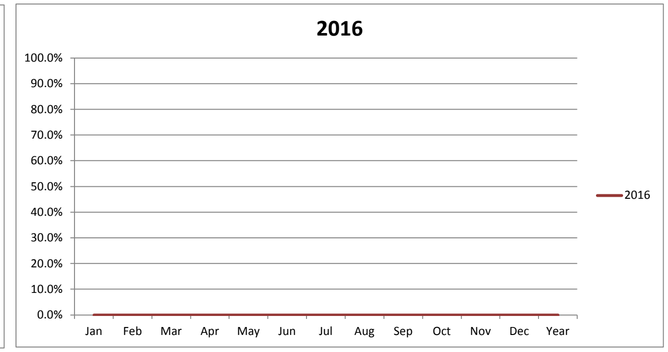


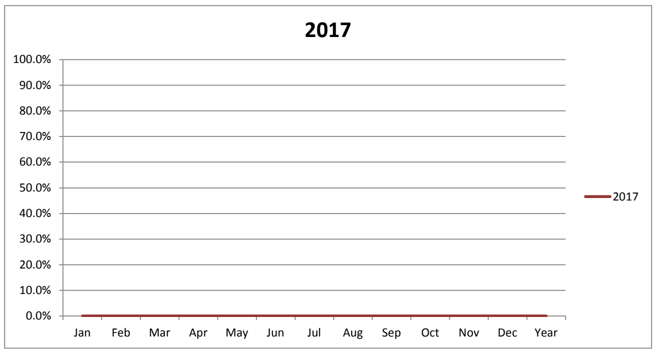


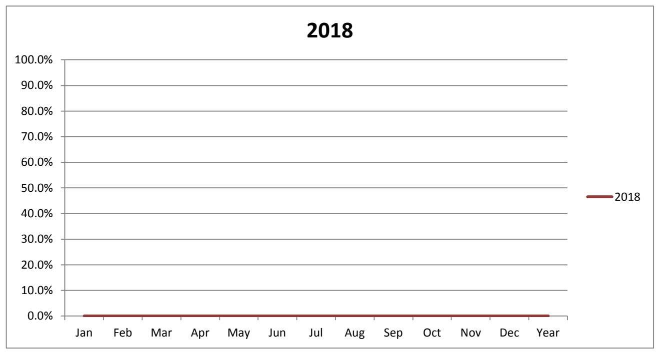
Unit: Riverton 9
Data: Equivalent Forced Outage Rate (%)

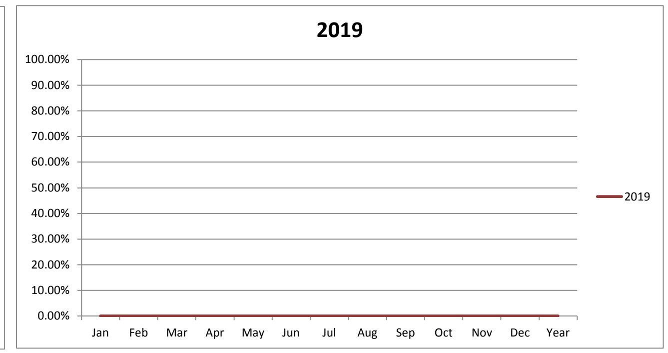




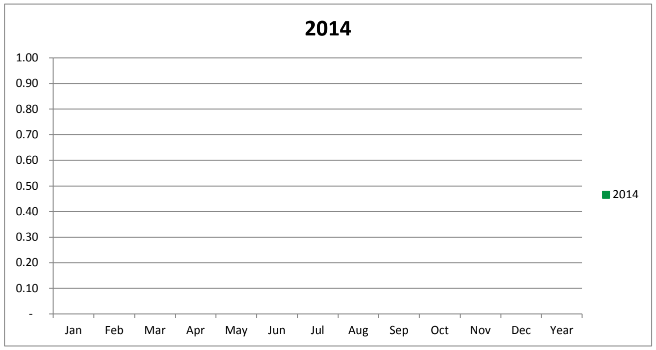


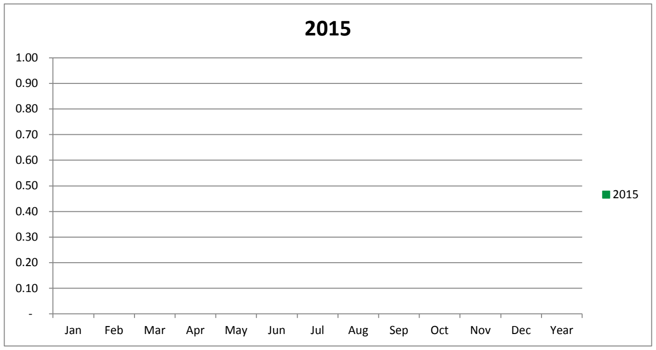


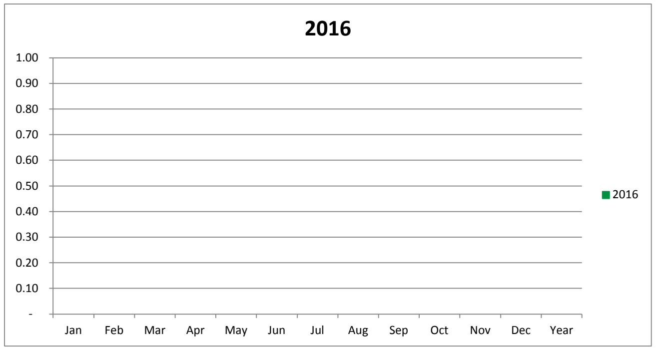


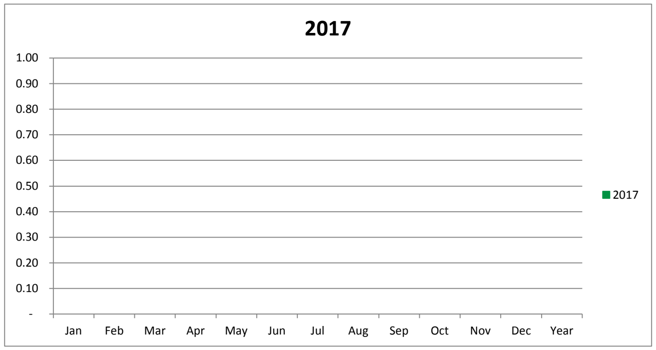


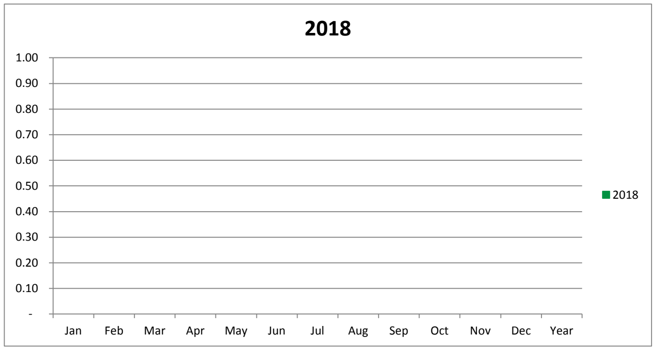
Unit: Riverton 9
Data: Length and timing of planned outages - Scheduled Outage Hours

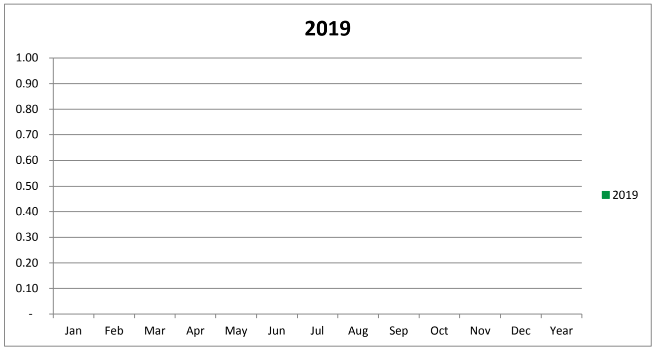












Riverton Units 8 and 9 retired on June 30, 2015. Unit 8 transitioned to natural gas only operation in September, 2012

Unit: Riverton 10
Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	100.0%	100.0%	99.4%	100.0%	100.0%	100.0%	100.0%	36.0%	99.3%	100.0%	100.0%	94.6%
2015	100.0%	0.0%	94.9%	0.0%	0.0%	0.0%	0.0%	98.7%	11.9%	59.8%	100.0%	93.5%	47.2%
2016	42.5%	100.0%	100.0%	100.0%	100.0%	97.3%	100.0%	99.5%	100.0%	93.1%	4.7%	100.0%	86.5%
2017	79.0%	45.3%	97.9%	99.7%	100.0%	84.1%	100.0%	97.4%	88.6%	93.5%	73.9%	97.6%	88.5%
2018	98.8%	99.0%	100.0%	99.9%	54.2%	0.0%	14.2%	56.1%	100.0%	100.0%	92.1%	99.6%	76.0%
2019	99.7%	100.0%	82.2%	100.0%	100.0%	100.0%							

Unit: Riverton 10
Data: Equivalent Forced Outage Rate (%)

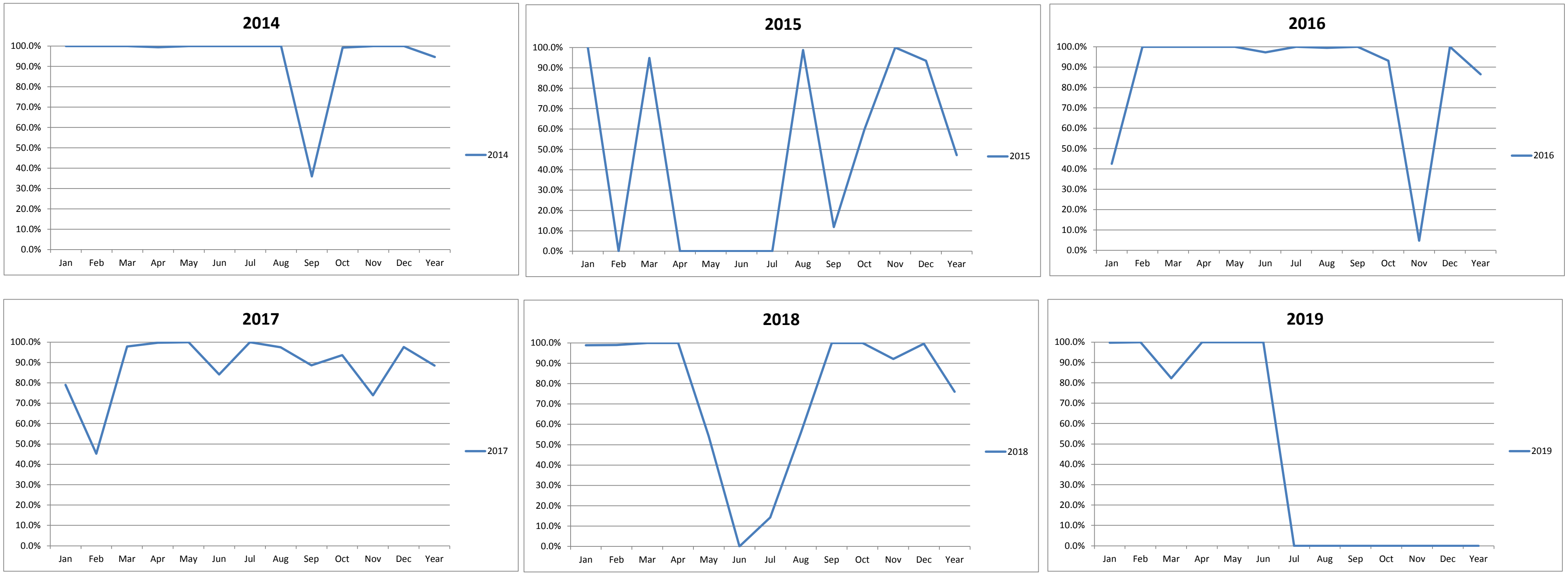
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014				0.0%	0.0%				99.1%			0.0%	97.2%
2015				100.0%	100.0%	100.0%	100.0%	100.0%	99.5%	100.0%		100.0%	99.9%
2016	100.0%	0.0%				90.5%			0.0%	100.0%			96.4%
2017	99.5%	99.8%		0.0%	0.0%			98.8%	88.3%	0.0%		88.8%	92.8%
2018	28.6%		0.0%		0.0%			0.0%	0.0%	0.0%			9.0%
2019			94.8%	0.0%	0.0%								

