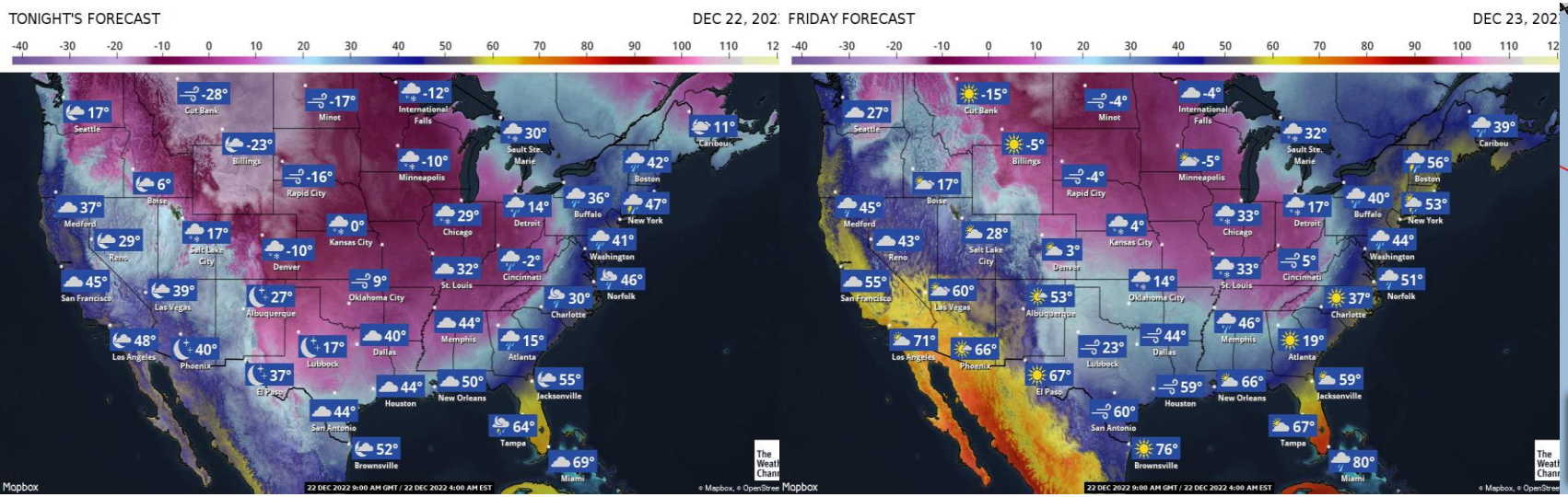
Energy Supply & Analysis

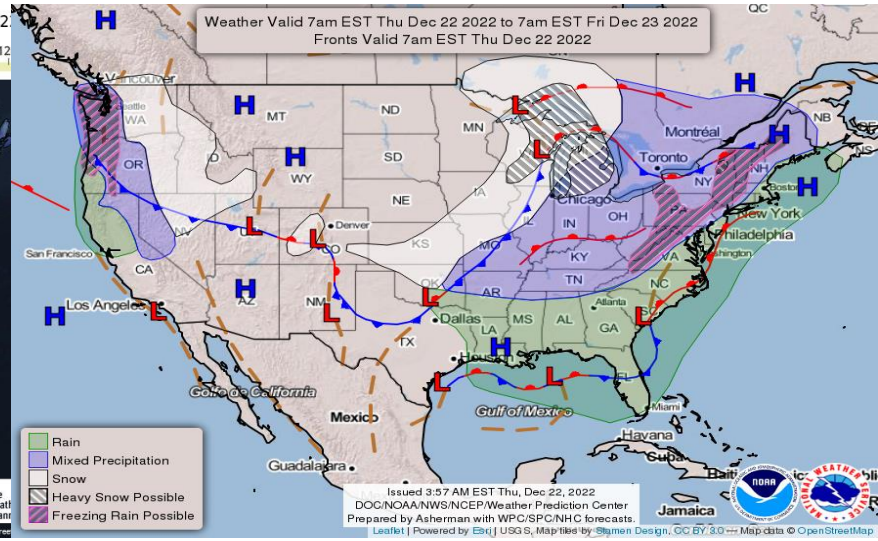
Power Supply Morning Meeting

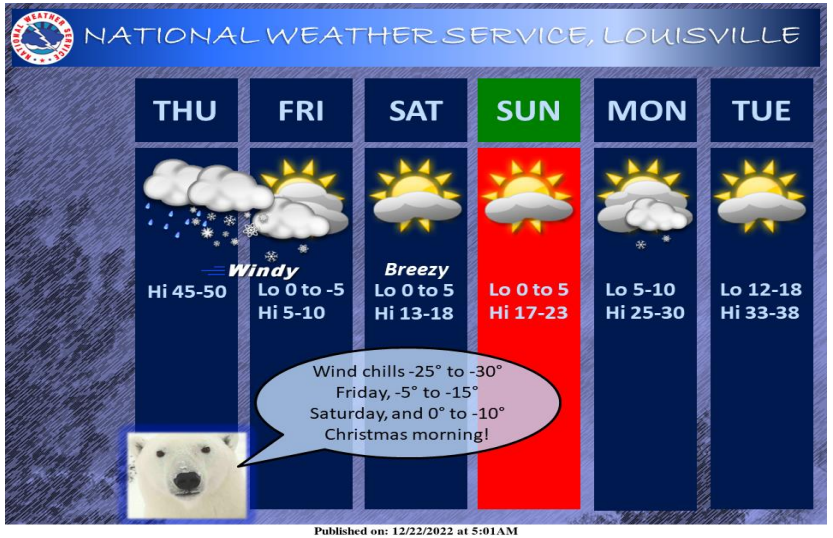
12/22/2022

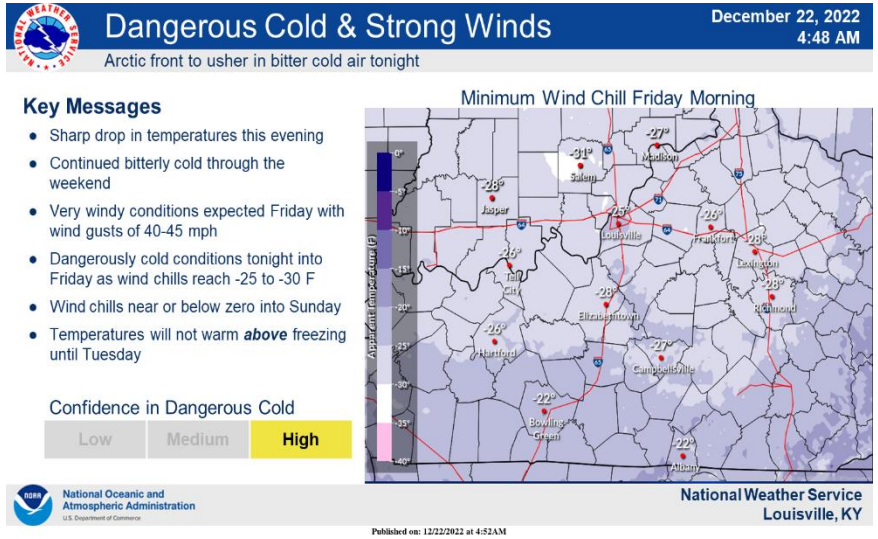
LGE-KU003_0001342

Weather Updates







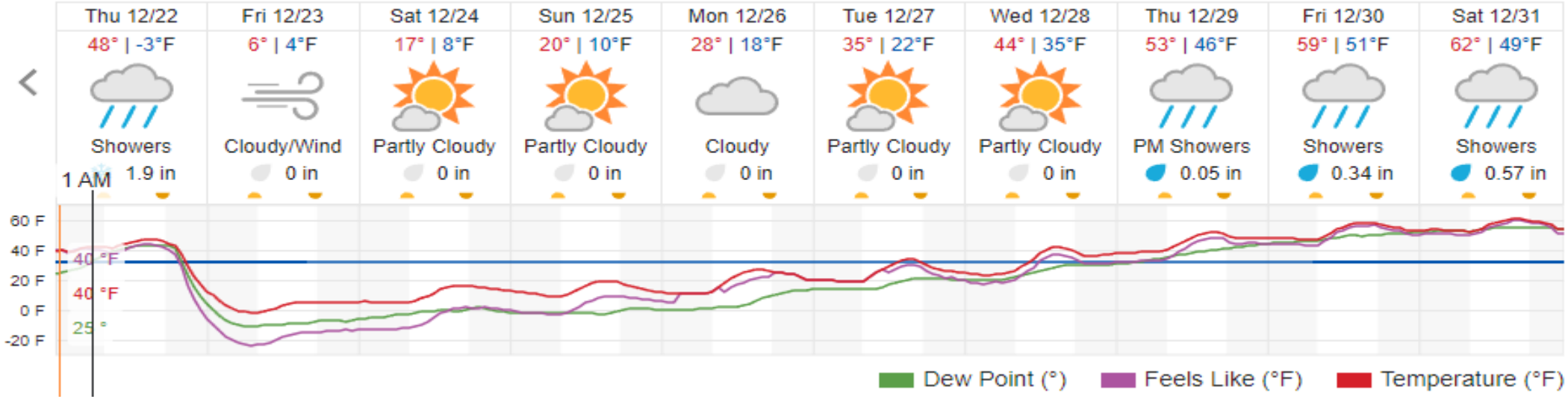


Business Use
LGE-KU003_0001343
PPL companies

Louisville

High Temp	12/21	12/22	12/23	12/24	12/25	12/26	12/27	12/28
	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed
WSI-SDF	48	48	13	18	20	28	35	43
Average High	44	44	44	43	43	43	43	43
Departure from Normal	4	4	-31	-25	-23	-15	-8	0

Low Temp	12/21	12/22	12/23	12/24	12/25	12/26	12/27	12/28
	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed
WSI-SDF	27	17	0	6	10	13	20	25
Average Low	28	28	28	28	28	28	28	27
Departure from Normal	-1	-11	-28	-22	-18	-15	-8	-2

