

Liberty Utilities Energy Corporation

2022-2023 Design Day and RFP Plan Summary
File Last Updated: November 29, 2022

Design Day Summary and Deliverable Capacity

Load Study:	Hannibal, MO
Weather Station Location:	Quincy Regional-Baldwin Field Airport
Weather Station Code:	KUIN
Data Sample:	1/1/2020 to 3/31/2022
HDD Selection Method:	Coldest Day Since 1970

Forecasted Design Day DTH	
Forecasted DTH:	18,813
S.E. of Regression:	320
S.E. 95% Adjustment	627
3rd Party Obligations DTH:	0
Total Forecasted DTH:	19,759

Design Day Weather	Date	HDD
Coldest HDD on Record:	12/22/1989	79
HDD of Prior Day:	12/21/1989	72

Reserve Margin Summary	
Final Deliverable Capacity DTH:	18,407
Reserve Capacity DTH:	(1,352)
Reserve Capacity %:	-6.84%

Summary of Final Delivery Capacity

Pipeline	Contract # & Description	MDQ DTH	Notes
PEPL	EFT 11671	8,045	
PEPL	EFT 14089	10,362	FS 14088 moves on this.
Total Capacity		18,407	

Total Capacity 18,407

Summary of Upstream Storage and Storage Capacity

Pipeline	Contract # & Description	MDQ DTH	Notes
PEPL	FS 14088	12,201	Rides on EFT 14089;
Total Upstream and Storage Capacity		12,201	

Total Upstream and Storage Capacity 12,201

Planned Volumes

Firm Sales Customers

Month	Year	Normal Weather		10% Colder		10% Warmer		20% Colder		20% Warmer	
		HDD	DTH	HDD	DTH	HDD	DTH	HDD	DTH	HDD	DTH
January	2023	1,190	282,048	1,309	311,260	1,071	252,837	1,428	340,472	952	223,625
February	2023	946	225,071	1,041	248,371	852	201,771	1,135	271,672	757	178,471
March	2023	714	159,493	785	177,117	643	141,869	857	194,742	571	124,472
April	2023	367	72,641	403	78,782	330	67,494	440	85,661	293	63,371
May	2023	130	36,514	143	37,929	117	35,100	156	39,344	104	33,685
June	2023	13	21,679	14	21,821	12	21,536	16	21,964	10	21,394
July	2023	0	19,349	0	19,352	0	19,347	0	19,354	0	19,345
August	2023	4	20,679	4	20,719	3	20,638	5	20,760	3	20,598
September	2023	73	35,888	80	36,669	66	35,106	87	37,450	58	34,325
October	2023	331	69,687	365	74,371	298	65,796	398	79,680	265	62,229
November	2022	682	144,290	750	160,937	614	127,680	818	177,584	545	111,723
December	2022	1,035	236,635	1,139	261,985	932	211,285	1,242	287,335	828	185,935
Firm Winter DTH		4,568	1,047,537	5,024	1,159,670	4,111	935,441	5,481	1,271,804	3,654	824,225
Firm Annual DTH		5,486	1,323,974	6,034	1,449,313	4,937	1,200,458	6,583	1,576,016	4,388	1,079,170

Interruptible Sales Customers

Month	Year	Normal Weather		10% Colder		10% Warmer		20% Colder		20% Warmer	
		HDD	DTH	HDD	DTH	HDD	DTH	HDD	DTH	HDD	DTH
January	2023	1,190	0	1,309	0	1,071	0	1,428	0	952	0
February	2023	946	0	1,041	0	852	0	1,135	0	757	0
March	2023	714	0	785	0	643	0	857	0	571	0
April	2023	367	0	403	0	330	0	440	0	293	0
May	2023	130	0	143	0	117	0	156	0	104	0
June	2023	13	0	14	0	12	0	16	0	10	0
July	2023	0	0	0	0	0	0	0	0	0	0
August	2023	4	0	4	0	3	0	5	0	3	0
September	2023	73	0	80	0	66	0	87	0	58	0
October	2023	331	0	365	0	298	0	398	0	265	0
November	2022	682	0	750	0	614	0	818	0	545	0
December	2022	1,035	0	1,139	0	932	0	1,242	0	828	0
INT Winter DTH		4,568	0	5,024	0	4,111	0	5,481	0	3,654	0
INT Annual DTH		5,486	0	6,034	0	4,937	0	6,583	0	4,388	0
Total Winter DTH		4,568	1,047,537	5,024	1,159,670	4,111	935,441	5,481	1,271,804	3,654	824,225
Total Annual DTH		5,486	1,323,974	6,034	1,449,313	4,937	1,200,458	6,583	1,576,016	4,388	1,079,170

April	72,641	85,661	63,371
May	36,514	39,344	33,685
June	21,679	21,964	21,394
July	19,349	19,354	19,345
August	20,679	20,760	20,598
September	35,888	37,450	34,325
October	69,687	79,680	62,229
November	144,290	177,584	111,723
December	236,635	287,335	185,935
January	282,048	340,472	223,625
February	225,071	271,672	178,471
March	159,493	194,742	124,472
	1,323,974	1,576,016	1,079,170

