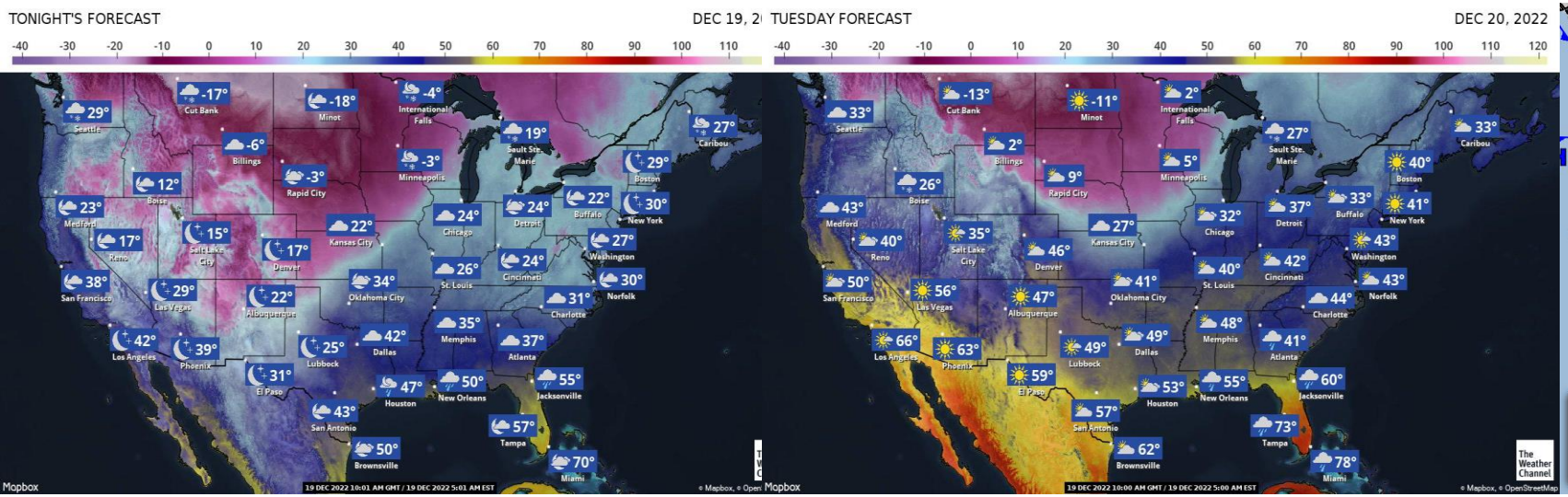
Energy Supply & Analysis

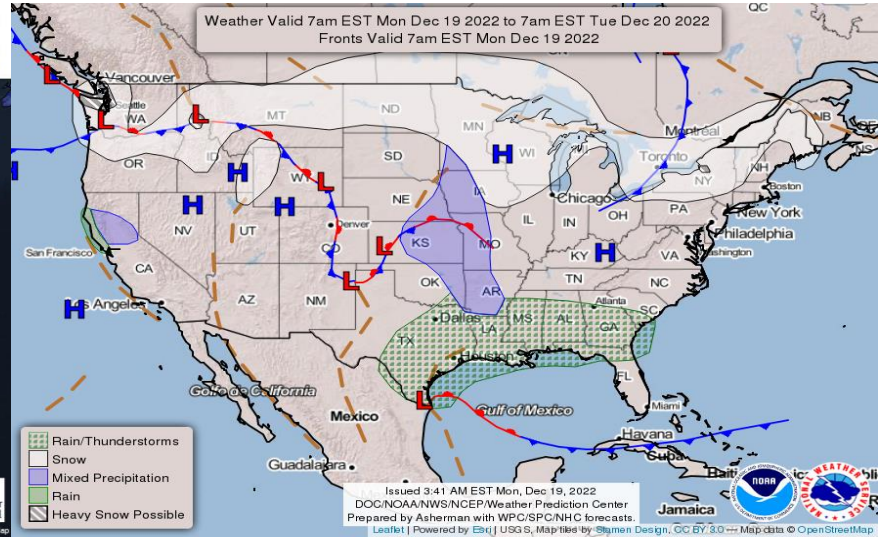
Power Supply Morning Meeting

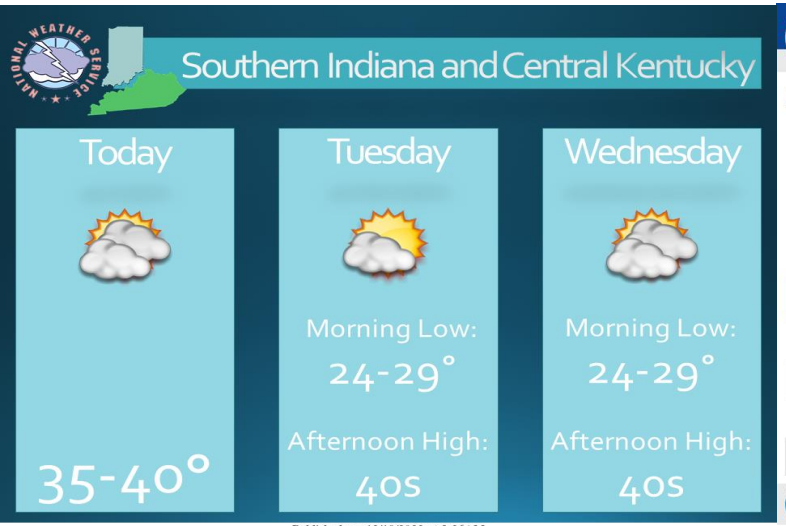
12/19/2022

LGE-KU003_00001313

Weather Updates







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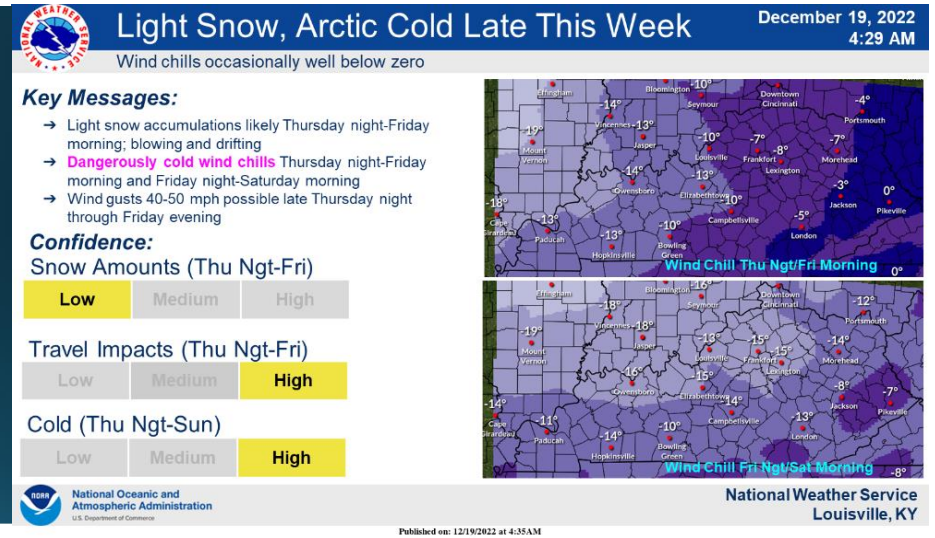


Published on: 12/19/2022 at 4:35AM

Published on: 12/19/2022 at 4:04AM

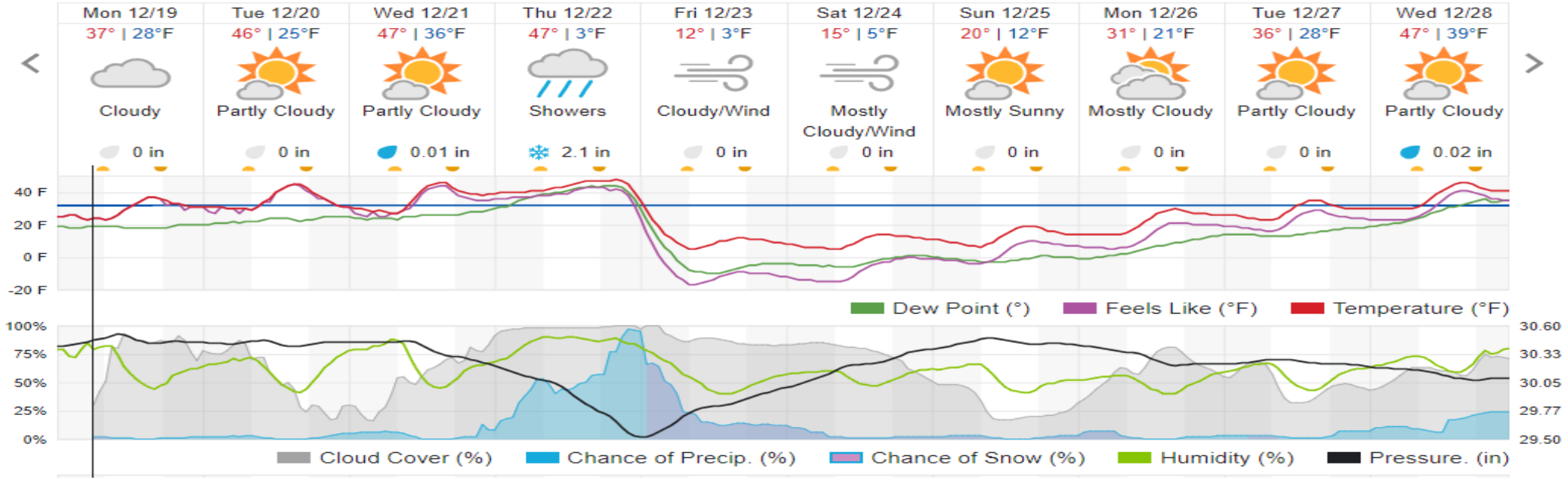
Business Use

PPL companies

Louisville

High Temp	12/18	12/19	12/20	12/21	12/22	12/23	12/24	12/25
	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
WSI-SDF	38	38	45	46	48	30	15	20
Average High	44	44	44	44	44	44	43	43
Departure from Normal	-6	-6	1	2	4	-14	-28	-23

Low Temp	12/18	12/19	12/20	12/21	12/22	12/23	12/24	12/25
	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
WSI-SDF	27	25	30	27	35	6	6	7
Average Low	29	29	28	28	28	28	28	28
Departure from Normal	-2	-4	2	-1	7	-22	-22	-21