Unit: Riverton 10
Data: Length and timing of planned outages - Scheduled Outage Hours

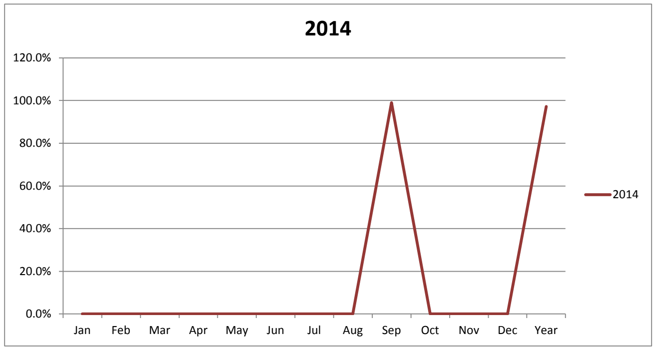
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	-	-	-	-	-	-	5.50	-	-	5.50
2015	-	-	38.00	199.50	-	-	-	-	-	27.83	-	-	265.33
2016	-	-	-	-	-	-	-	3.92	-	28.25	686.91	-	719.08
2017	-	-	15.83	2.05	-	114.25	-	-	6.00	48.00	188.00	-	374.13
2018	-	7.00	-	0.67	340.83	720.00	638.22	326.60	-	-	57.30	3.00	2,093.62
2019	2.00	-	-	-	-	-							

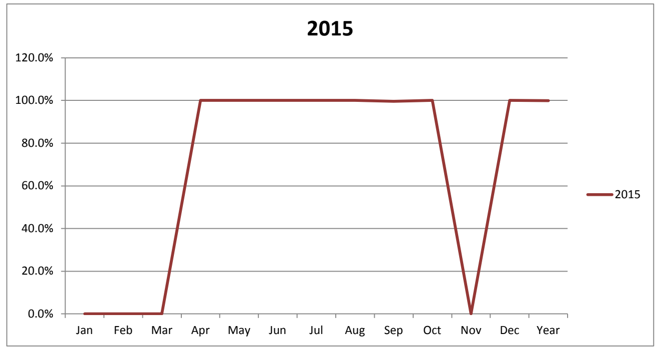
Data through June, 2019

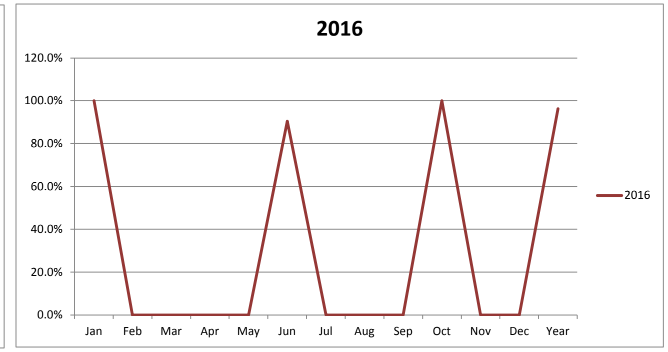
Unit: Riverton 10
Data: Equivalent Availability Factor (%)

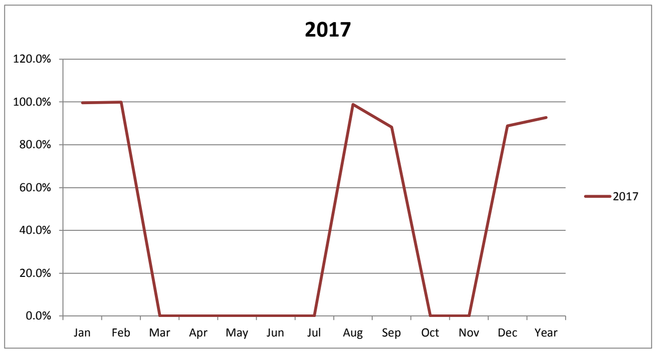


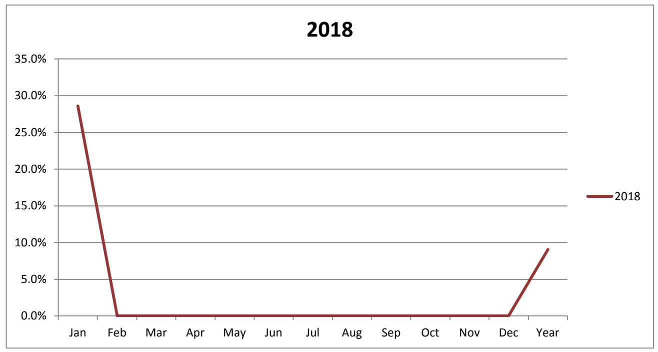
Unit: Riverton 10
Data: Equivalent Forced Outage Rate (%)

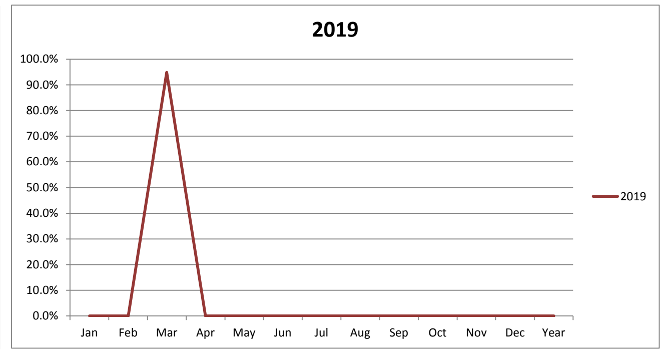




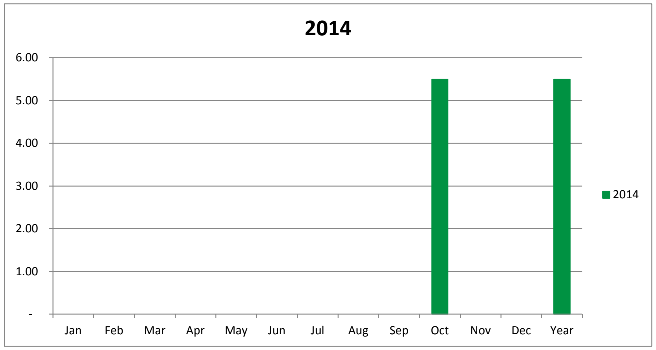


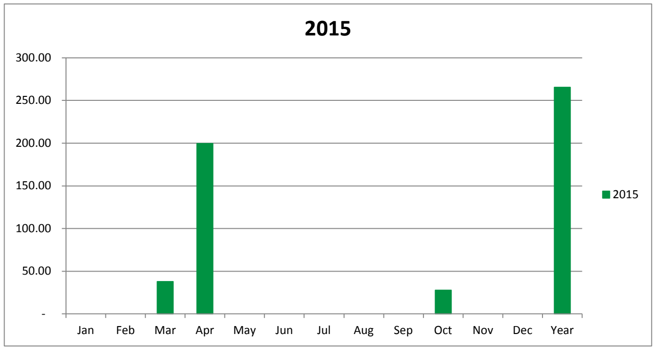


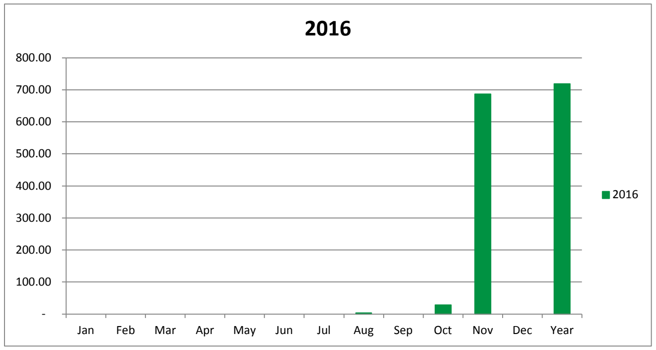


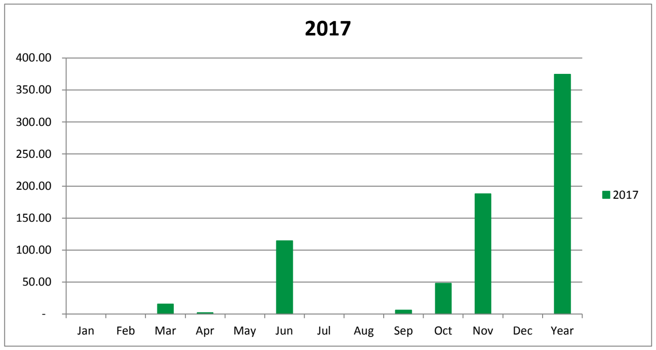


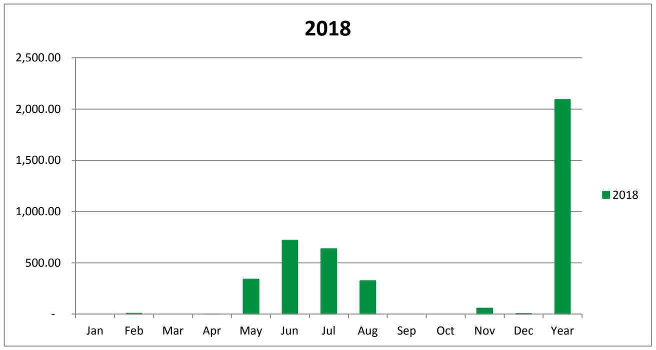
Unit: Riverton 10
Data: Length and timing of planned outages - Scheduled Outage Hours