W/ Firm DTH(-1) Model				
Dependent Variable: HANNIBAL_FIRM				
Method: Least Squares				
Date: 11/29/22 Time: 10:19				
Sample: 1/01/2020 3/31/2022				
Included observations: 821				
HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = 7.0000)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
HANNIBAL_HDD	110.1008	4.4947	24.4959	0.0000
HANNIBAL_HDD50	80.8780	4.9685	16.2781	0.0000
HANNIBAL_HDD(-1)	-26.3033	6.9446	-3.7876	0.0002
HANNIBAL_FIRM(-1)	0.3293	0.0364	9.0569	0.0000
MONTH12	338.8160	80.1525	4.2271	0.0000
MONTH01	510.7387	98.5164	5.1843	0.0000
MONTH02	486.0890	100.0871	4.8567	0.0000
MONTH03	330.5741	64.7042	5.1090	0.0000
MONTH11	203.6205	61.9073	3.2891	0.0010
WEEKDAY01	433.2828	36.1507	11.9854	0.0000
WEEKDAY02	556.7757	33.8599	16.4435	0.0000
WEEKDAY03	576.8041	41.9215	13.7591	0.0000
WEEKDAY04	611.3688	41.6235	14.6881	0.0000
WEEKDAY05	543.3072	34.1709	15.8997	0.0000
WEEKDAY06	505.9761	38.5856	13.1131	0.0000
WEEKDAY07	362.5113	34.0605	10.6431	0.0000
R-squared	0.9921	Mean dependent var	4023.333	
Adjusted R-squared	0.9919	S.D. dependent var	3558.3	
S.E. of regression	319.8403	Akaike info criterion	14.39282	
Sum squared resid	82349753.5305	Schwarz criterion	14.48462	
Log likelihood	-5892.2513	Hannan-Quinn criter.	14.42804	
Durbin-Watson stat	1.7185			

W/O Firm DTH(-1) Model				
Dependent Variable: HANNIBAL_FIRM				
Method: Least Squares				
Date: 11/29/22 Time: 10:11				
Sample: 1/01/2020 3/31/2022				
Included observations: 821				
HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = 7.0000)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
HANNIBAL_HDD	92.4627	5.1169	18.0702	0.0000
HANNIBAL_HDD50	104.4418	6.4110	16.2910	0.0000
HANNIBAL_HDD(-1)	37.8602	2.5649	14.7609	0.0000
MONTH12	580.1551	97.3387	5.9602	0.0000
MONTH01	924.6149	108.6122	8.5130	0.0000
MONTH02	927.8385	98.7910	9.3919	0.0000
MONTH03	517.3204	76.1581	6.7927	0.0000
MONTH11	308.2199	81.2917	3.7915	0.0002
WEEKDAY01	626.7212	36.0925	17.3643	0.0000
WEEKDAY02	758.6376	35.0775	21.6275	0.0000
WEEKDAY03	824.0112	41.3035	19.9501	0.0000
WEEKDAY04	879.4037	43.6838	20.1311	0.0000
WEEKDAY05	813.4785	42.0280	19.3556	0.0000
WEEKDAY06	756.6139	42.2230	17.9195	0.0000
WEEKDAY07	607.0979	40.4503	15.0085	0.0000
R-squared	0.9902	Mean dependent var	4023.333	
Adjusted R-squared	0.9900	S.D. dependent var	3558.3	
S.E. of regression	355.3218	Akaike info criterion	14.60203	
Sum squared resid	101760404.8231	Schwarz criterion	14.68809	
Log likelihood	-5979.1318	Hannan-Quinn criter.	14.63505	
Durbin-Watson stat	1.0725			

Design Day DTH Calculations	
Design Day Date	HDD
12/22/1989	79
12/21/1989	72
Is HDD(-2) Known?	NO
	72
	N/A
Calendar Load	1122.11
Weather Load	11980.31
DTH Lag Load	5710.29
Total Forecasted DTH	18812.71
DTH(-1) Calculations	
NO DTH	
Calendar Load	1807.24
Weather Load	15336.43
Total Forecast DTH	17143.67
DTH LRV method	
Calendar Load	1122.11
Weather Load	10643.46
Total Forecast DTH	17541.32

HDD50

64

57

Dependent Variable: HANNIBAL_FIRM
Method: Least Squares
Date: 11/29/22 Time: 12:50
Sample (adjusted): 11/02/2018 3/31/2019 11/01/2019 3/31/2020 11/01/2020 3/31/2021 11/01/2021 3/31/2022
Included observations: 604 after adjustments
HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = 6.0000)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-92.90305	52.31647	-1.77579	0.07627
HANNIBAL_HDD	188.92851	2.78558	67.82378	0.00000
HANNIBAL_HDD(-1)	-64.55887	6.55157	-9.85395	0.00000
HANNIBAL_FIRM(-1)	0.48477	0.02830	17.12835	0.00000

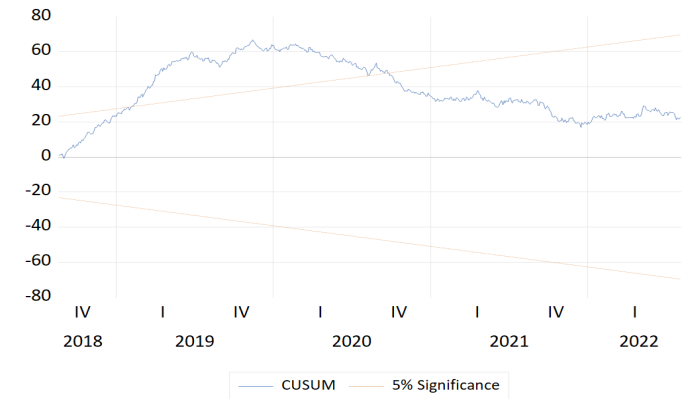
R-squared	0.97615	Mean dependent var	7077.91391
Adjusted R-squared	0.97603	S.D. dependent var	2899.42394
S.E. of regression	448.85793	Akaike info criterion	15.05789
Sum squared resid	120884064.55021	Schwarz criterion	15.08705
Log likelihood	-4543.48290	Hannan-Quinn criter.	15.06924
F-statistic	8186.90442	Durbin-Watson stat	2.00743
Prob(F-statistic)	0.00000	Wald F-statistic	6696.55024
Prob(Wald F-statistic)	0.00000		

Note: Due to the limited sample size, the sample was not truncated.