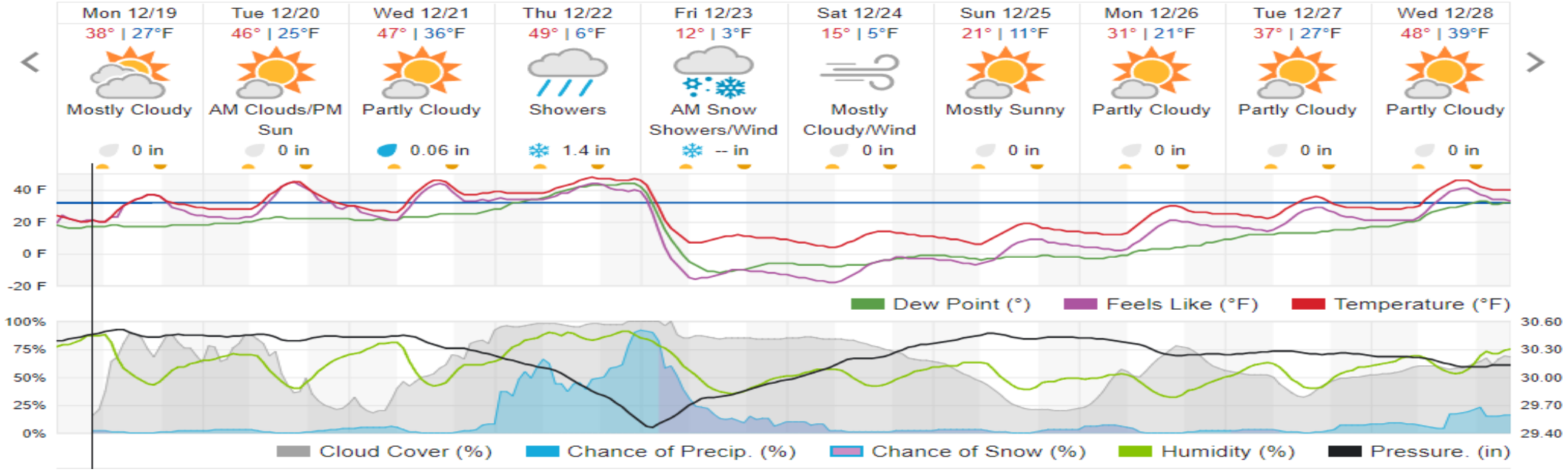


Business Use
LGE-KU003_0001315

Lexington

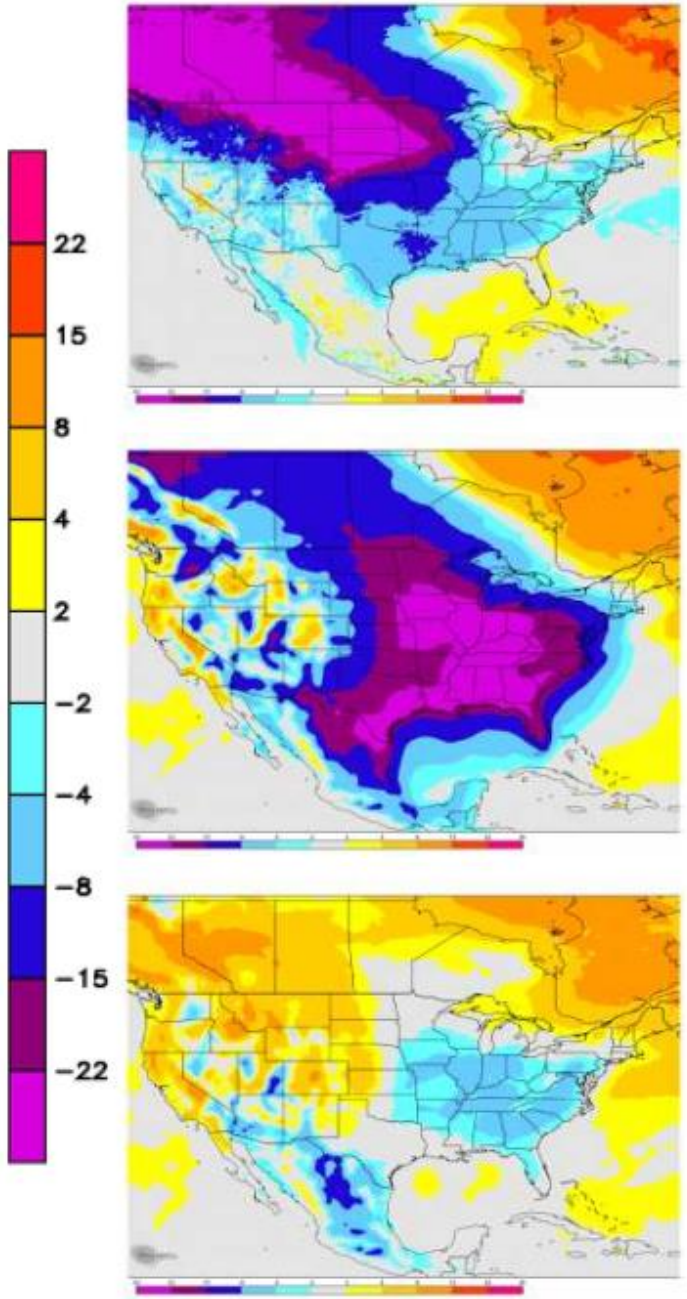
High Temp	12/18	12/19	12/20	12/21	12/22	12/23	12/24	12/25
	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
WSI-LEX	37	38	45	47	48	43	15	20
Average High	43	43	43	42	42	42	42	42
Departure from Normal	-6	-5	2	5	6	1	-27	-22

Low Temp	12/18	12/19	12/20	12/21	12/22	12/23	12/24	12/25
	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
WSI-LEX	25	19	28	26	38	8	5	7
Average Low	27	27	27	27	27	26	26	26
Departure from Normal	-2	-8	1	-1	11	-18	-21	-19



Business Use

WeatherBELL Forecast



Days 1-5

CONFIDENCE: HIGH

Days 6-10

CONFIDENCE: HIGH

Days 11-15

CONFIDENCE: LOW

Business Use

PPL companies

Fuels Update

• Natural Gas Updates

Current Gas Day

Location	Estimated FIFO	Spot Price	Spot Change from Previous Meeting	Gas Position (MMBtu)
TETCO				
E. W. Brown	$6.50	$6.50	$0.00	3,957
TEXAS GAS				
Cane Run 7	$5.49	$6.20	-$0.17	132,169
Paddy's Run	$5.85	$6.20	-$0.17	5,565
Trimble County	$4.58	$6.20	-$0.17	138,428

Forward Gas Market

Jan	Henry Hub Natural Gas Futures
Previous Morning	$6.57
Current Price	$6.19
Change	($0.38)

• Coal Updates

Actuals thru:	Thursday 12/15/2022			12/31/2022	Lowest	
Station	Tons	Days of Inventory	Change in Days	Projected EOM DOI	Future YR22 DOI	Date
Brown	188,321	47	0	45	45	12/26/2022
Ghent	632,603	30	0	34	30	12/19/2022
Mill Creek	492,173	33	0	36	33	12/21/2022
Trimble HS	268,073	27	0	31	28	12/16/2022
Trimble PRB	120,829	55	3	55	54	12/29/2022
System	1,701,999	33	0	36	33	12/16/2022