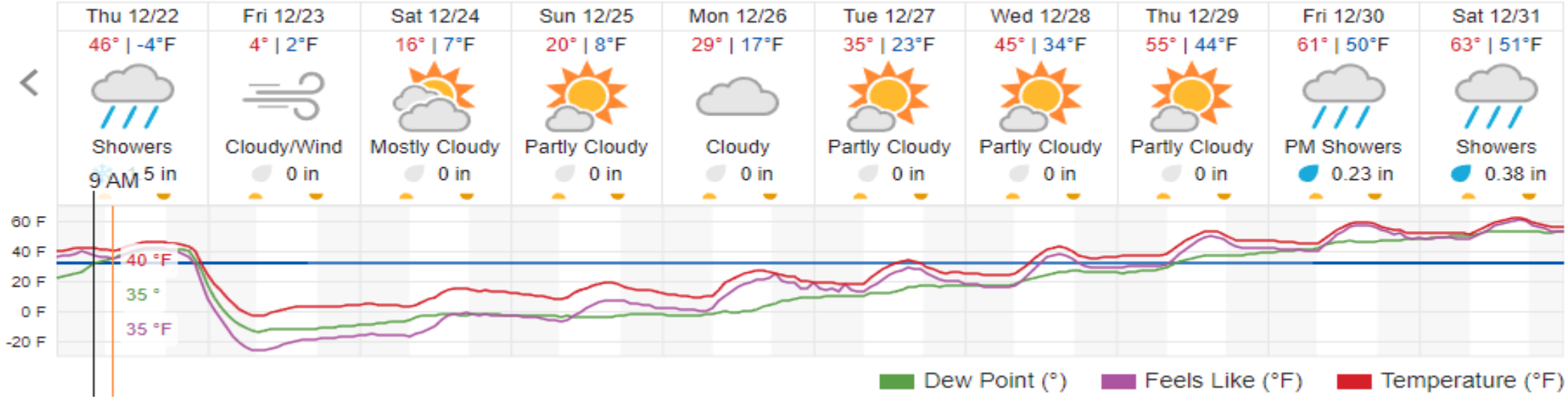


Business Use
LGE-KU003_0001344

Lexington

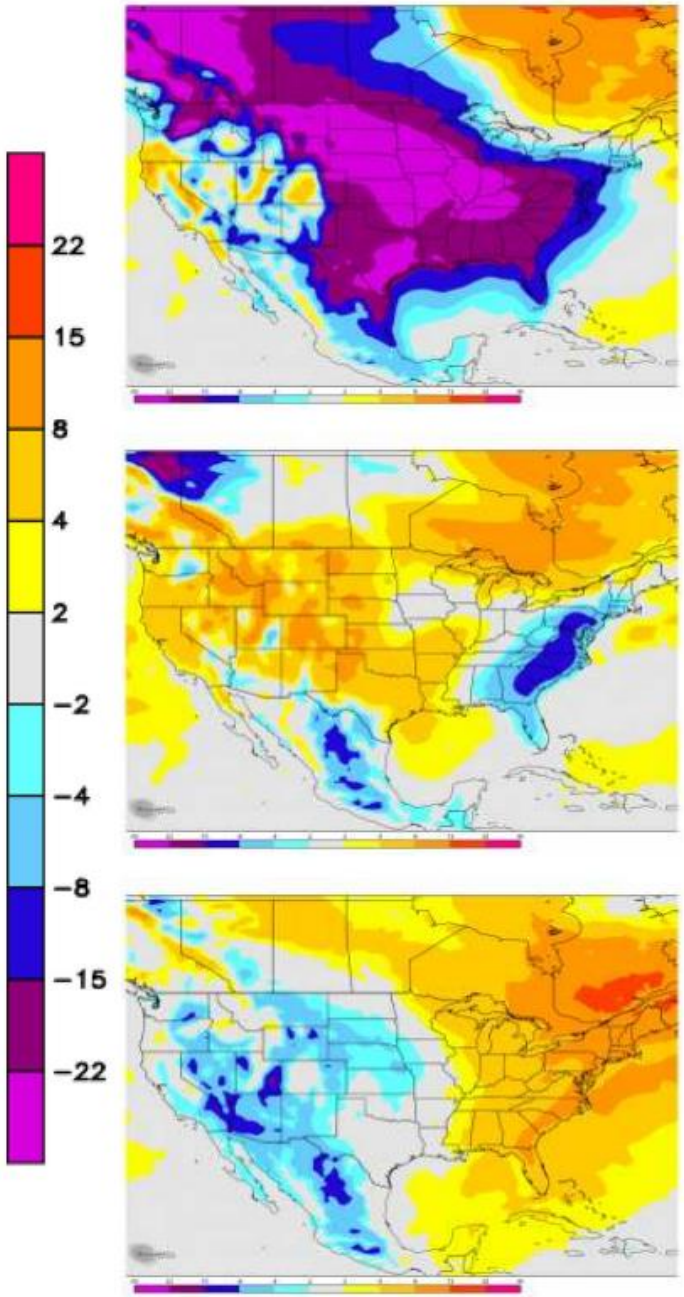
High Temp	12/21	12/22	12/23	12/24	12/25	12/26	12/27	12/28
	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed
WSI-LEX	49	48	18	16	20	28	35	44
Average High	42	42	42	42	42	42	42	41
Departure from Normal	7	6	-24	-26	-22	-14	-7	3

Low Temp	12/21	12/22	12/23	12/24	12/25	12/26	12/27	12/28
	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed
WSI-LEX	23	23	-2	4	9	10	18	24
Average Low	27	27	26	26	26	26	26	26
Departure from Normal	-4	-4	-28	-22	-17	-16	-8	-2



Business Use

WeatherBELL Forecast



Days 1-5

CONFIDENCE: HIGH

Days 6-10

CONFIDENCE: HIGH

Days 11-15

CONFIDENCE: MEDIUM

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	$5.20	$6.15	$0.95	1,434
TEXAS GAS				
Cane Run 7	$5.46	$6.06	$0.96	157,208
Paddy's Run	$5.10	$6.06	$0.96	5,081
Trimble County	$4.57	$6.06	$0.96	123,087

Forward Gas Market

Jan	Henry Hub Natural Gas Futures
Previous Morning	$5.51
Current Price	$5.41
Change	($0.10)

• Coal Updates

Actuals thru:	Tuesday 12/20/2022				12/31/2022		Lowest	
Station	Tons	Days of Inventory		Change in Days	Projected EOM DOI		Future YR22 DOI	Date
Brown	176,851	44	▼	(1)	45		44	12/26/2022
Ghent	625,700	30	▬	0	33		29	12/21/2022
Mill Creek	463,802	32	▬	0	34		31	12/21/2022
Trimble HS	290,074	30	▬	0	34		30	12/21/2022
Trimble PRB	136,308	62	▲	2	61		60	12/29/2022
System	1,692,734	33	▬	0	36		33	12/21/2022