Quandt-Andrews unknown breakpoint test
Null Hypothesis: No breakpoints within 10% trimmed data
Equation Sample: 11/02/2018 3/31/2019 11/01/2019 3/31/2020 11/01/2020 3/31/2021 11/01/2021 3/31/2022
Test Sample: 1/02/2019 1/30/2022
Number of breaks compared: 483

Statistic	Value	Prob.
Maximum LR F-statistic (12/13/2019)	3.632482	0.11161
Exp LR F-statistic	1.087701	0.10626
Ave LR F-statistic	2.06487	0.02535

Note: probabilities calculated using Hansen's (1997) method
WARNING: estimation sample is non-continuous (probabilities calculated assuming a continuous sample)



Dependent Variable: HANNIBAL_FIRM
Method: Least Squares
Date: 11/29/22 Time: 12:50
Sample: 1/01/2020 3/31/2020 11/01/2020 3/31/2021 11/01/2021 3/31/2022
Included observations: 393
HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = 6.0000)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-99.07558	65.55620	-1.51131	0.13152
HANNIBAL_HDD	186.93784	3.66895	50.95125	0.00000
HANNIBAL_HDD(-1)	-52.93659	8.07516	-6.55548	0.00000
HANNIBAL_FIRM(-1)	0.43967	0.03704	11.87059	0.00000

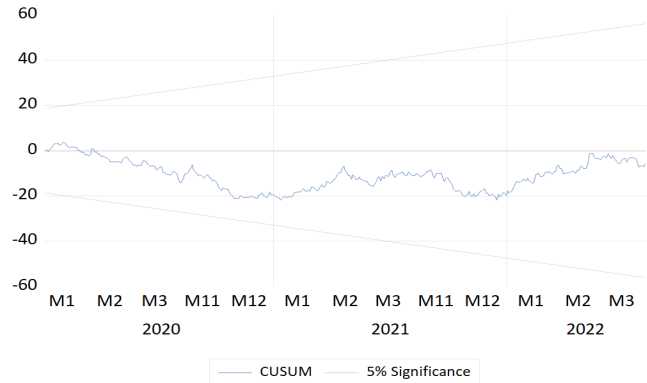
R-squared	0.97994	Mean dependent var	6862.69211
Adjusted R-squared	0.97978	S.D. dependent var	3052.93709
S.E. of regression	434.10356	Akaike info criterion	14.99457
Sum squared resid	73305455.39403	Schwarz criterion	15.03502
Log likelihood	-2942.43286	Hannan-Quinn criter.	15.01060
F-statistic	6333.03083	Durbin-Watson stat	1.91555
Prob(F-statistic)	0.00000	Wald F-statistic	4032.12912
Prob(Wald F-statistic)	0.00000		

Note: Due to the limited sample size, the sample was not truncated.

Quandt-Andrews unknown breakpoint test
Null Hypothesis: No breakpoints within 10% trimmed data
Equation Sample: 1/01/2020 3/31/2020 11/01/2020 3/31/2021 11/01/2021 3/31/2022
Test Sample: 2/10/2020 2/20/2022
Number of breaks compared: 314

Statistic	Value	Prob.
Maximum LR F-statistic (12/26/2021)	4.803736	0.01946229
Exp LR F-statistic	0.954241	0.16836249
Ave LR F-statistic	1.564841	0.104023646

Note: probabilities calculated using Hansen's (1997) method
WARNING: estimation sample is non-continuous (probabilities calculated assuming a continuous sample)



<u>Gas Day</u>	Hannibal <u>HDD</u>	Hannibal <u>Dth</u>
1/1/2020	21	5596
1/2/2020	23	5033
1/3/2020	31	6335
1/4/2020	33	7292
1/5/2020	28	6360
1/6/2020	31	7285
1/7/2020	33	7281
1/8/2020	29	7455
1/9/2020	13	4083
1/10/2020	28	6589
1/11/2020	39	8870
1/12/2020	36	8525
1/13/2020	29	7560
1/14/2020	22	5350
1/15/2020	37	8204
1/16/2020	46	10768
1/17/2020	34	9254
1/18/2020	50	11710
1/19/2020	55	12854
1/20/2020	53	12714
1/21/2020	40	10228
1/22/2020	33	8856
1/23/2020	32	7831
1/24/2020	33	7973
1/25/2020	38	8789
1/26/2020	36	8220
1/27/2020	35	8176
1/28/2020	39	8735
1/29/2020	38	8957
1/30/2020	34	8228
1/31/2020	30	6864
2/1/2020	27	6559
2/2/2020	20	4641
2/3/2020	22	5230
2/4/2020	34	8627
2/5/2020	39	9338
2/6/2020	42	9268
2/7/2020	38	9098
2/8/2020	36	8145
2/9/2020	32	7729
2/10/2020	34	7680
2/11/2020	32	7555
2/12/2020	41	9322
2/13/2020	65	14049
2/14/2020	49	11907
2/15/2020	37	9056
2/16/2020	28	6641
2/17/2020	28	6772
2/18/2020	35	7854
2/19/2020	39	8990