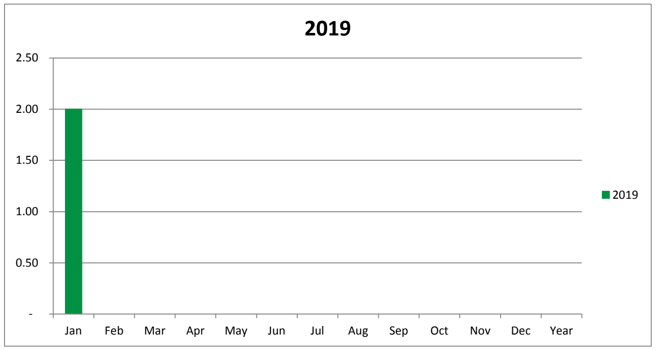












Data through June, 2019

Unit: Riverton 11
Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.1%	99.3%	100.0%	95.5%	99.5%
2015	100.0%	0.0%	94.9%	69.9%	35.3%	73.3%	37.7%	0.0%	4.5%	59.8%	100.0%	93.5%	56.1%
2016	100.0%	100.0%	100.0%	100.0%	100.0%	97.3%	100.0%	99.5%	100.0%	93.1%	4.7%	0.3%	82.9%
2017	17.0%	62.9%	75.5%	99.7%	100.0%	84.1%	100.0%	100.0%	88.6%	97.4%	100.0%	65.8%	82.6%
2018	0.0%	0.0%	18.9%	100.0%	54.2%	0.0%	14.0%	94.2%	0.0%	0.0%	0.0%	0.0%	23.6%
2019	0.0%	0.0%	0.0%	0.0%	0.0%	75.3%							

Unit: Riverton 11
Data: Equivalent Forced Outage Rate (%)

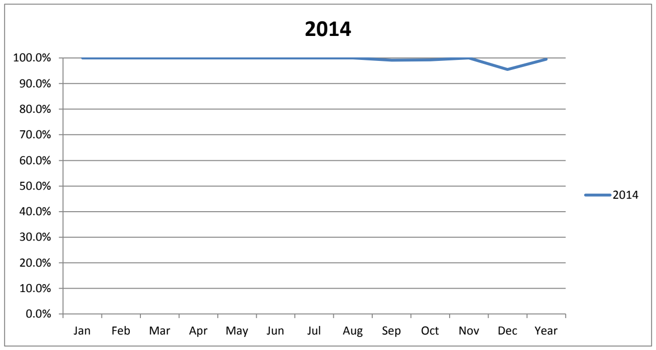
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014									61.3%	0.0%		97.6%	82.8%
2015							100.0%	100.0%	99.7%	100.0%		100.0%	99.9%
2016	0.0%	0.0%				90.7%			0.0%	100.0%		99.7%	97.1%
2017	100.0%	99.5%	99.8%	0.0%	0.0%			0.0%	100.0%	47.7%		99.0%	97.2%
2018	100.0%	100.0%	99.7%		0.0%		0.0%	80.5%	100.0%	100.0%	100.0%	100.0%	99.7%
2019		100.0%	100.0%	100.0%	100.0%	100.0%							

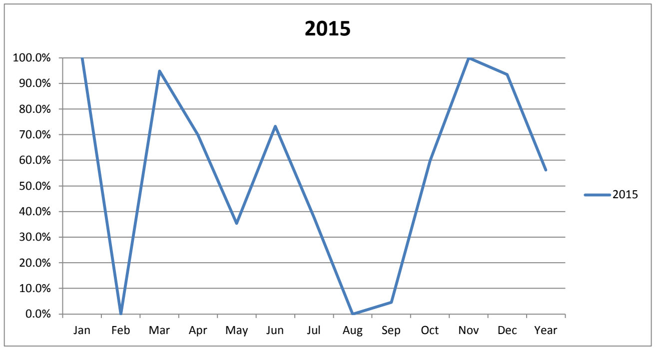
Unit: Riverton 11
Data: Length and timing of planned outages - Scheduled Outage Hours

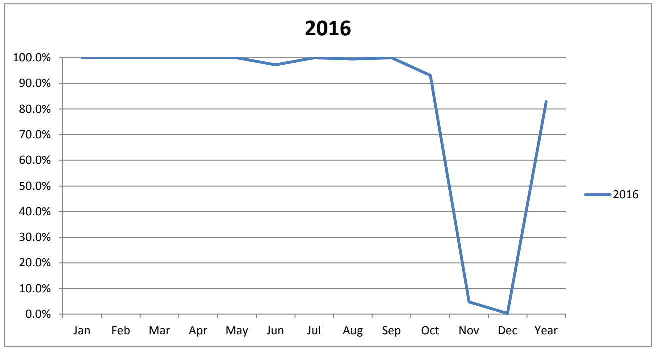
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	-	-	-	-	-	-	6	-	-	6
2015	-	-	38	217	481	192	-	-	-	28	-	-	956
2016	-	-	-	-	-	-	-	4	-	28	687	14	733
2017	-	-	16	2	-	114	-	-	6	2	-	-	140
2018	-	-	-	-	341	720	640	15	-	-	-	-	1,715
2019	744	-	-	-	-	-							

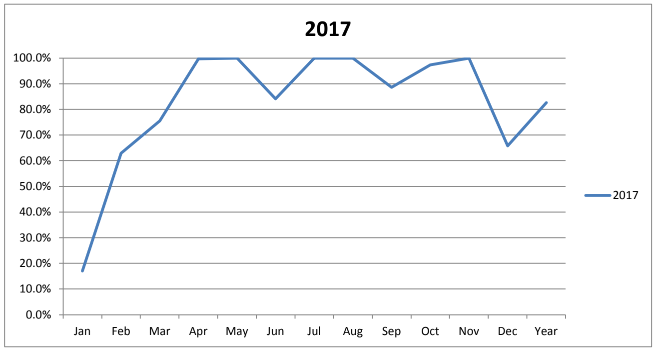
Data through June, 2019

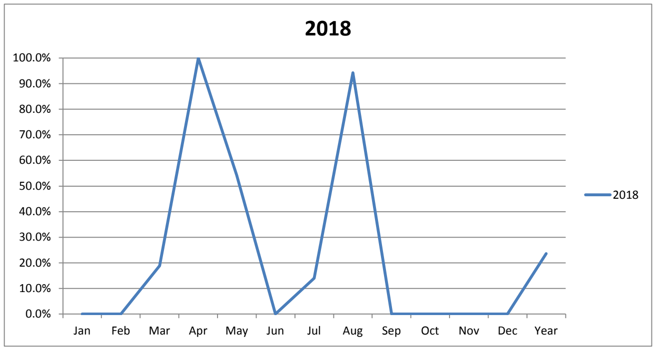
Unit: Riverton 11
Data: Equivalent Availability Factor (%)

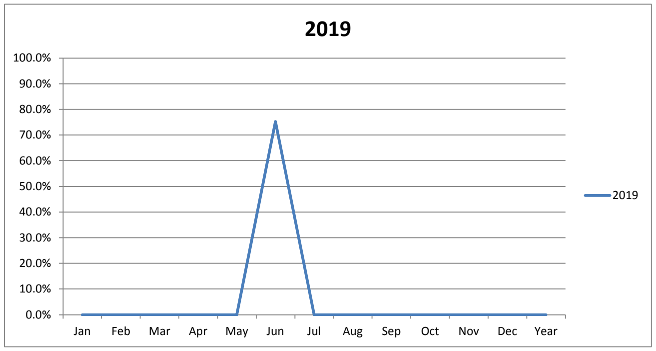




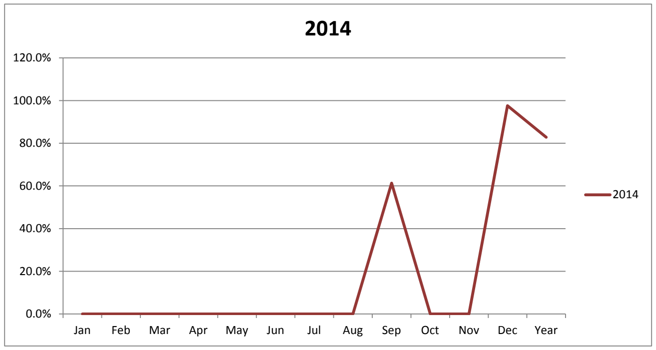


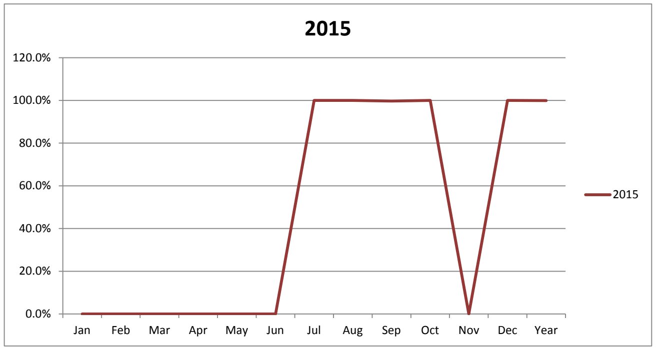


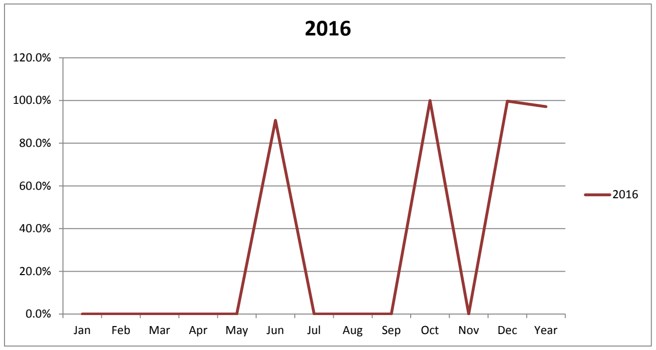


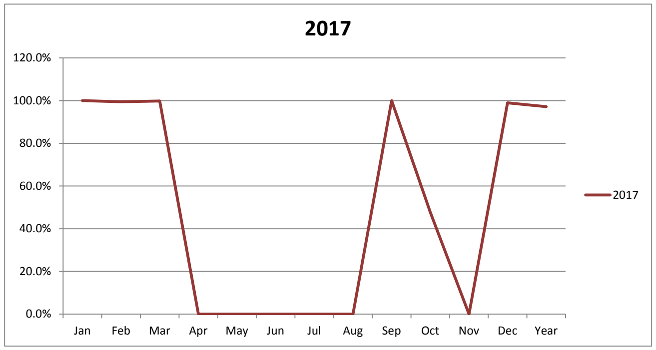


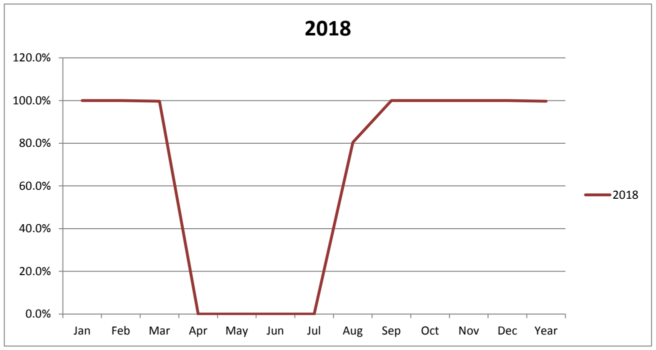
Unit: Riverton 11
Data: Equivalent Forced Outage Rate (%)