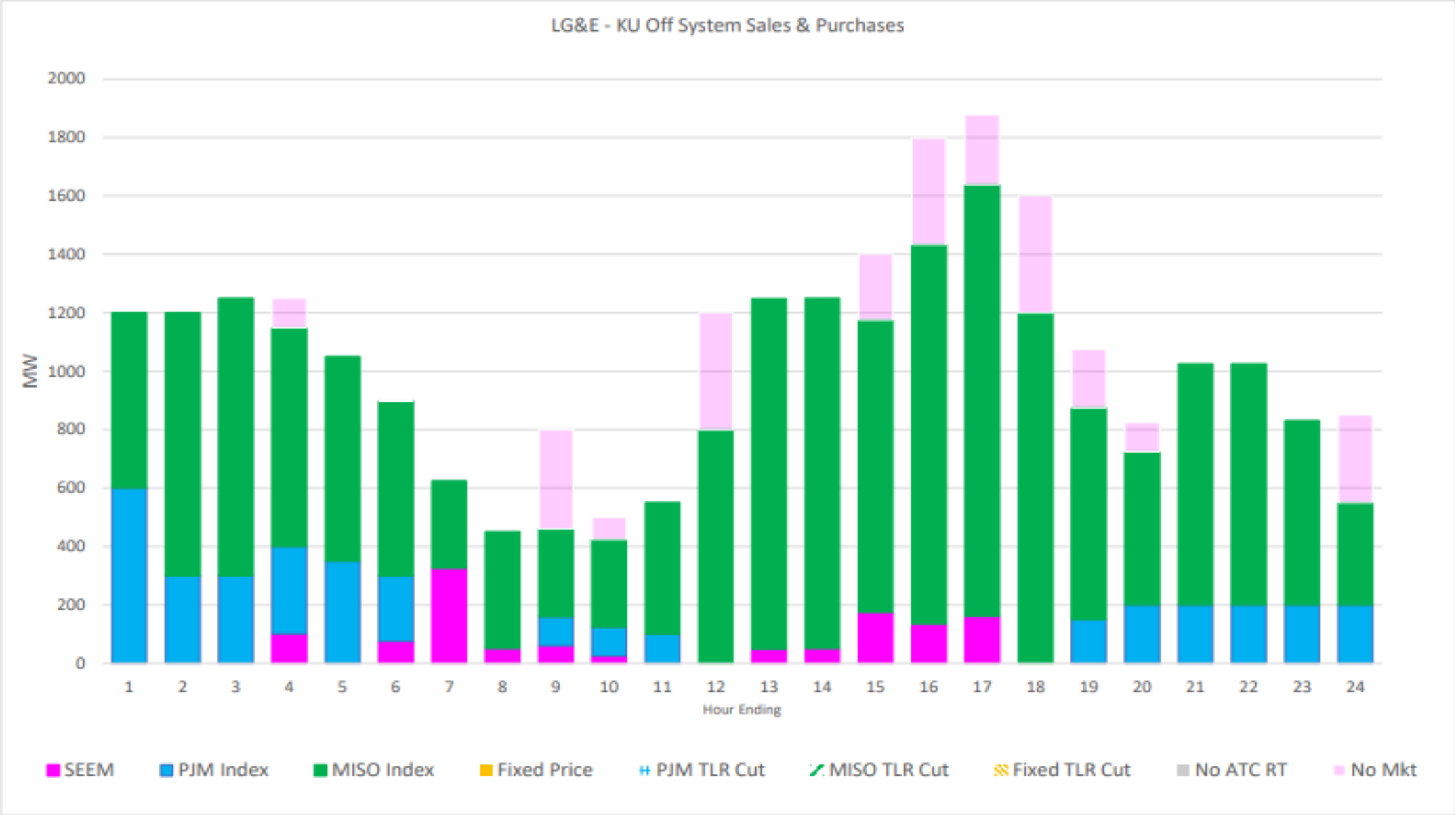
Business Use
LGE-KU003_0001347
PPL companies

Hour Ending EST	Wednesday, December 21, 2022				Thursday, December 22, 2022				Friday, December 23, 2022			
	48/27		39/17		48/-3		43/43		6/4		49/7	
	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	79	209	65	60	63	31	50	42	75	85	66	70
2	68	65	63	66	54	28	50	41	75	85	69	90
3	69	83	61	63	44	24	48	42	75	80	70	67
4	68	68	62	61	45	24	48	38	75	80	74	64
5	66	60	64	60	42	28	50	36	75	95	78	65
6	71	56	65	59	49	29	53	40	90	125	83	69
7	77	85	83	70	61	53	61	55	115	140	107	91
8	94	76	103	95	79	61	69	65	125	150	140	124
9	86	80	75	70	76	94	69	65	120	145	97	96
10	84	70	66	61	75	51	68	65	100	115	80	74
11	76	66	62	51	80	45	69	65	95	105	79	91
12	73	52	59	47	81	48	68	65	90	100	77	97
13	68	56	58	46	82	46	65	65	90	90	74	89
14	68	46	56	48	79	48	63	60	85	85	74	83
15	67	66	54	44	76	50	60	60	85	85	74	93
16	64	51	55	46	74	60	58	55	80	85	76	73
17	64	62	59	47	75	65	60	56	84	115	84	75
18	77	76	72	62	89	85	68	68	125	85	106	102
19	72	65	64	63	85	85	61	65	115	150	92	78
20	68	58	62	49	90	100	58	60	105	125	90	82
21	60	48	60	48	88	100	54	60	100	100	85	111
22	54	45	57	46	82	90	50	55	95	95	80	102
23	52	43	52	41	74	90	47	50	92	90	76	108
24	50	35	51	36	76	90	41	45	90	80	69	64
averages												
ON	70	60	63	54	80	70	62	61	99	108	86	92
OFF	68	83	64	59	54	38	50	42	84	96	77	73