<u>Gas Day</u>	<u>HDD</u>	<u>Dth</u>
2/20/2020	46	10562
2/21/2020	34	8534
2/22/2020	23	5876
2/23/2020	17	4149
2/24/2020	27	6638
2/25/2020	33	7986
2/26/2020	37	8913
2/27/2020	32	7596
2/28/2020	36	7929
2/29/2020	25	5924
3/1/2020	15	3522
3/2/2020	25	5086
3/3/2020	19	4462
3/4/2020	21	4546
3/5/2020	21	5127
3/6/2020	25	5582
3/7/2020	16	3970
3/8/2020	6	2744
3/9/2020	19	4297
3/10/2020	26	5671
3/11/2020	20	4278
3/12/2020	20	4446
3/13/2020	23	4874
3/14/2020	31	7052
3/15/2020	27	6303
3/16/2020	25	5797
3/17/2020	20	4156
3/18/2020	16	3875
3/19/2020	8	2571
3/20/2020	31	6652
3/21/2020	31	5973
3/22/2020	32	7045
3/23/2020	27	5983
3/24/2020	24	5460
3/25/2020	14	3594
3/26/2020	15	3422
3/27/2020	9	2680
3/28/2020	7	2211
3/29/2020	15	3179
3/30/2020	12	2458
3/31/2020	19	3035
4/1/2020	14	2751
4/2/2020	7	2195
4/3/2020	24	4540
4/4/2020	26	5019
4/5/2020	13	2828
4/6/2020	2	1951
4/7/2020	0	1366
4/8/2020	7	2016
4/9/2020	24	4793
4/10/2020	16	3798

<u>Gas Day</u>	<u>HDD</u>	<u>Dth</u>
4/11/2020	10	2558
4/12/2020	18	3434
4/13/2020	29	6083
4/14/2020	26	5645
4/15/2020	28	5363
4/16/2020	29	6193
4/17/2020	30	6463
4/18/2020	14	3154
4/19/2020	13	2725
4/20/2020	10	2488
4/21/2020	12	2645
4/22/2020	3	1578
4/23/2020	7	1505
4/24/2020	9	1687
4/25/2020	19	3251
4/26/2020	8	1727
4/27/2020	2	1241
4/28/2020	4	1136
4/29/2020	16	2928
4/30/2020	7	1735
5/1/2020	0	980
5/2/2020	0	761
5/3/2020	6	1091
5/4/2020	14	2173
5/5/2020	18	2733
5/6/2020	13	2154
5/7/2020	8	1634
5/8/2020	18	2803
5/9/2020	11	1861
5/10/2020	19	3028
5/11/2020	16	2731
5/12/2020	13	2462
5/13/2020	9	2270
5/14/2020	0	911
5/15/2020	1	907
5/16/2020	0	837
5/17/2020	5	1015
5/18/2020	9	1663
5/19/2020	6	1442
5/20/2020	6	1354
5/21/2020	4	1340
5/22/2020	0	878
5/23/2020	0	754
5/24/2020	0	721
5/25/2020	0	752
5/26/2020	0	720
5/27/2020	0	742
5/28/2020	0	827
5/29/2020	1	799
5/30/2020	0	767
5/31/2020	0	729

<u>Gas Day</u>	<u>HDD</u>	<u>Dth</u>
6/1/2020	0	701
6/2/2020	0	684
6/3/2020	0	679
6/4/2020	0	684
6/5/2020	0	644
6/6/2020	0	622
6/7/2020	0	615
6/8/2020	0	630
6/9/2020	0	651
6/10/2020	1	766
6/11/2020	0	733
6/12/2020	0	665
6/13/2020	0	644
6/14/2020	0	671
6/15/2020	0	784
6/16/2020	0	788
6/17/2020	0	655
6/18/2020	0	641
6/19/2020	0	643
6/20/2020	0	618
6/21/2020	0	620
6/22/2020	0	765
6/23/2020	0	778
6/24/2020	0	792
6/25/2020	0	770
6/26/2020	0	733
6/27/2020	0	602
6/28/2020	0	604
6/29/2020	0	701
6/30/2020	0	639
7/1/2020	0	630
7/2/2020	0	605
7/3/2020	0	617
7/4/2020	0	575
7/5/2020	0	590
7/6/2020	0	726
7/7/2020	0	716
7/8/2020	0	594
7/9/2020	0	723
7/10/2020	0	600
7/11/2020	0	571
7/12/2020	0	598
7/13/2020	0	630
7/14/2020	0	600
7/15/2020	0	633
7/16/2020	0	603
7/17/2020	0	592
7/18/2020	0	562
7/19/2020	0	595
7/20/2020	0	612
7/21/2020	0	638