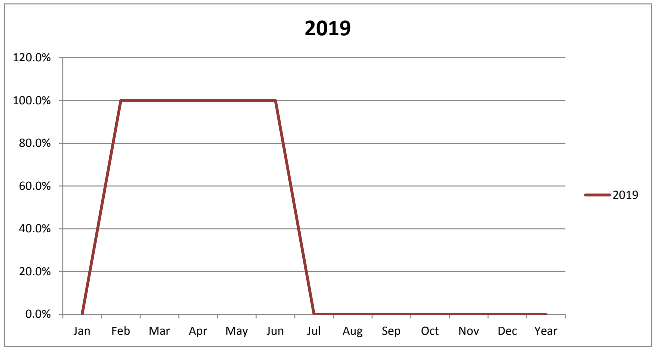




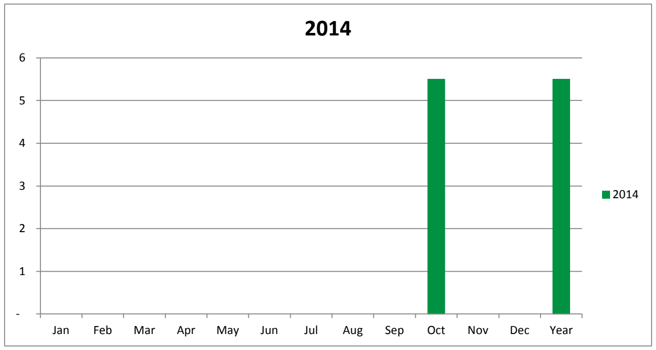


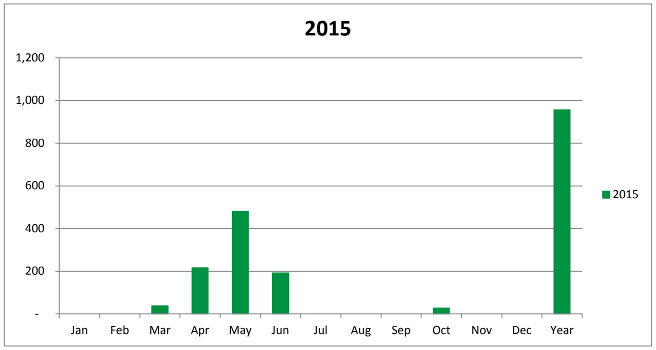


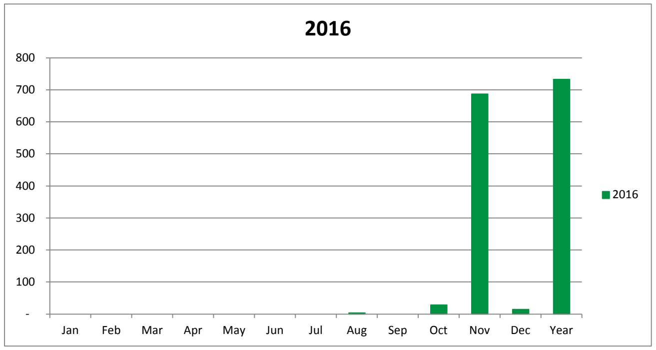


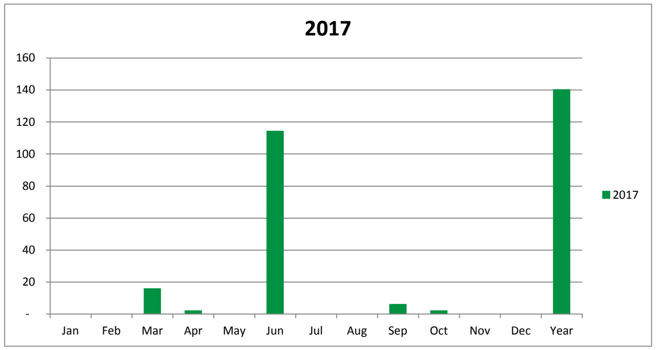


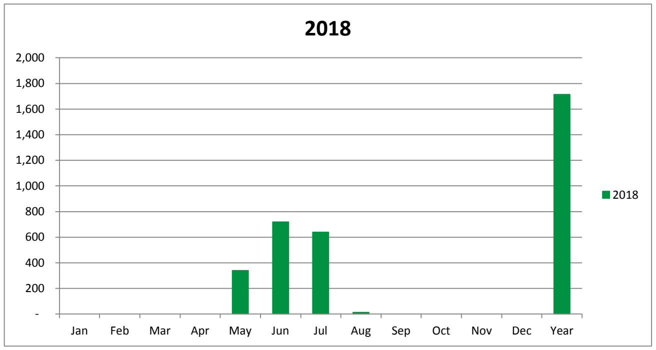
Unit: Riverton 11
Data: Length and timing of planned outages - Scheduled Outage Hours

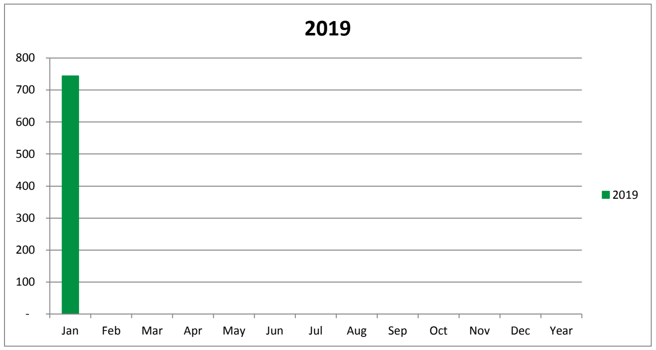












Data through June, 2019

Unit: Riverton 12
Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	99.9%	100.0%	95.6%	96.3%	89.6%	99.8%	98.2%	100.0%	100.0%	66.5%	48.4%	86.1%	90.0%
2015	100.0%	100.0%	82.5%	67.1%	76.5%	96.8%	90.9%	100.0%	46.7%	0.0%	0.0%	0.0%	63.2%
2016	0.0%	0.0%	0.0%	0.0%	90.1%	91.2%	75.4%	96.9%	53.3%	29.2%	45.6%	66.8%	68.6%
2017	94.5%	79.1%	69.2%	100.0%	85.8%	89.4%	99.9%	100.0%	65.0%	83.9%	100.0%	100.0%	60.8%
2018	93.4%	81.0%	97.4%	100.0%	62.4%	100.0%	100.0%	92.5%	93.0%	70.1%	96.6%	100.0%	90.5%
2019	100.0%	93.7%	47.8%	0.0%	84.3%	93.2%							

Unit: Riverton 12
Data: Equivalent Forced Outage Rate (%)

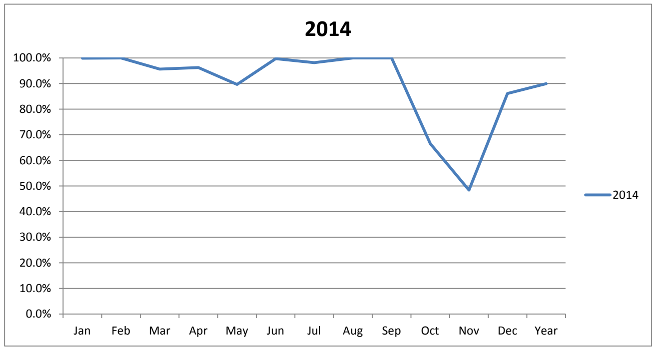
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	0.0%	0.0%	0.0%	0.0%	49.3%	0.0%	0.0%	0.0%	0.0%	93.0%	0.0%	48.4%	26.5%
2015	0.0%	0.0%	25.0%	8.0%	0.0%	12.1%	0.0%	0.0%	0.0%	0.0%			5.1%
2016					0.0%	0.0%	27.3%	4.0%	0.0%	50.5%	64.1%	43.0%	23.2%
2017	8.1%	0.0%	0.2%	0.0%	21.2%	0.0%	0.2%	0.0%	16.9%	0.2%	0.0%	0.0%	4.4%
2018	4.5%	1.5%	0.5%	0.0%	0.3%	0.0%	0.0%	11.2%	10.7%	0.0%	0.0%	0.0%	2.2%
2019	0.0%	7.8%	1.3%		1.2%	7.5%							

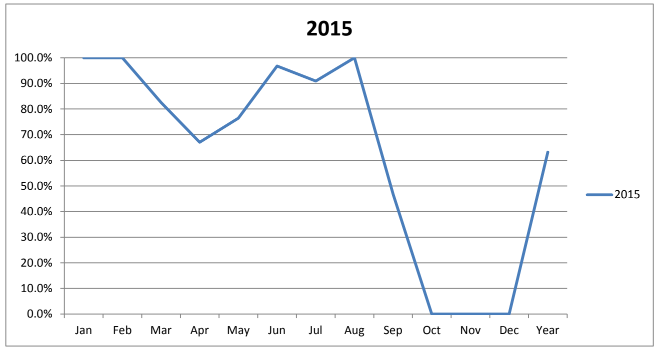
Unit: Riverton 12
Data: Length and timing of planned outages - Scheduled Outage Hours

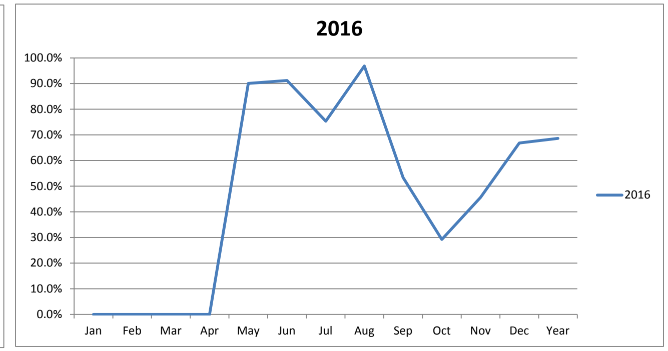
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	-	-	-	-	-	-	6	372	13	391
2015	-	-	107	231	175	-	68	-	384	744	721	744	3,174
2016	744	696	743	720	74	63	-	-	336	449	-	-	3,825
2017	-	141	228	-	-	76	-	-	193	120	-	-	757
2018	23	120	16	-	278	-	-	-	-	222	24	-	684
2019	-	-	383	720	112	-							