Business Use

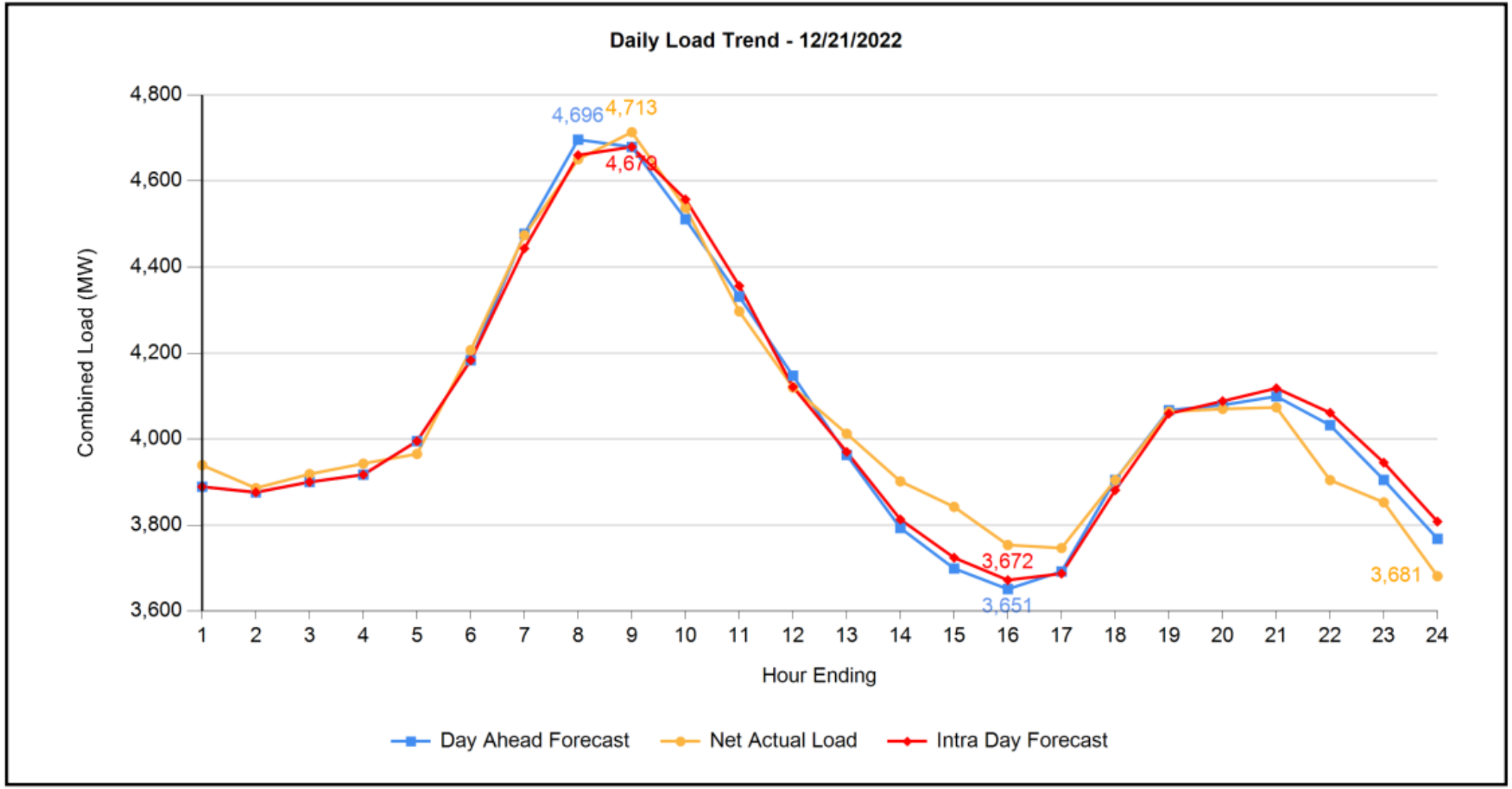
PPL companies

Wednesday, December 21, 2022



Business Use

GDLF Dashboard



12/21/2022		
	Max Net Load	Hour
LGE	1,548	9
KU	3,165	9
Combined	4,713	9

	Min Net Load	Hour
LGE	1,277	24