Business Use
LGE-KU003_0001318
PPL companies

Hour Ending EST	Friday, December 16, 2022				Saturday, December 17, 2022				Sunday, December 18, 2022			
	44/35		41/35		37/29		40/32		38/27		38/27	
	MISO-LGEE		PJM-SOUTH		MISO-LGEE		PJM-SOUTH		MISO-LGEE		PJM-SOUTH	
	DA	RT	DA	RT	DA	RT	DA	RT	DA	RT	DA	RT
1	53	49	55	47	51	80	60	58	57	49	57	48
2	51	44	54	47	51	58	59	53	55	49	57	50
3	50	44	52	53	51	56	56	52	55	45	55	49
4	50	37	53	52	50	49	56	50	54	48	55	48
5	51	37	57	59	50	48	58	45	54	52	56	44
6	53	36	62	98	50	46	58	48	55	45	57	46
7	63	42	72	89	52	43	64	50	58	53	65	48
8	79	49	83	68	58	42	72	58	62	58	69	69
9	70	68	78	59	60	52	69	54	65	62	67	56
10	63	65	68	54	61	64	65	48	65	60	58	51
11	60	54	68	61	58	57	75	55	66	60	60	54
12	58	54	64	55	57	56	68	53	64	60	59	61
13	55	46	62	58	53	50	61	52	61	67	58	62
14	54	51	62	55	52	46	62	53	61	65	56	56
15	51	50	62	53	49	50	62	49	58	55	56	50
16	52	45	62	57	49	50	63	51	59	57	56	45
17	57	46	69	57	56	53	82	70	71	61	69	65
18	68	48	86	63	72	52	90	67	87	86	87	76
19	68	46	80	57	71	54	88	62	94	82	85	77
20	64	42	80	58	70	61	90	57	82	71	83	77
21	62	41	74	56	69	51	89	59	83	68	82	66
22	58	47	67	52	64	67	85	64	82	68	79	72
23	57	50	64	53	60	55	79	56	74	80	73	74
24	53	56	61	52	59	48	80	49	62	65	68	63

averages												
ON	61	50	71	57	60	54	75	57	71	66	69	63
OFF	53	43	58	62	52	53	61	51	56	51	59	50

LGE-KU003_0001319

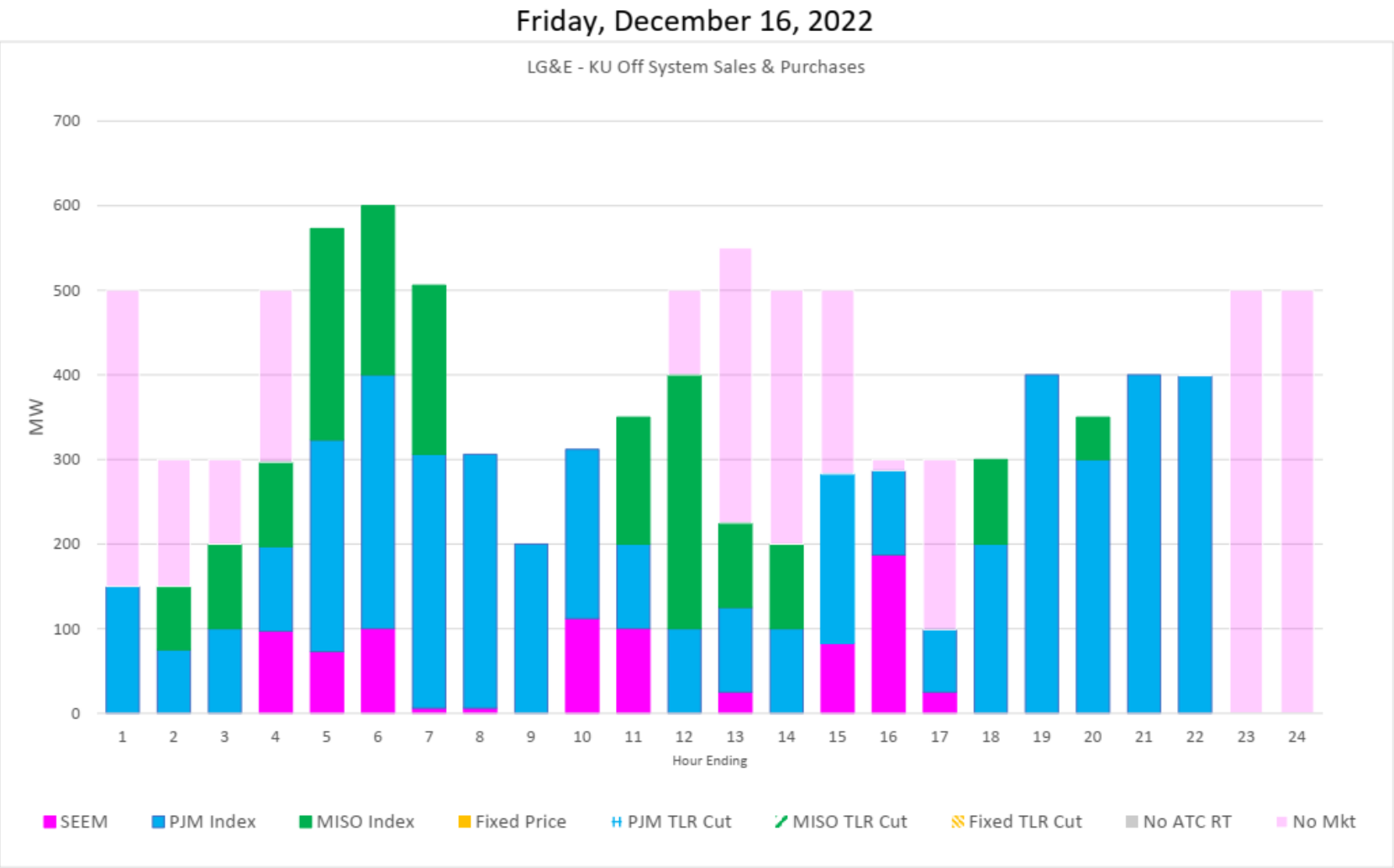
Hour Ending EST	Monday, December 19, 2022				Tuesday, December 20, 2022			
	38/29		37/25		45/26		39/21	
	MISO-LGEE		PJM-SOUTH		MISO-LGEE		PJM-SOUTH	
	DA	RT	DA	RT	DA	RT	DA	RT
1	66	64	66	70	67	65	66	67
2	59	60	69	90	60	63	69	68
3	58	56	70	67	59	60	70	67
4	57	48	74	64	58	57	74	70
5	55	47	78	65	56	54	78	74
6	60	57	83	69	61	58	83	72
7	79	73	107	83	80	79	105	93
8	92	88	140	94	91	83	135	102
9	88	81	97	88	87	74	95	86
10	86	79	80	85	85	72	79	75
11	86	78	79	74	85	73	76	72
12	84	77	77	69	83	71	74	71
13	81	75	74	71	82	75	73	72
14	77	75	74	72	78	76	72	70
15	77	76	74	70	76	77	71	69
16	76	74	76	73	75	79	75	70
17	84	83	84	85	83	81	83	78
18	103	89	106	99	102	88	104	89
19	105	90	92	82	105	89	88	83
20	92	82	90	78	91	84	87	79
21	85	80	85	74	84	77	84	77
22	80	77	80	69	79	77	79	75
23	71	65	76	63	70	69	75	72
24	67	63	69	65	68	67	67	63