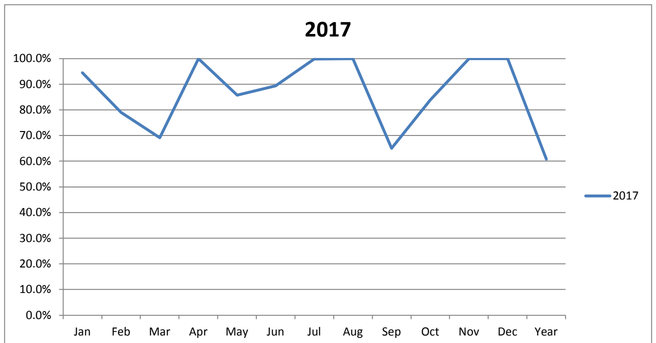
Data through June, 2019

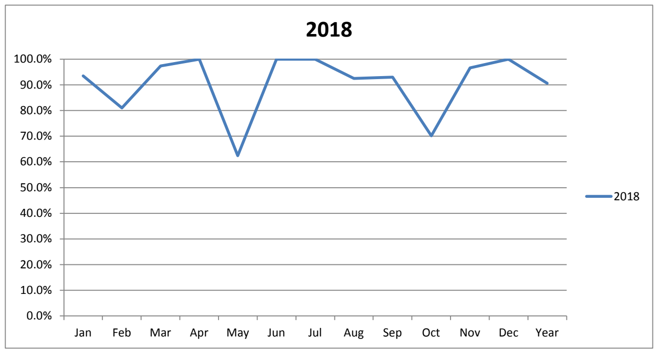
Unit: Riverton 12
Data: Equivalent Availability Factor (%)

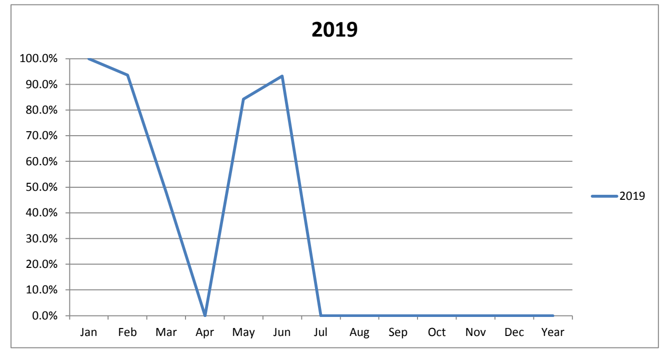




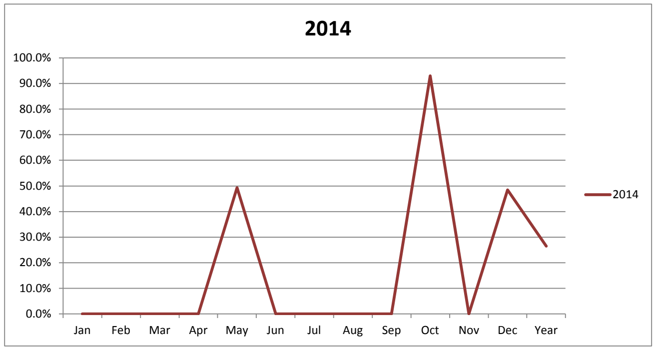


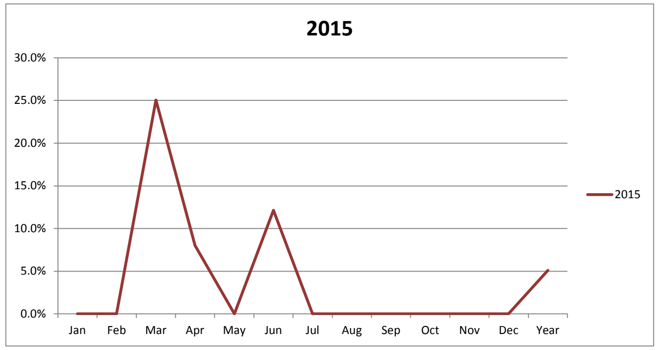


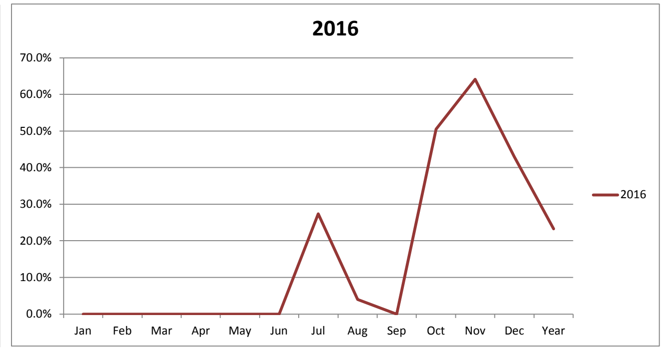


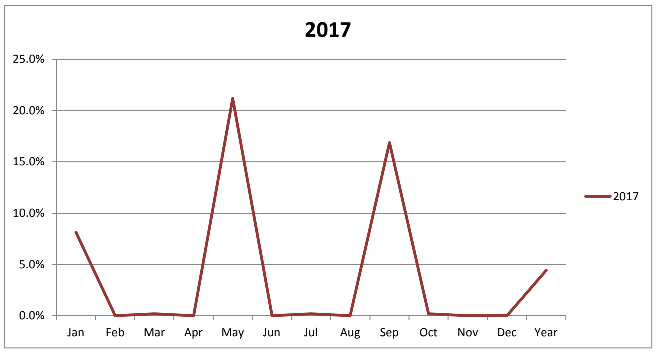


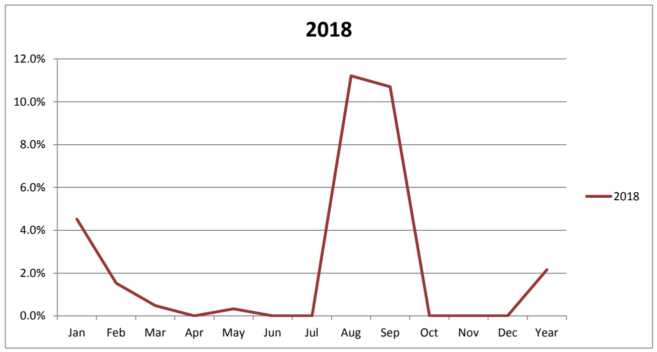
Unit: Riverton 12
Data: Equivalent Forced Outage Rate (%)

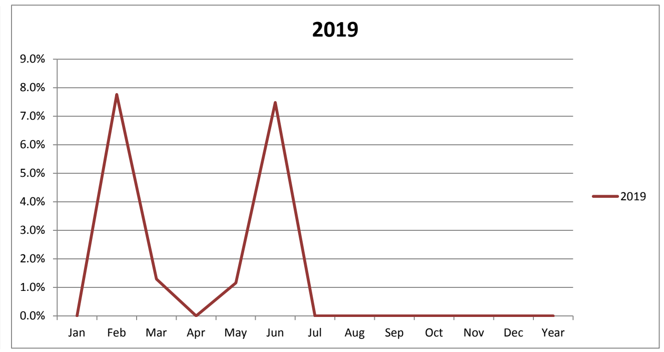




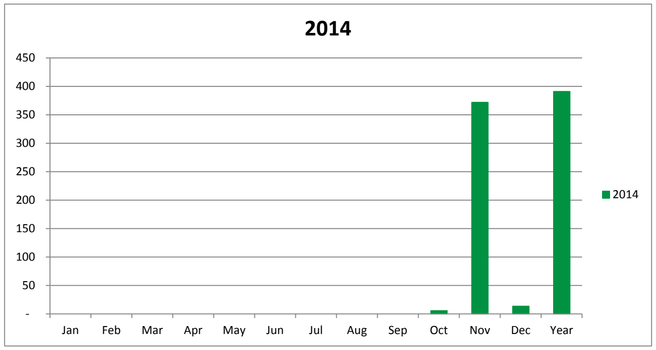


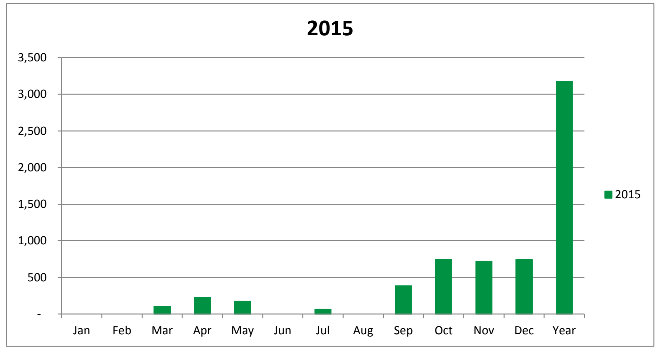


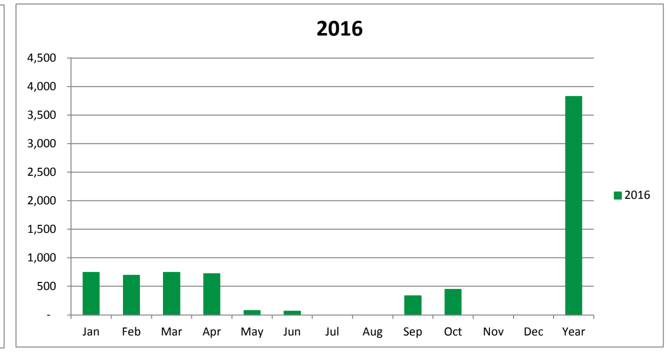


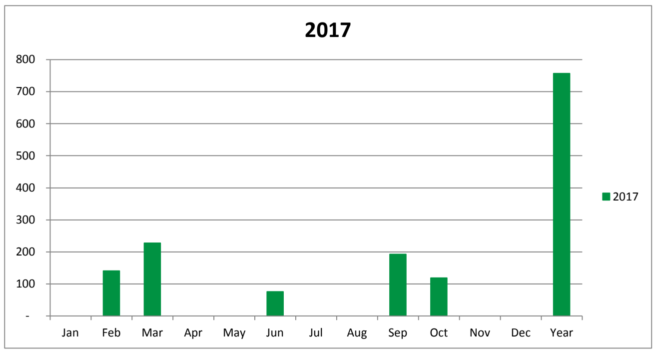


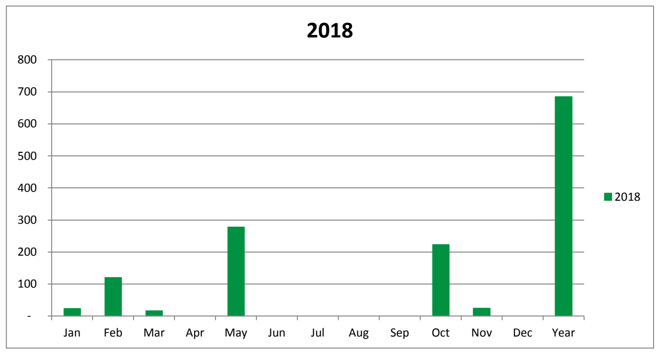
Unit: Riverton 12
Data: Length and timing of planned outages - Scheduled Outage Hours