KU	2,403	16
Combined	3,681	24

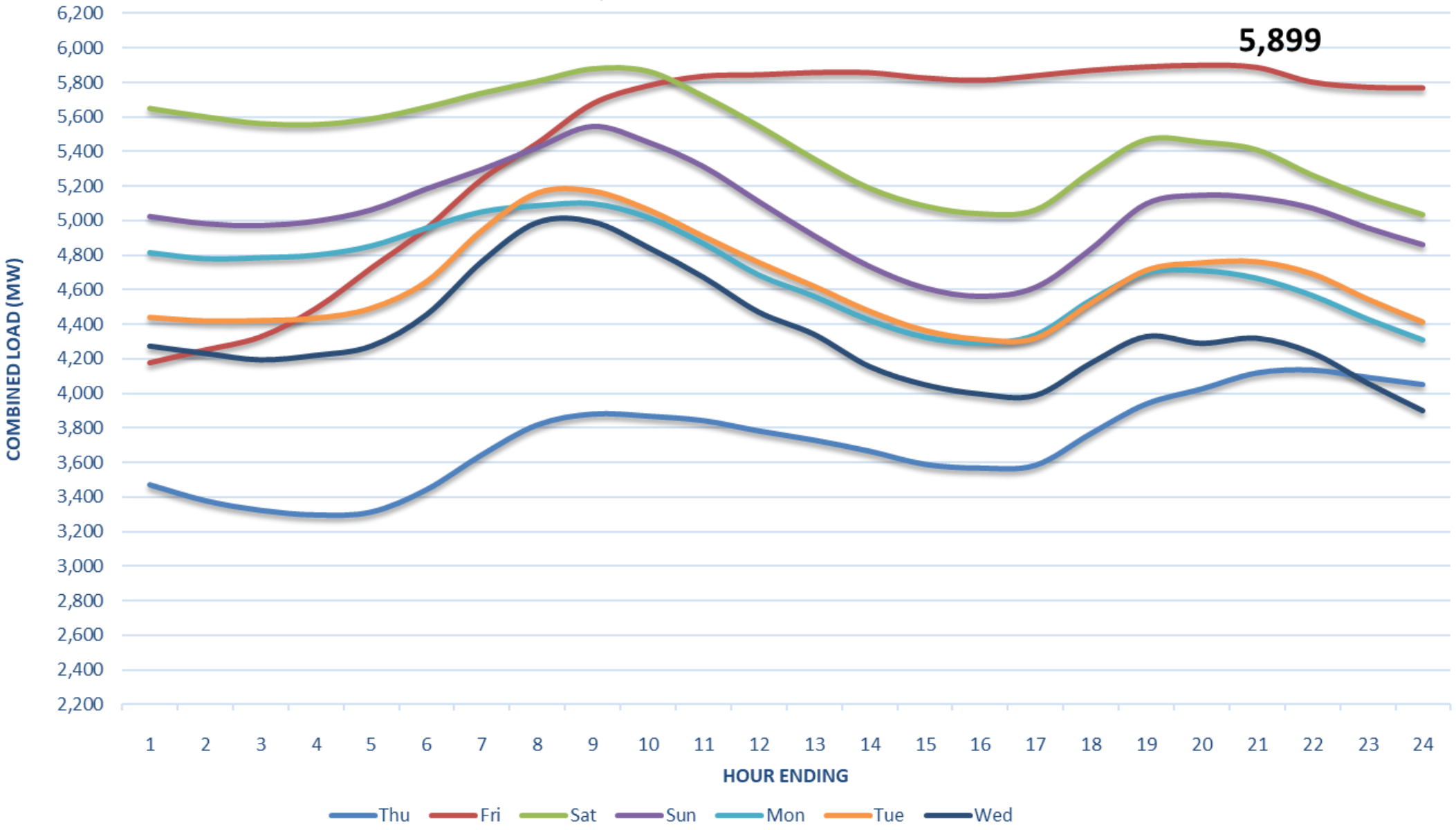
	Total Net Load
LGE	33,492
KU	63,963
Combined	97,455

Daily SDAF MAPE (Peak)	0.7288
Daily SDAF MAPE	1.1525
Monthly SDAF MAPE	2.5887
Yearly SDAF MAPE	2.9417