<u>Gas Day</u>	<u>HDD</u>	<u>Dth</u>
7/22/2020	0	753
7/23/2020	0	644
7/24/2020	0	580
7/25/2020	0	554
7/26/2020	0	568
7/27/2020	0	634
7/28/2020	0	630
7/29/2020	0	633
7/30/2020	0	642
7/31/2020	0	622
8/1/2020	0	604
8/2/2020	0	649
8/3/2020	2	670
8/4/2020	0	685
8/5/2020	0	660
8/6/2020	0	654
8/7/2020	0	615
8/8/2020	0	597
8/9/2020	0	578
8/10/2020	0	633
8/11/2020	0	634
8/12/2020	0	638
8/13/2020	0	613
8/14/2020	0	597
8/15/2020	0	595
8/16/2020	0	614
8/17/2020	0	632
8/18/2020	0	649
8/19/2020	0	678
8/20/2020	0	649
8/21/2020	0	634
8/22/2020	0	582
8/23/2020	0	604
8/24/2020	0	604
8/25/2020	0	613
8/26/2020	0	602
8/27/2020	0	617
8/28/2020	0	593
8/29/2020	0	665
8/30/2020	0	679
8/31/2020	0	691
9/1/2020	0	646
9/2/2020	0	667
9/3/2020	0	749
9/4/2020	0	765
9/5/2020	0	712
9/6/2020	0	670
9/7/2020	0	702
9/8/2020	6	829
9/9/2020	5	896
9/10/2020	3	848

<u>Gas Day</u>	<u>HDD</u>	<u>Dth</u>
9/11/2020	0	724
9/12/2020	1	671
9/13/2020	0	705
9/14/2020	0	795
9/15/2020	0	801
9/16/2020	0	868
9/17/2020	4	1065
9/18/2020	8	1381
9/19/2020	8	1440
9/20/2020	5	1176
9/21/2020	0	1416
9/22/2020	0	1511
9/23/2020	0	2137
9/24/2020	0	1911
9/25/2020	0	1902
9/26/2020	0	1631
9/27/2020	6	1251
9/28/2020	11	1609
9/29/2020	8	2082
9/30/2020	8	2513
10/1/2020	16	3361
10/2/2020	15	3737
10/3/2020	16	3241
10/4/2020	18	3110
10/5/2020	9	2795
10/6/2020	0	2009
10/7/2020	0	1638
10/8/2020	0	1609
10/9/2020	0	1312
10/10/2020	0	1072
10/11/2020	0	882
10/12/2020	9	1614
10/13/2020	3	1119
10/14/2020	0	991
10/15/2020	21	2980
10/16/2020	15	3172
10/17/2020	5	1806
10/18/2020	24	3425
10/19/2020	24	4522
10/20/2020	17	3630
10/21/2020	15	2849
10/22/2020	0	1050
10/23/2020	25	4063
10/24/2020	25	4390
10/25/2020	26	4944
10/26/2020	33	7283
10/27/2020	27	6812
10/28/2020	21	5458
10/29/2020	28	6534
10/30/2020	22	5312
10/31/2020	13	3164

<u>Gas Day</u>	<u>HDD</u>	<u>Dth</u>
11/1/2020	30	5531
11/2/2020	19	4340
11/3/2020	5	2342
11/4/2020	1	1672
11/5/2020	5	1528
11/6/2020	4	1355
11/7/2020	3	1357
11/8/2020	0	956
11/9/2020	0	1004
11/10/2020	19	2988
11/11/2020	25	4673
11/12/2020	23	4600
11/13/2020	30	5749
11/14/2020	16	4101
11/15/2020	25	5285
11/16/2020	21	4662
11/17/2020	28	5853
11/18/2020	12	3743
11/19/2020	4	1905
11/20/2020	16	3037
11/21/2020	22	4370
11/22/2020	27	5073
11/23/2020	28	6112
11/24/2020	18	4349
11/25/2020	22	4460
11/26/2020	24	4437
11/27/2020	29	5512
11/28/2020	23	4698
11/29/2020	30	6836
11/30/2020	41	8808
12/1/2020	36	8010
12/2/2020	30	7192
12/3/2020	30	6394
12/4/2020	27	5804
12/5/2020	27	5671
12/6/2020	28	5725
12/7/2020	32	6799
12/8/2020	27	6207
12/9/2020	19	4767
12/10/2020	14	4174
12/11/2020	23	5257
12/12/2020	32	6505
12/13/2020	36	7673
12/14/2020	41	8932
12/15/2020	38	8923
12/16/2020	41	9153
12/17/2020	38	9082
12/18/2020	25	6572
12/19/2020	34	7595
12/20/2020	26	6268
12/21/2020	24	5696

<u>Gas Day</u>	<u>HDD</u>	<u>Dth</u>
12/22/2020	17	4974
12/23/2020	34	7511
12/24/2020	53	11586
12/25/2020	44	9811
12/26/2020	28	6975
12/27/2020	28	6365
12/28/2020	41	9037
12/29/2020	33	8671
12/30/2020	38	8604
12/31/2020	38	8711
1/1/2021	37	8424
1/2/2021	38	8423
1/3/2021	38	8432
1/4/2021	36	8421
1/5/2021	32	7121
1/6/2021	32	7449
1/7/2021	34	8276
1/8/2021	36	8363
1/9/2021	40	8872
1/10/2021	38	8952
1/11/2021	33	8016
1/12/2021	27	6535
1/13/2021	24	6200
1/14/2021	30	7493
1/15/2021	33	7833
1/16/2021	35	8180
1/17/2021	35	8196
1/18/2021	36	8342
1/19/2021	36	8772
1/20/2021	28	7374
1/21/2021	30	6786
1/22/2021	47	9888
1/23/2021	32	8002
1/24/2021	30	7059
1/25/2021	34	8513
1/26/2021	41	9522
1/27/2021	51	11130
1/28/2021	45	10165
1/29/2021	33	7884
1/30/2021	30	7542
1/31/2021	34	8626
2/1/2021	39	9398
2/2/2021	41	9131
2/3/2021	29	7305
2/4/2021	39	9763
2/5/2021	46	10589
2/6/2021	60	12957
2/7/2021	63	14288
2/8/2021	58	14070
2/9/2021	57	13690
2/10/2021	55	13743