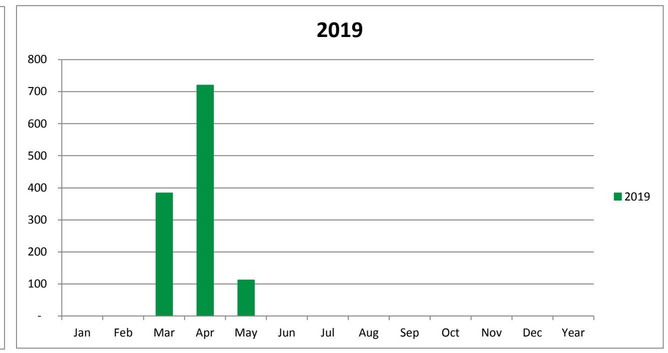












Data through June, 2019

Unit: **Stateline Unit 1**
Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	94.1%	100.0%	100.0%	100.0%	100.0%	100.0%	99.2%	100.0%	100.0%	100.0%	100.0%	100.0%	99.4%
2015	93.5%	99.9%	100.0%	78.1%	99.0%	100.0%	100.0%	100.0%	77.3%	92.8%	100.0%	100.0%	95.1%
2016	100.0%	100.0%	100.0%	100.0%	100.0%	97.2%	100.0%	100.0%	100.0%	100.0%	88.6%	77.4%	96.9%
2017	100.0%	100.0%	98.8%	70.0%	87.9%	99.6%	100.0%	100.0%	43.3%	49.8%	18.4%	0.0%	72.2%
2018	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	90.6%	100.0%	100.0%	94.4%	91.7%	100.0%	48.5%
2019	91.5%	100.0%	96.0%	100.0%	100.0%	95.2%							

Unit: **Stateline Unit 1**
Data: Equivalent Forced Outage Rate (%)

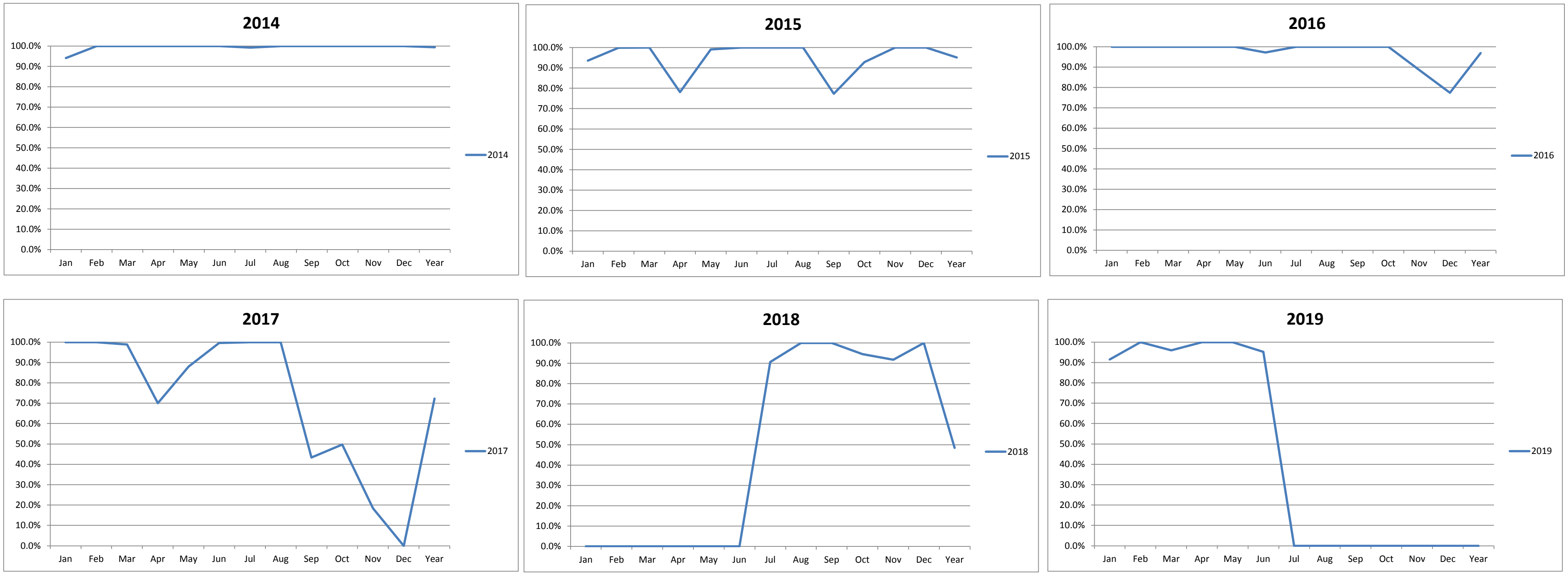
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.4%	0.0%	0.0%	0.0%		0.0%	21.4%
2015		3.5%	0.0%	0.0%	14.1%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%		18.1%
2016	0.0%	0.0%		0.0%		70.1%	0.0%	0.0%	0.0%	0.0%			13.1%
2017	0.0%	0.0%	41.7%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	84.7%	100.0%	71.0%
2018	100.0%	100.0%	100.0%	100.0%			41.5%	0.0%	0.0%	74.6%	0.0%	0.0%	90.5%
2019	0.0%	0.0%	29.7%	0.0%	0.0%	0.0%							

Unit: **Stateline Unit 1**
Data: Length and timing of planned outages - Scheduled Outage Hours

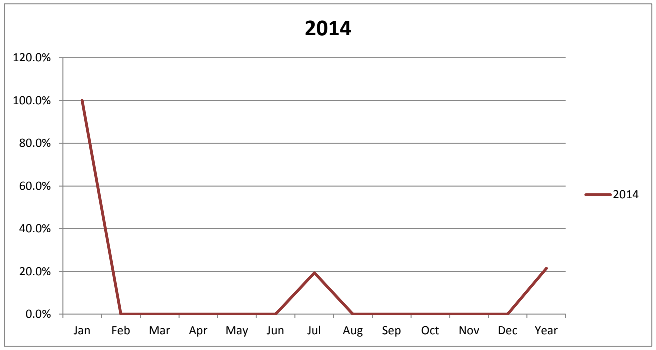
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	16	-	-	-	-	-	-	-	-	-	16
2015	48	-	-	157	-	-	-	-	163	-	-	-	369
2016	-	-	-	-	-	-	-	-	-	-	82	168	250
2017	-	-	-	216	90	3	-	-	408	374	101	-	1,192
2018	-	-	-	-	744	720	30	-	-	-	59	-	1,553
2019	63	-	-	-	-	-							

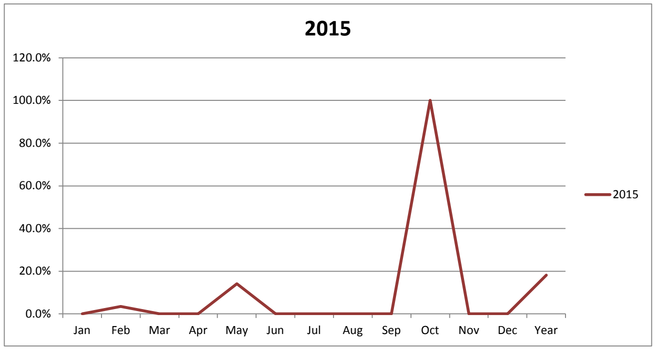
Data through June, 2019

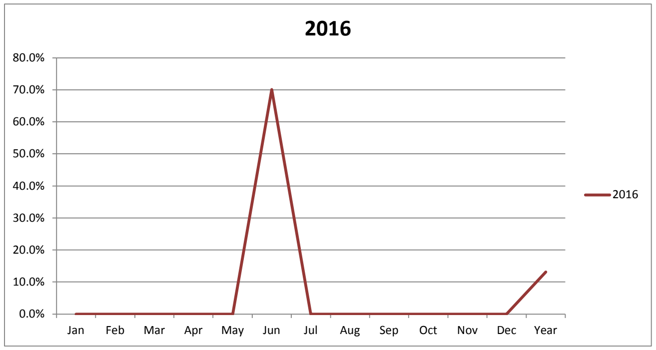
Unit: Stateline Unit 1
Data: Equivalent Availability Factor (%)

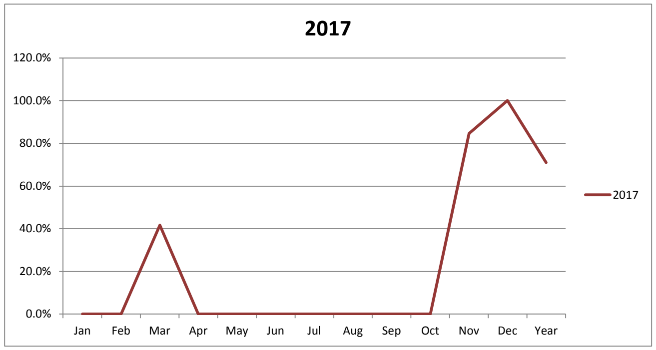


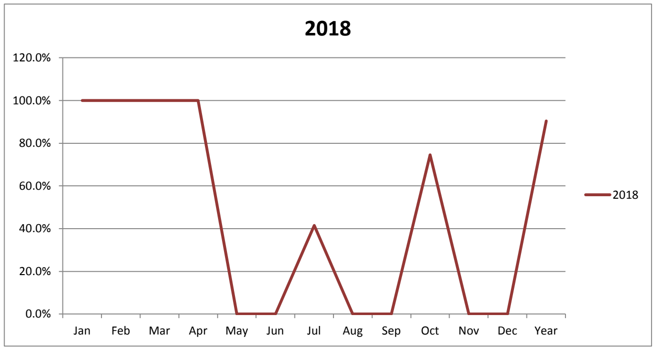
Unit: Stateline Unit 1
Data: Equivalent Forced Outage Rate (%)