averages								
ON	85	79	86	78	85	78	84	78
OFF	63	59	77	72	64	63	76	72

Business Use

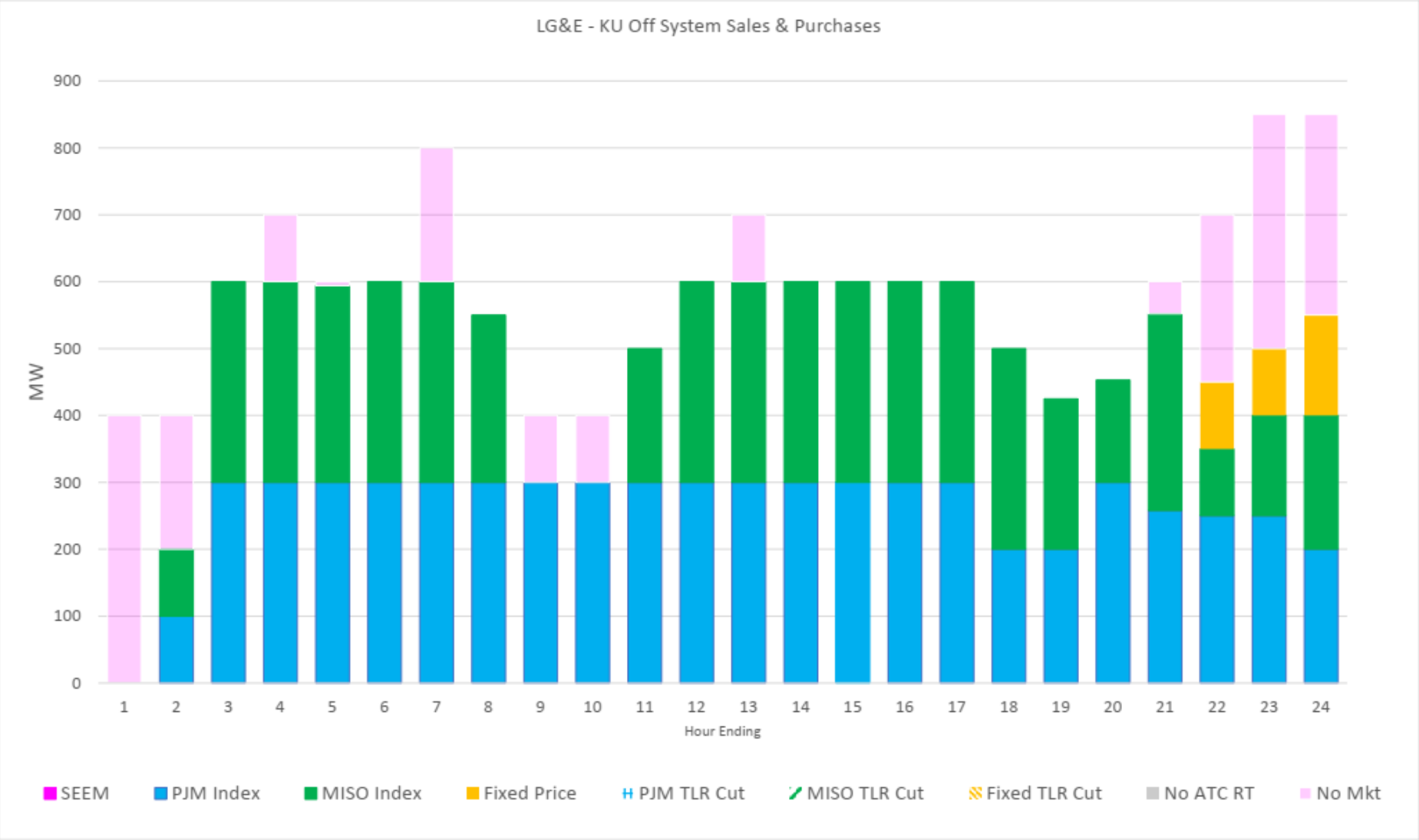
PPL companies

OSS & Transmission



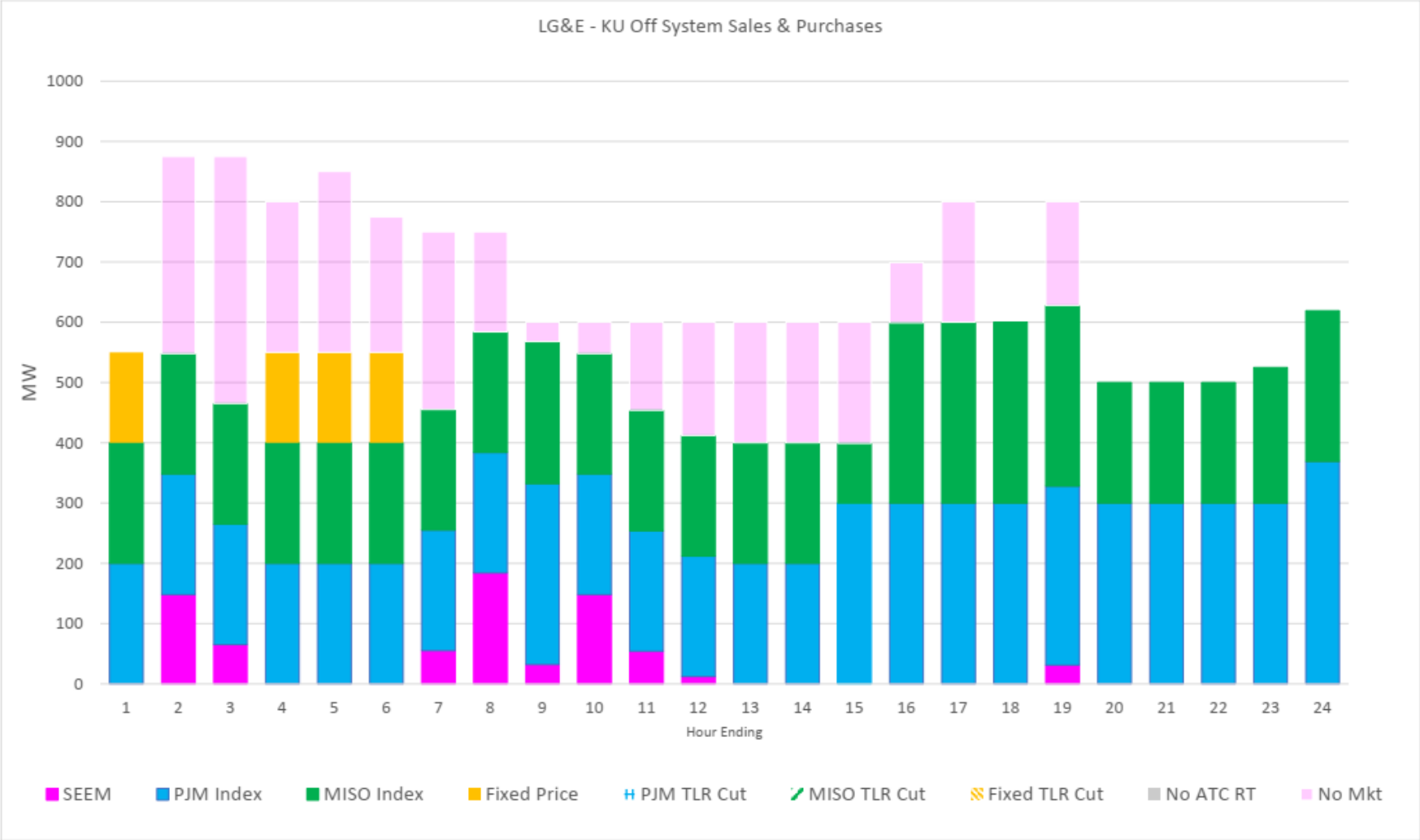
Business Use
LGE-KU003_0001321
PPL companies