<u>Gas Day</u>	<u>HDD</u>	<u>Dth</u>
2/11/2021	57	14283
2/12/2021	64	15490
2/13/2021	67	15846
2/14/2021	68	16856
2/15/2021	68	17074
2/16/2021	62	14770
2/17/2021	56	13287
2/18/2021	55	12417
2/19/2021	45	10887
2/20/2021	37	8635
2/21/2021	30	8300
2/22/2021	24	6080
2/23/2021	18	4281
2/24/2021	30	6321
2/25/2021	30	7116
2/26/2021	25	5751
2/27/2021	16	3933
2/28/2021	28	5859
3/1/2021	32	6736
3/2/2021	21	5173
3/3/2021	18	3763
3/4/2021	23	4763
3/5/2021	23	4941
3/6/2021	18	4070
3/7/2021	12	3355
3/8/2021	8	2791
3/9/2021	1	1678
3/10/2021	6	1993
3/11/2021	20	3308
3/12/2021	17	4327
3/13/2021	15	3250
3/14/2021	21	5004
3/15/2021	27	5934
3/16/2021	23	5353
3/17/2021	26	6624
3/18/2021	28	7141
3/19/2021	25	5343
3/20/2021	18	3805
3/21/2021	8	2651
3/22/2021	7	2066
3/23/2021	12	2874
3/24/2021	17	3755
3/25/2021	20	4685
3/26/2021	16	3266
3/27/2021	14	3001
3/28/2021	21	4378
3/29/2021	5	2366
3/30/2021	17	3421
3/31/2021	31	5987
4/1/2021	29	5888
4/2/2021	17	4331

<u>Gas Day</u>	<u>HDD</u>	<u>Dth</u>
4/3/2021	6	2387
4/4/2021	0	1420
4/5/2021	0	1452
4/6/2021	0	1387
4/7/2021	8	1651
4/8/2021	15	2996
4/9/2021	6	1466
4/10/2021	18	3610
4/11/2021	14	2614
4/12/2021	14	2547
4/13/2021	16	2705
4/14/2021	20	3372
4/15/2021	19	3244
4/16/2021	15	2752
4/17/2021	16	2750
4/18/2021	15	2758
4/19/2021	23	4243
4/20/2021	30	6238
4/21/2021	26	5315
4/22/2021	16	3402
4/23/2021	14	3120
4/24/2021	14	2378
4/25/2021	9	1866
4/26/2021	0	1114
4/27/2021	0	924
4/28/2021	0	933
4/29/2021	5	1046
4/30/2021	1	928
5/1/2021	0	773
5/2/2021	0	796
5/3/2021	13	924
5/4/2021	13	1727
5/5/2021	7	1291
5/6/2021	13	1855
5/7/2021	7	1388
5/8/2021	15	2434
5/9/2021	20	3370
5/10/2021	11	2053
5/11/2021	14	2288
5/12/2021	12	2093
5/13/2021	7	1679
5/14/2021	3	1228
5/15/2021	10	1566
5/16/2021	3	1208
5/17/2021	2	1139
5/18/2021	0	1005
5/19/2021	0	969
5/20/2021	0	881
5/21/2021	0	793
5/22/2021	0	778
5/23/2021	0	747

<u>Gas Day</u>	<u>HDD</u>	<u>Dth</u>
5/24/2021	0	781
5/25/2021	0	784
5/26/2021	1	757
5/27/2021	1	866
5/28/2021	17	1942
5/29/2021	10	1415
5/30/2021	2	967
5/31/2021	4	1077
6/1/2021	0	920
6/2/2021	0	864
6/3/2021	0	778
6/4/2021	0	708
6/5/2021	0	667
6/6/2021	0	660
6/7/2021	0	717
6/8/2021	0	674
6/9/2021	0	690
6/10/2021	0	665
6/11/2021	0	669
6/12/2021	0	625
6/13/2021	0	640
6/14/2021	0	670
6/15/2021	0	701
6/16/2021	0	653
6/17/2021	0	640
6/18/2021	0	617
6/19/2021	0	606
6/20/2021	0	625
6/21/2021	3	786
6/22/2021	0	738
6/23/2021	0	706
6/24/2021	0	674
6/25/2021	0	663
6/26/2021	0	623
6/27/2021	0	633
6/28/2021	0	721
6/29/2021	0	690
6/30/2021	0	685
7/1/2021	0	712
7/2/2021	0	648
7/3/2021	0	598
7/4/2021	0	544
7/5/2021	0	614
7/6/2021	0	647
7/7/2021	0	665
7/8/2021	0	709
7/9/2021	0	645
7/10/2021	0	606
7/11/2021	0	640
7/12/2021	0	710
7/13/2021	0	668