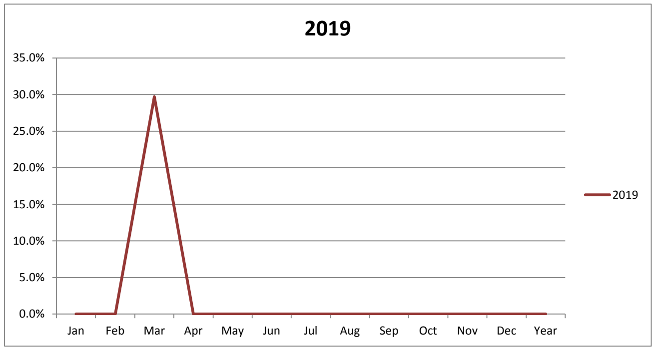




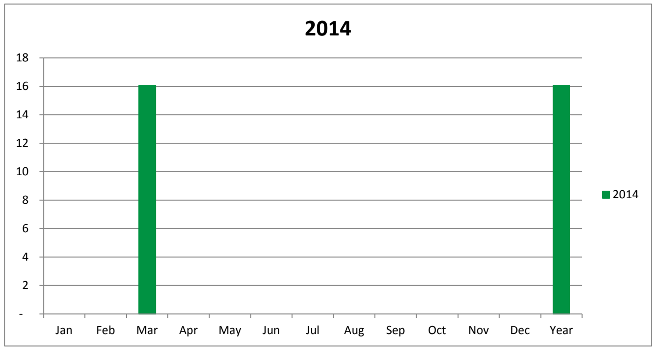


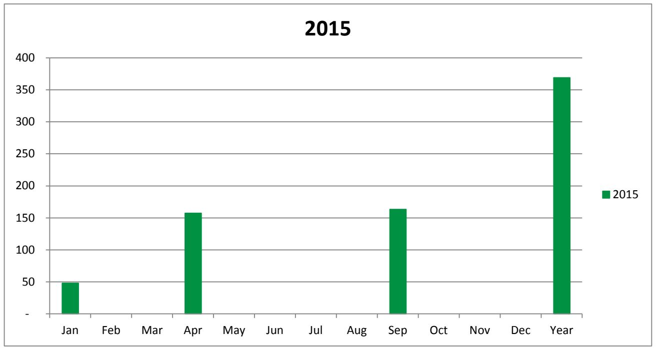


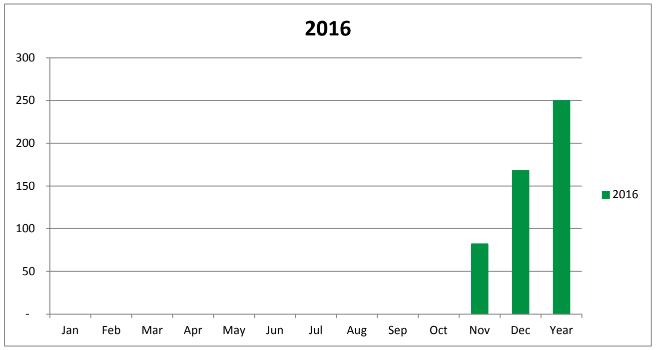


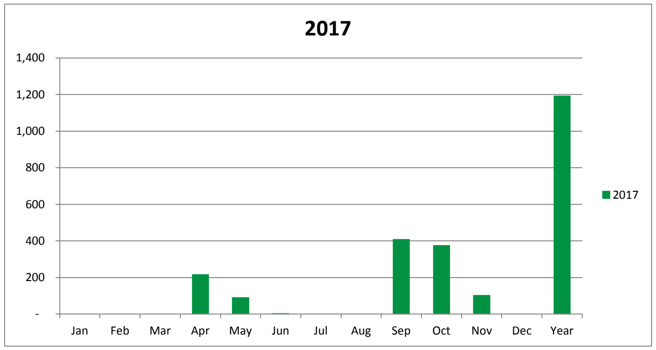


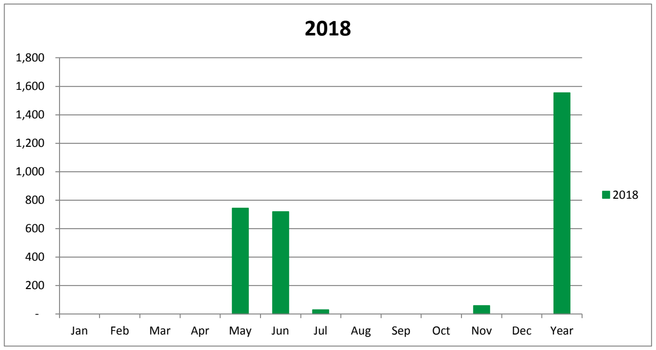
Unit: Stateline Unit 1
Data: Length and timing of planned outages - Scheduled Outage Hours

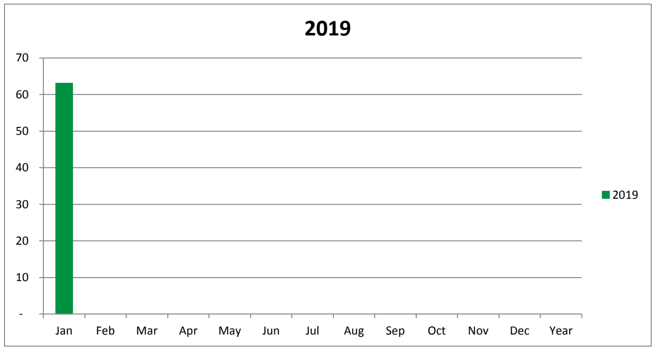












Data through June, 2019

Unit: Stateline CC
Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	99.8%	99.9%	100.0%	58.3%	61.3%	100.0%	100.0%	97.1%	99.2%	99.5%	96.3%	95.3%	92.4%
2015	100.0%	100.0%	81.2%	0.0%	12.9%	98.3%	93.4%	99.9%	100.0%	81.5%	99.6%	99.6%	80.4%
2016	100.0%	100.0%	83.8%	87.7%	94.7%	99.7%	99.8%	100.0%	98.4%	100.0%	70.0%	100.0%	94.5%
2017	95.6%	100.0%	88.5%	38.0%	99.6%	99.6%	100.0%	-8.9%	94.1%	50.1%	79.4%	98.9%	77.3%
2018	100.0%	98.2%	88.4%	0.0%	88.0%	99.2%	86.4%	100.0%	98.0%	84.0%	73.6%	99.9%	84.7%
2019	91.5%	100.0%	96.0%	100.0%	68.7%	95.6%							

Unit: Stateline CC
Data: Equivalent Forced Outage Rate (%)

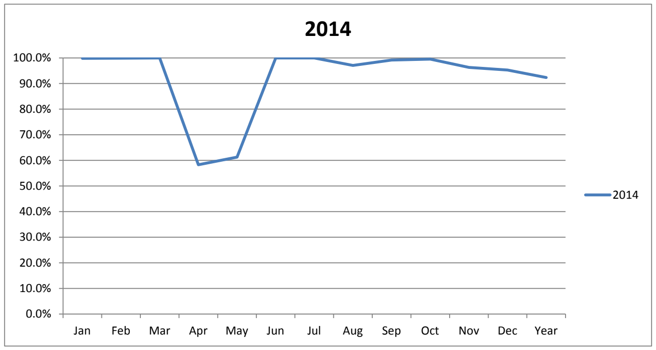
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.5%	0.0%	0.5%
2015	0.0%	0.0%	0.0%		9.1%	2.2%	0.0%	0.0%	0.0%	0.0%	0.4%	0.7%	3.1%
2016	0.1%	0.0%	0.0%	0.0%	3.6%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%
2017	4.9%	0.0%	0.0%	3.6%	0.5%	0.4%	0.0%	8.1%	0.9%	0.0%	4.7%	1.1%	2.0%
2018	0.0%	1.8%	0.1%		0.5%	0.1%	2.1%	0.0%	2.0%	0.1%	5.7%	0.1%	1.0%
2019	0.0%	0.0%	2.0%	0.6%	4.6%	4.5%							

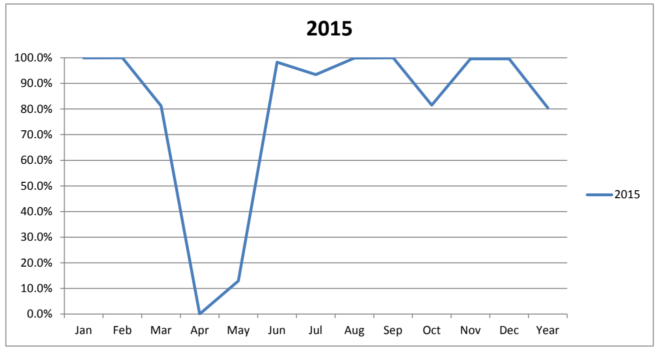
Unit: Stateline CC
Data: Length and timing of planned outages - Scheduled Outage Hours

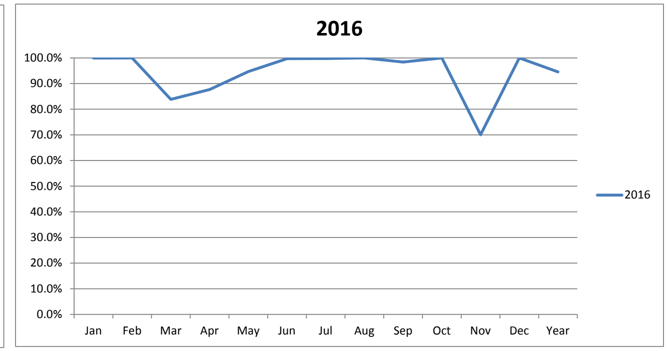
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	288	90	-	-	-	6	-	-	35	418
2015	-	-	96	720	638	-	48	-	-	-	-	-	1,502
2016	-	-	96	89	21	-	-	-	-	-	216	-	421
2017	-	-	-	322	-	-	-	-	-	263	85	-	670
2018	-	-	86	720	71	-	74	-	-	119	103	-	1,172
2019	-	-	-	-	221	-							

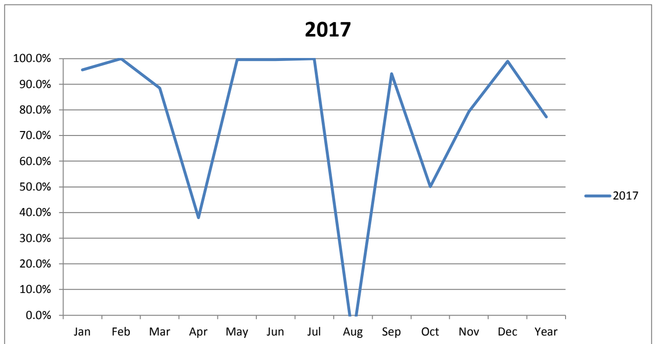
Data through June, 2019

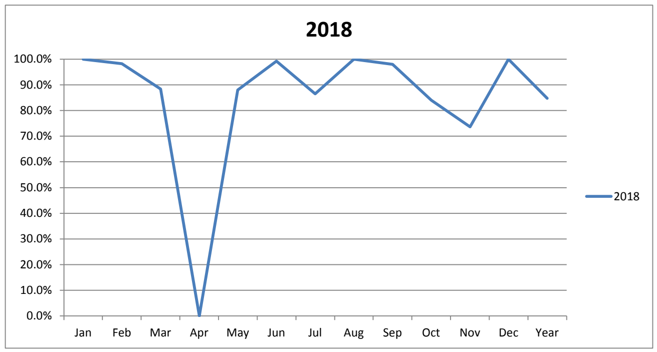
Unit: Stateline CC
Data: Equivalent Availability Factor (%)