Saturday, December 17, 2022



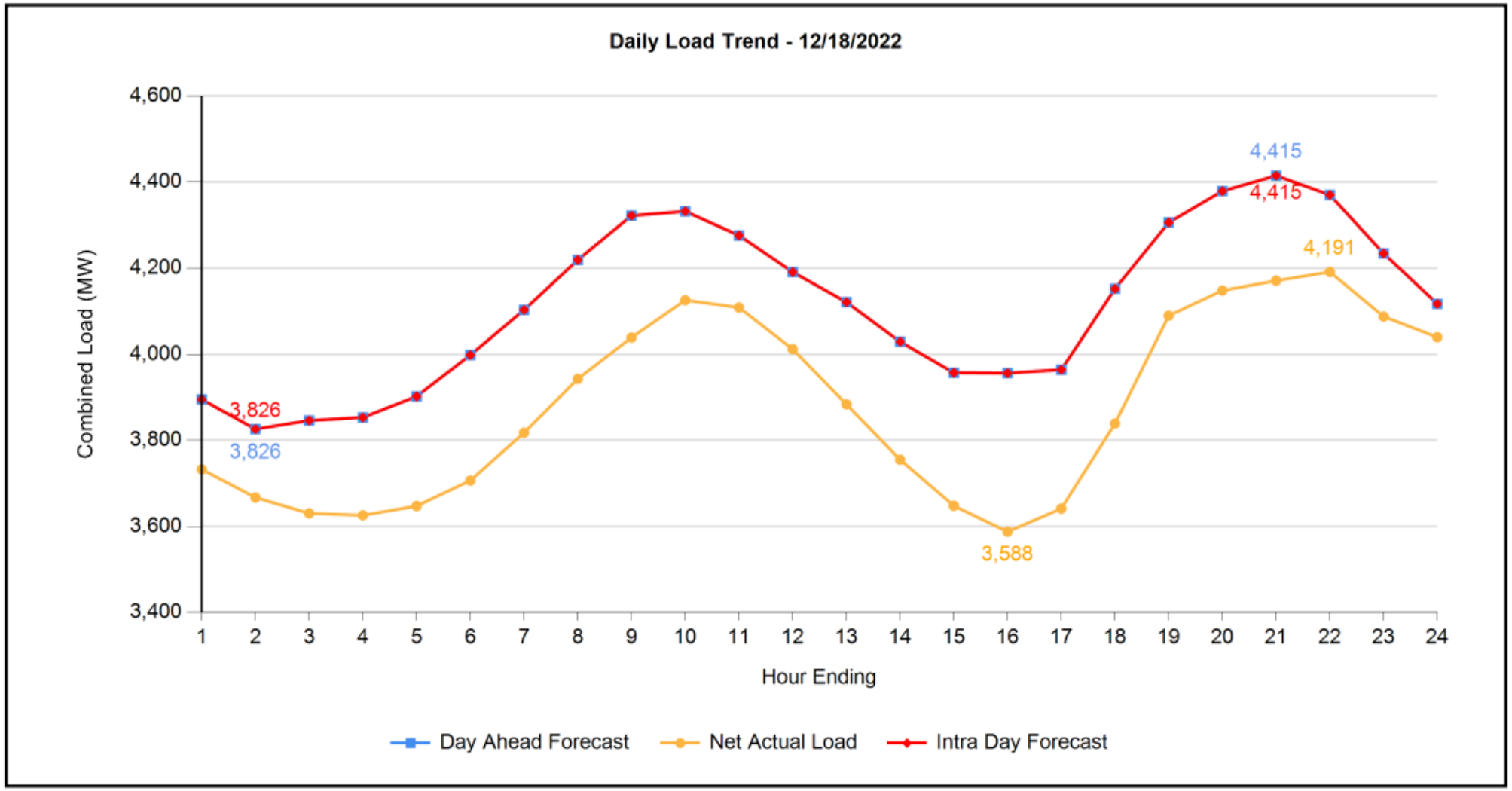
Business Use

Sunday, December 18, 2022



Business Use
LGE-KU003_0001323

GDLF Dashboard



12/18/2022		
	Max Net Load	Hour
LGE	1,450	21
KU	2,747	22
Combined	4,191	22