<u>Gas Day</u>	<u>HDD</u>	<u>Dth</u>
7/14/2021	0	655
7/15/2021	0	690
7/16/2021	0	648
7/17/2021	0	616
7/18/2021	0	624
7/19/2021	0	718
7/20/2021	0	684
7/21/2021	0	673
7/22/2021	0	671
7/23/2021	0	638
7/24/2021	0	572
7/25/2021	0	613
7/26/2021	0	651
7/27/2021	0	651
7/28/2021	0	632
7/29/2021	0	640
7/30/2021	0	623
7/31/2021	1	627
8/1/2021	0	639
8/2/2021	0	688
8/3/2021	0	685
8/4/2021	0	699
8/5/2021	0	685
8/6/2021	0	635
8/7/2021	0	578
8/8/2021	0	638
8/9/2021	0	636
8/10/2021	0	673
8/11/2021	0	671
8/12/2021	0	681
8/13/2021	0	635
8/14/2021	0	588
8/15/2021	0	634
8/16/2021	0	725
8/17/2021	0	653
8/18/2021	0	649
8/19/2021	0	665
8/20/2021	0	608
8/21/2021	0	588
8/22/2021	0	585
8/23/2021	0	622
8/24/2021	0	638
8/25/2021	0	623
8/26/2021	0	627
8/27/2021	0	637
8/28/2021	0	717
8/29/2021	0	585
8/30/2021	0	799
8/31/2021	0	848
9/1/2021	0	823
9/2/2021	0	792

<u>Gas Day</u>	<u>HDD</u>	<u>Dth</u>
9/3/2021	0	659
9/4/2021	0	724
9/5/2021	0	670
9/6/2021	0	780
9/7/2021	0	851
9/8/2021	0	1038
9/9/2021	0	987
9/10/2021	0	989
9/11/2021	0	932
9/12/2021	0	751
9/13/2021	0	1084
9/14/2021	0	1265
9/15/2021	0	1088
9/16/2021	0	1388
9/17/2021	0	1231
9/18/2021	0	927
9/19/2021	0	789
9/20/2021	0	1141
9/21/2021	5	1447
9/22/2021	7	1560
9/23/2021	5	1600
9/24/2021	1	1623
9/25/2021	5	1286
9/26/2021	0	831
9/27/2021	0	1188
9/28/2021	0	931
9/29/2021	0	1109
9/30/2021	0	1168
10/1/2021	0	1039
10/2/2021	0	1098
10/3/2021	2	1017
10/4/2021	1	1370
10/5/2021	0	1740
10/6/2021	0	1659
10/7/2021	1	1482
10/8/2021	0	1308
10/9/2021	0	1523
10/10/2021	0	1241
10/11/2021	5	1154
10/12/2021	0	1220
10/13/2021	0	841
10/14/2021	5	869
10/15/2021	15	2341
10/16/2021	15	2311
10/17/2021	8	2122
10/18/2021	5	1415
10/19/2021	4	1126
10/20/2021	5	1471
10/21/2021	16	2519
10/22/2021	16	2453
10/23/2021	11	1940

<u>Gas Day</u>	<u>HDD</u>	<u>Dth</u>
10/24/2021	9	1869
10/25/2021	21	3317
10/26/2021	14	2633
10/27/2021	11	2632
10/28/2021	15	3252
10/29/2021	16	3261
10/30/2021	17	2564
10/31/2021	21	3282
11/1/2021	28	5442
11/2/2021	28	5854
11/3/2021	26	6289
11/4/2021	23	5525
11/5/2021	22	4891
11/6/2021	15	3407
11/7/2021	8	2500
11/8/2021	8	2263
11/9/2021	12	2872
11/10/2021	7	2352
11/11/2021	19	4176
11/12/2021	29	6354
11/13/2021	27	5681
11/14/2021	31	5810
11/15/2021	22	4786
11/16/2021	5	2772
11/17/2021	23	5079
11/18/2021	33	6975
11/19/2021	25	5975
11/20/2021	18	3490
11/21/2021	26	4806
11/22/2021	34	7454
11/23/2021	19	5176
11/24/2021	18	4216
11/25/2021	42	7866
11/26/2021	30	6542
11/27/2021	23	4454
11/28/2021	29	5686
11/29/2021	20	4436
11/30/2021	20	4721
12/1/2021	14	3480
12/2/2021	15	3065
12/3/2021	20	3632
12/4/2021	25	4838
12/5/2021	20	4581
12/6/2021	40	8334
12/7/2021	37	8989
12/8/2021	28	6425
12/9/2021	19	4553
12/10/2021	18	4856
12/11/2021	30	6120
12/12/2021	23	5465
12/13/2021	21	5113

<u>Gas Day</u>	<u>HDD</u>	<u>Dth</u>
12/14/2021	6	2969
12/15/2021	5	2034
12/16/2021	30	6081
12/17/2021	31	7036
12/18/2021	38	7543
12/19/2021	35	7670
12/20/2021	34	7179
12/21/2021	34	7612
12/22/2021	29	7208
12/23/2021	15	4185
12/24/2021	8	2238
12/25/2021	27	4709
12/26/2021	16	4632
12/27/2021	25	5360
12/28/2021	28	6317
12/29/2021	35	8146
12/30/2021	31	7408
12/31/2021	25	5789
1/1/2022	48	10694
1/2/2022	58	12446
1/3/2022	41	10273
1/4/2022	35	8908
1/5/2022	52	12524
1/6/2022	61	14553
1/7/2022	50	12875
1/8/2022	34	9137
1/9/2022	48	11011
1/10/2022	46	11114
1/11/2022	25	7427
1/12/2022	25	6483
1/13/2022	28	6388
1/14/2022	32	7745
1/15/2022	49	10099
1/16/2022	40	9141
1/17/2022	39	8691
1/18/2022	30	7455
1/19/2022	57	13669
1/20/2022	63	14681
1/21/2022	49	12579
1/22/2022	33	8361
1/23/2022	41	9464
1/24/2022	46	10656
1/25/2022	59	13637
1/26/2022	44	11259
1/27/2022	37	9248
1/28/2022	50	11651
1/29/2022	36	8741
1/30/2022	41	9371
1/31/2022	24	6841
2/1/2022	37	8537
2/2/2022	52	12443