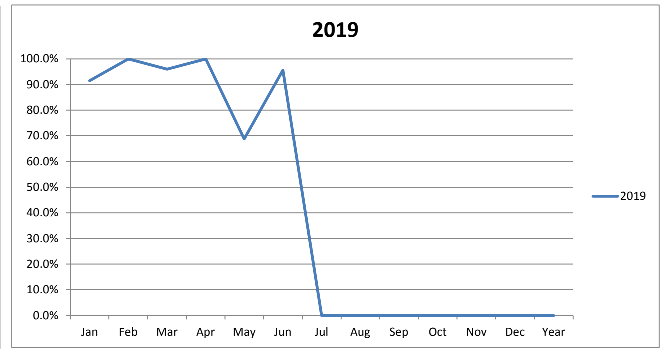




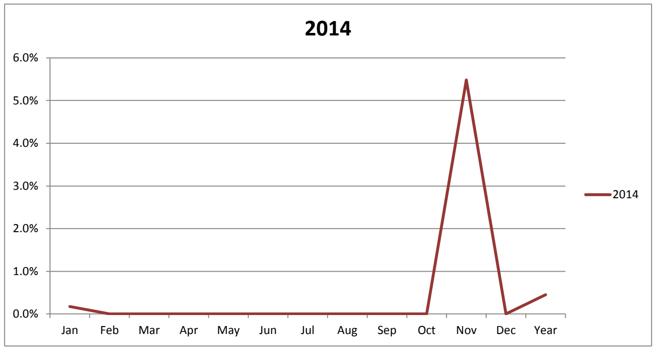


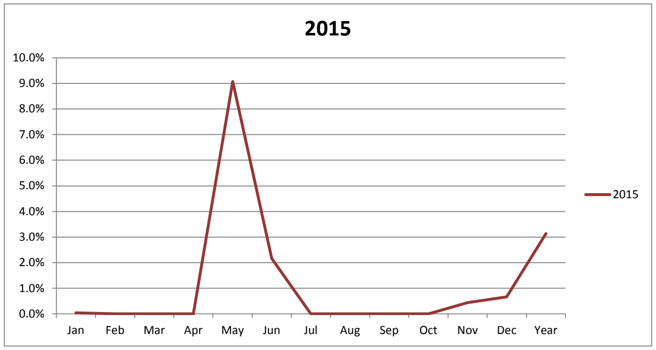


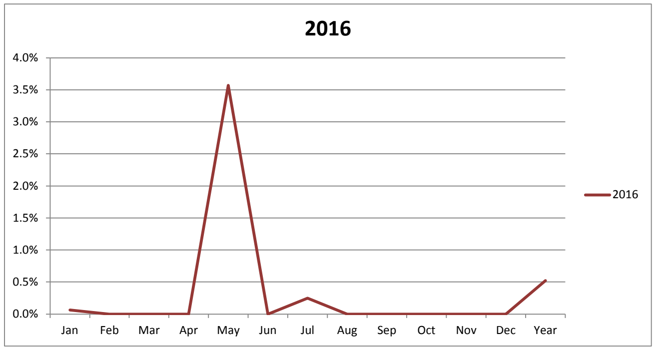


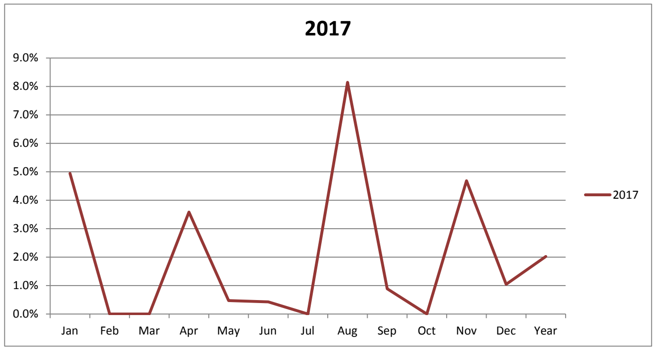


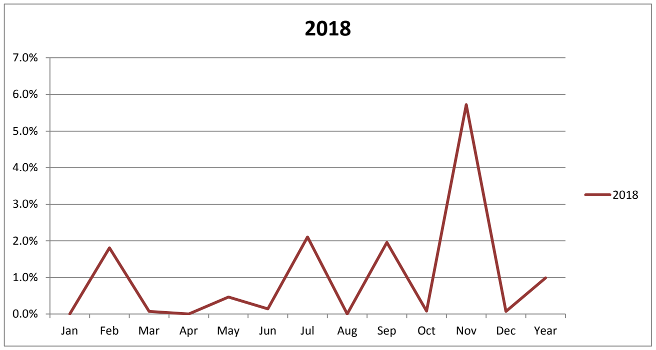
Unit: Stateline CC
Data: Equivalent Forced Outage Rate (%)

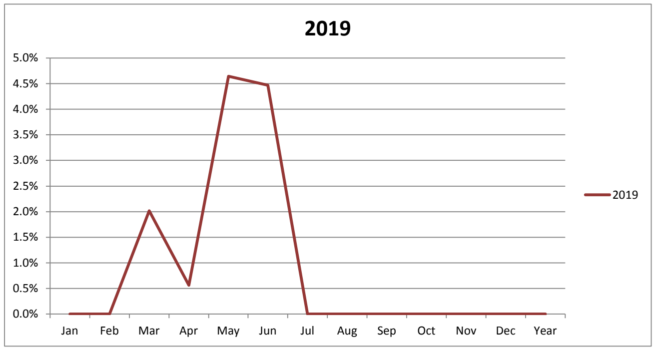




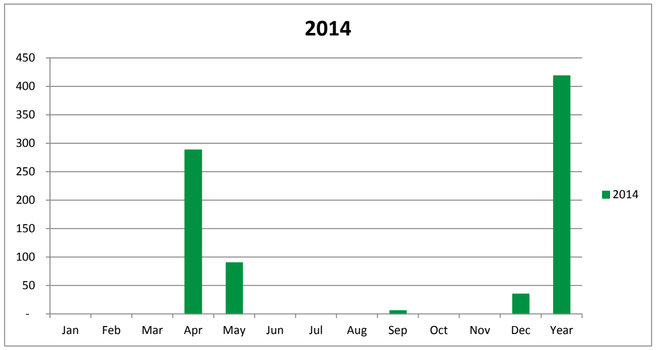


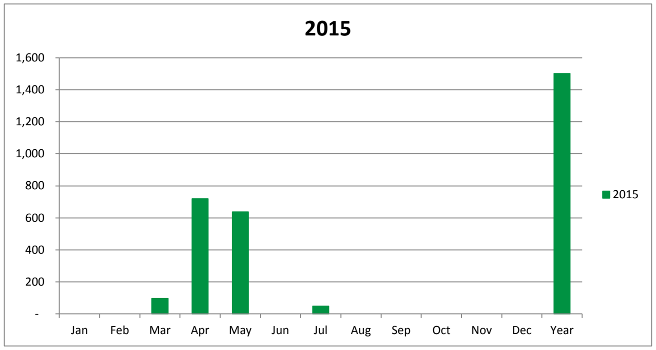


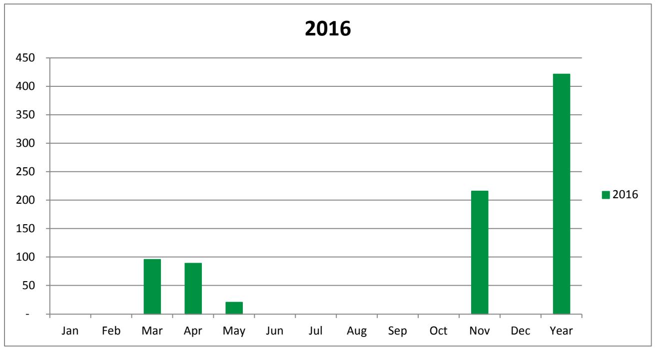


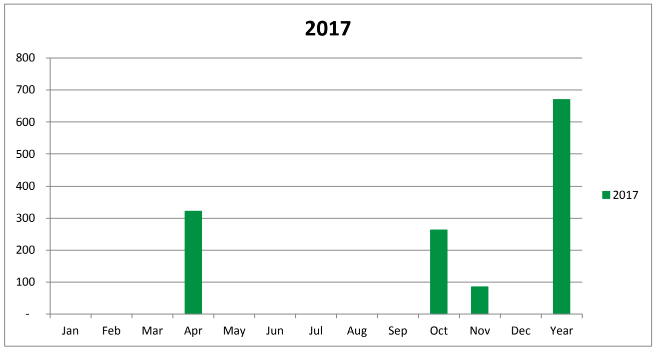


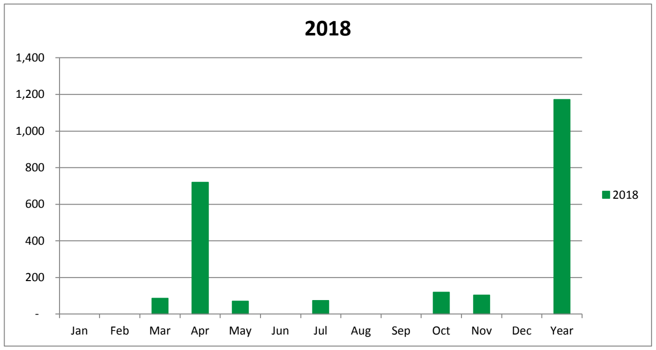
Unit: Stateline CC
Data: Length and timing of planned outages - Scheduled Outage Hours

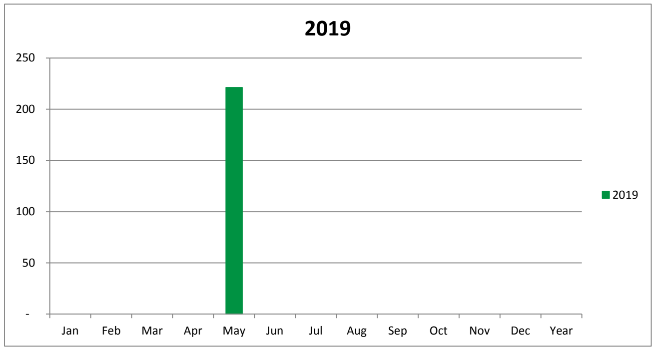












Data through June, 2019