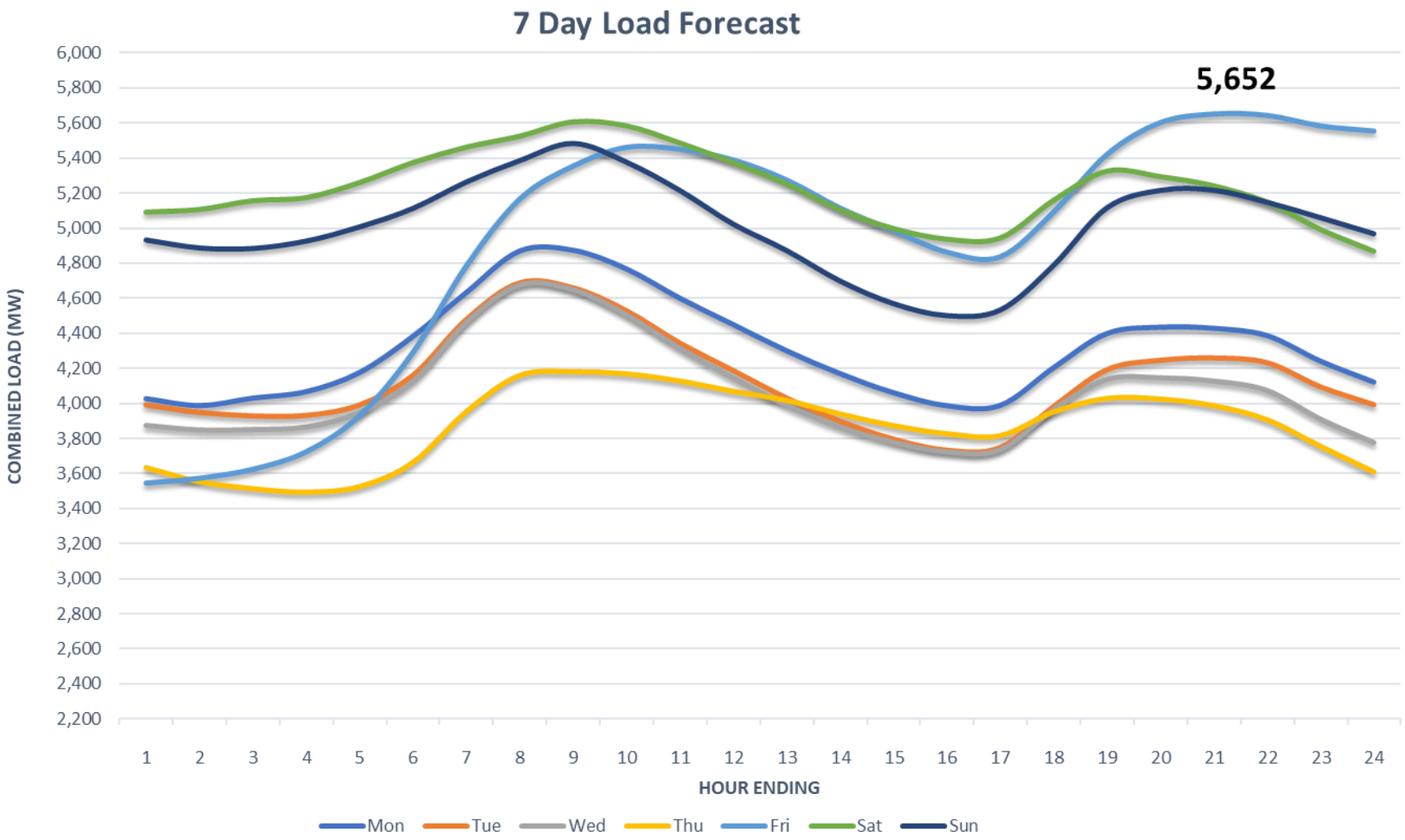
	Min Net Load	Hour
LGE	1,244	5
KU	2,299	16
Combined	3,588	16

	Total Net Load
LGE	32,329
KU	60,806
Combined	93,135

Daily SDAF MAPE (Peak)	4.2673
Daily SDAF MAPE	6.1017
Monthly SDAF MAPE	2.7037
Yearly SDAF MAPE	2.9506