Business Use

PPL companies

7 Day Load Forecast



Business Use

LGE-KU003_0001351

Fleet Update

Unit	Date	12/22	12/23	12/24	12/25	12/26	12/27	12/28	12/29	12/30	12/31	1/1	1/2	1/3	1/4
	Day	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed
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	486	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	43	40	40	40	40	40	40	40	40	40	40	40	40	40
BR-5	130	130	130	130	R	R	R	R	R	R	R	R	R	R	R
BR-6	171	171	171	171	171	R	R	R	R	R	R	R	R	R	R
BR-7	171	171	171	171	171	171	R	R	R	R	R	R	R	R	R
BR-9	138	FS	138	138	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
BR-10	138	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BR-11	128	FS	FS	FS	128	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
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-5	179	179	179	179	179	R	R	R	R	R	R	R	R	R	R
TC-6	179	179	179	179	179	179	179	R	R	R	R	R	R	R	R
TC-7	179	179	179	179	179	179	179	R	R	R	R	R	R	R	R
TC-8	179	179	179	179	179	179	FS	FS	FS	FS	FS	FS	FS	FS	FS
TC-9	179	179	179	179	179	179	R	R	R	R	R	R	R	R	R
TC-10	179	179	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Peak Hour		22:00	20:00	9:00	9:00	9:00	9:00	9:00							
		Net	Net	Net	Net	Net	Net	Net	Net	Net	Net	Net	Net	Net	Net
On Line Base Capacity		5791	5788	5788	5788	5788	5788	5788	5788	5788	5788	5788	5788	5788	5788
Projected Net Peak Load		4134	5899	5881	5544	5101	5171	4991	4375	3919	3320	3242	3677	3768	3875
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		131	156	159	159	159	159	159	159	159	159	159	159	159	159
Load Obligation		4316	6056	6035	5698	5256	5326	5145	4529	4073	3474	3396	3831	3922	4029
Position before Res & Int		1475	(268)	(247)	90	532	462	643	1259	1715	2314	2392	1957	1866	1759
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	12/22	12/23	12/24	12/25	12/26	12/27	12/28	12/29	12/30	12/31	1/1	1/2	1/3	1/4
	Day	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed
Base Load On Line Position		1157	(586)	(565)	(228)	214	144	325	941	1397	1996	2074	1639	1548	1441
Base Reserve Resources		32	32	32	32	32	32	32	32	32	32	32	32	32	32
Base On Line Position w/base reserves		1189	(554)	(533)	(196)	246	176	357	973	1429	2028	2106	1671	1580	1473
Online Capacity		7337	7293	7293	7153	6675	6146	5788	5788	5788	5788	5788	5788	5788	5788
Position w/Online CT's		2703	919	940	1137	1101	502	325	941	1397	1996	2074	1639	1548	1441
PRI CT Reserve		569	610	610	750	1228	1757	2115	2115	2115	2115	2115	2115	2115	2115
Net On Line Position and all stand by CT's		3324	1581	1602	1939	2381	2311	2492	3108	3564	4163	4241	3806	3715	3608
Primary CT Reserve Margin incl Position		79.14%	25.92%	26.35%	34.03%	45.66%	43.69%	48.88%	69.85%	89.61%	123.82%	129.20%	102.09%	97.21%	91.76%
Total Net Reserve Margin incl Secondary's		80.40%	26.80%	27.24%	34.97%	46.68%	44.70%	49.92%	71.03%	90.94%	125.38%	130.81%	103.50%	98.59%	93.10%
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	0	100	100	100	100	100	100	100	100	100	100
TC CT 8 Fast Start available		0	0	0	0	0	100	100	100	100	100	100	100	100	100
TC CT 10 Fast Start available		0	100	100	100	100	100	100	100	100	100	100	100	100	100
		518	618	618	518	618	718	718	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		275	375	375	275	375	475	475	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		200	300	300	200	300	400	400	400	400	400	400	400	400	400
Model		S	M	M	M	M	M	E							
A = ANNSTLF		4134	5905	5931	5316	5205	5154	4875							
S = Similar Day		4134	5905	5931	5316	5205	5154	4875							
E = eLoad		4177	5966	5760	5485	5466	5214	4991							
M = Manual		4134	5899	5881	5544	5101	5171	4991	Predicted Net peak						
Average of Models		4148	5925	5874	5372	5292	5174	4914							
Forecast variance from average		(14)	(26)	7	172	(191)	(3)	77							

Business Use

LG&E KU 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_0001354
PPL companies