Business Use

PPL companies



Business Use

LGE-KU003_0001325

Fleet Update

Unit	Date	12/19	12/20	12/21	12/22	12/23	12/24	12/25	12/26	12/27	12/28	12/29	12/30	12/31	1/1
	Day	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
BR-3	416	416	416	416	416	416	416	416	416	416	416	416	416	416	416
GH-1	479	479	479	479	479	479	479	479	479	479	479	479	479	479	479
GH-2	486	425	486	486	486	486	486	486	486	486	486	486	486	486	486
GH-3	476	476	476	476	476	476	476	476	476	476	476	476	476	476	476
GH-4	478	478	478	478	478	478	478	478	478	478	478	478	478	478	478
MC-1	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
MC-2	297	297	297	297	297	297	297	297	297	297	297	297	297	297	297
MC-3	394	394	394	394	394	394	394	394	394	394	394	394	394	394	394
MC-4	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486
TC-1	493	493	493	493	493	493	493	493	493	493	493	493	493	493	493
TC-2	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760
OF	40	32	40	40	40	40	40	40	40	40	40	40	40	40	40
BR-10	138	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR-7-1	226	226	226	226	226	226	226	226	226	226	226	226	226	226	226
CR-7-2	226	226	226	226	226	226	226	226	226	226	226	226	226	226	226
CR-ST	231	231	231	231	231	231	231	231	231	231	231	231	231	231	231
TC-6	179	R	R	R	R	179	179	179	R	R	R	R	R	R	R
TC-7	179	R	179	R	R	179	179	R	R	R	R	R	R	R	R
TC-8	179	FS	FS	179	FS	FS	179	179	FS	FS	FS	FS	FS	FS	FS
TC-9	179	R	R	R	179	179	179	R	R	R	R	R	R	R	R
TC-10	179	FS	FS	FS	FS	179	FS	FS	FS	FS	FS	FS	FS	FS	FS
Peak Hour		9:00	8:00	8:00	9:00	21:00	9:00	9:00							
		Net	Net	Net	Net	Net	Net	Net	Net	Net	Net	Net	Net	Net	Net
On Line Base Capacity		5719	5788	5788	5788	5788	5788	5788	5788	5788	5788	5788	5788	5788	5788
Projected Net Peak Load		4875	4691	4677	4180	5652	5607	5483	5260	5133	4786	4239	3922	3362	3528
JOU Schedules		161	161	161	161	161	161	161	161	161	161	161	161	161	161
JOU Pseudo-Tie		152	152	152	152	152	152	152	152	152	152	152	152	152	152
OVEC Import		143	143	159	159	159	159	159	159	159	159	159	159	159	159
Load Obligation		5045	4861	4831	4334	5806	5761	5637	5414	5287	4940	4393	4076	3516	3682
Position before Res & Int		674	927	957	1454	(18)	27	151	374	501	848	1395	1712	2272	2106
Projected OSS/OSP Net		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spinning Reserve Target		318	318	318	318	318	318	318	318	318	318	318	318	318	318

Business Use

PPL companies

Unit	Date	12/19	12/20	12/21	12/22	12/23	12/24	12/25	12/26	12/27	12/28	12/29	12/30	12/31	1/1
	Day	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Base Load On Line Position		356	609	639	1136	(336)	(291)	(167)	56	183	530	1077	1394	1954	1788
Base Reserve Resources		32	32	32	32	32	32	32	32	32	32	32	32	32	32
Base On Line Position w/base reserves		388	641	671	1168	(304)	(259)	(135)	88	215	562	1109	1426	1986	1820
Online Capacity		5719	5967	5967	5967	6504	6504	6146	5788	5788	5788	5788	5788	5788	5788
Position w/Online CT's		356	788	818	1315	380	425	191	56	183	530	1077	1394	1954	1788
PRI CT Reserve		2115	1936	1936	1936	1399	1399	1757	2115	2115	2115	2115	2115	2115	2115
Net On Line Position and all stand by CT's		2523	2776	2806	3303	1831	1876	2000	2223	2350	2697	3244	3561	4121	3955
Primary CT Reserve Margin incl Position		50.68%	58.06%	58.88%	77.77%	31.47%	32.53%	35.52%	41.27%	44.76%	55.26%	75.29%	89.46%	121.02%	110.62%
Total Net Reserve Margin incl Secondary's		51.75%	59.17%	59.99%	79.01%	32.39%	33.45%	36.47%	42.26%	45.78%	56.35%	76.52%	90.79%	122.57%	112.10%
Spinning Reserve Target		318	318	318	318	318	318	318	318	318	318	318	318	318	318
BR CT 8-9 Quick Start available		100	100	100	100	100	100	100	100	100	100	100	100	100	100
BR CT 10-11 Quick Start available		100	100	100	100	100	100	100	100	100	100	100	100	100	100
TC CT 8 Fast Start available		100	100	0	100	100	0	0	100	100	100	100	100	100	100
TC CT 10 Fast Start available		100	100	100	100	0	100	100	100	100	100	100	100	100	100
		718	718	618	718	618	618	618	718	718	718	718	718	718	718
		243	243	243	243	243	243	243	243	243	243	243	243	243	243
15- minute Res > CRR		475	475	375	475	375	375	375	475	475	475	475	475	475	475
Operating Reserve Planned		318	318	318	318	318	318	318	318	318	318	318	318	318	318
15-minute Res > OR Planned		400	400	300	400	300	300	300	400	400	400	400	400	400	400
Model		A	A	A	E	E	E	E							
A = ANNSTLF		4875	4691	4677	4068	5889	5607	5637							
S = Similar Day		4920	4599	4488	4063	5016	5282	5313							
E = eLoad		4860	4629	4648	4180	5652	5607	5483							
M = Manual		4875	4691	4677	4180	5652	5607	5483	Predicted Net peak						
Average of Models		4885	4640	4604	4104	5519	5499	5478							
Forecast variance from average		(10)	51	73	76	133	108	5							

Business Use

PPL companies

Meeting Actions

Y	Projected Resource Capacity is sufficient to meet the Projected Load Obligation. The Projected excess energy may be sold in the market.
N	Concerns were raised in the meeting as to the Projected Resource Capacity available due to Fuel, Re-dispatch, and/or Available Transmission Capacity.
N	Projected Resources Capacity is not sufficient to meet the Projected Load Obligation (notes below as applicable).
N	Generation ALERT discussion necessary
N	Staffing adjustment discussion necessary
N	LG&E - KU BA-TO and RC contact required
	If so, Date / Time of BA Contact:
	If so, Date / Time of RC Contract:

Business Use
LGE-KU003_0001328
PPL companies