<u>Gas Day</u>	<u>HDD</u>	<u>Dth</u>
2/3/2022	56	13188
2/4/2022	54	12208
2/5/2022	41	10180
2/6/2022	39	8518
2/7/2022	37	8681
2/8/2022	25	6338
2/9/2022	29	6979
2/10/2022	28	6581
2/11/2022	38	8582
2/12/2022	47	10510
2/13/2022	47	10720
2/14/2022	34	8254
2/15/2022	16	5448
2/16/2022	22	5369
2/17/2022	53	11744
2/18/2022	40	9878
2/19/2022	40	9105
2/20/2022	19	5390
2/21/2022	10	3180
2/22/2022	45	10334
2/23/2022	46	12262
2/24/2022	42	10744
2/25/2022	46	11053
2/26/2022	37	8604
2/27/2022	28	6666
2/28/2022	20	5140
3/1/2022	15	3827
3/2/2022	15	3367
3/3/2022	29	6339
3/4/2022	15	4268
3/5/2022	10	2781
3/6/2022	28	5668
3/7/2022	38	8766
3/8/2022	32	7120
3/9/2022	34	7384
3/10/2022	44	10098
3/11/2022	47	10316
3/12/2022	40	9085
3/13/2022	18	4728
3/14/2022	11	2855
3/15/2022	11	2741
3/16/2022	5	2049
3/17/2022	5	1734
3/18/2022	22	4493
3/19/2022	21	3954
3/20/2022	5	2042
3/21/2022	5	1766
3/22/2022	12	2551
3/23/2022	25	5132
3/24/2022	25	5485
3/25/2022	22	4829

<u>Gas Day</u>	<u>HDD</u>	<u>Dth</u>
3/26/2022	30	5828
3/27/2022	30	5600
3/28/2022	25	5842
3/29/2022	14	3625
3/30/2022	24	5161
3/31/2022	31	7142

Calendar Date	KUIN	KBRL	KIRK	KMCI	KMWA	KPAH	KPOF	KSPI	KSTL	KUIN	KCSG	KGVL
January1	37.30	41	40	36	33	30	29	38	32	37	17	24
January2	37.40	41	41	36	33	30	29	38	32	37	17	24
January3	37.60	41	41	36	33	30	29	38	32	38	17	24
January4	37.80	41	41	36	33	31	29	38	32	38	17	24
January5	37.90	41	41	36	33	31	29	38	33	38	17	24
January6	38.10	41	41	36	33	31	29	38	33	38	17	24
January7	38.20	42	41	36	33	31	29	38	33	38	17	24
January8	38.30	42	41	36	33	31	29	38	33	38	17	24
January9	38.40	42	41	36	33	31	29	38	33	38	17	24
January10	38.50	42	41	36	33	31	29	38	33	39	17	24
January11	38.60	42	41	36	33	31	29	38	33	39	17	24
January12	38.70	42	41	36	33	31	29	39	33	39	17	24
January13	38.70	42	41	36	33	31	29	39	33	39	17	24
January14	38.80	42	41	36	33	31	29	39	33	39	17	24
January15	38.80	42	41	36	33	31	29	39	33	39	17	24
January16	38.90	42	41	36	33	31	29	39	33	39	17	24
January17	38.90	42	41	36	33	31	29	39	33	39	17	23
January18	38.90	42	41	36	33	31	29	39	33	39	17	23
January19	38.90	42	41	36	33	31	29	38	33	39	17	23
January20	38.90	42	41	36	33	31	29	38	33	39	17	23
January21	38.80	42	41	36	33	30	29	38	33	39	17	23
January22	38.80	42	41	36	32	30	29	38	33	39	17	23
January23	38.70	42	41	36	32	30	29	38	33	39	17	23
January24	38.70	42	41	36	32	30	29	38	33	39	16	23
January25	38.60	41	41	36	32	30	29	38	33	39	16	23
January26	38.50	41	41	36	32	30	28	38	33	39	16	23
January27	38.40	41	41	36	32	30	28	38	33	38	16	23
January28	38.20	41	41	36	32	30	28	38	33	38	16	23
January29	38.10	41	41	36	32	30	28	38	32	38	16	22
January30	37.90	41	40	35	31	30	28	38	32	38	16	22
January31	37.80	41	40	35	31	29	28	37	32	38	16	22
February1	37.60	41	40	35	31	29	28	37	32	38	15	22
February2	37.40	40	40	35	31	29	27	37	32	37	15	22
February3	37.20	40	40	35	31	29	27	37	32	37	15	22
February4	37.00	40	40	35	31	29	27	37	31	37	15	22
February5	36.80	40	39	34	30	28	27	37	31	37	15	21
February6	36.50	40	39	34	30	28	27	36	31	37	15	21
February7	36.30	39	39	34	30	28	26	36	31	36	14	21
February8	36.00	39	39	34	30	28	26	36	30	36	14	21
February9	35.70	39	38	33	30	27	26	36	30	36	14	21
February10	35.40	39	38	33	29	27	26	35	30	35	14	21
February11	35.10	38	38	33	29	27	26	35	30	35	14	20
February12	34.80	38	38	33	29	27	25	35	29	35	14	20
February13	34.50	38	37	32	29	26	25	35	29	35	13	20
February14	34.20	37	37	32	28	26	25	34	29	34	13	20
February15	33.90	37	37	32	28	26	25	34	28	34	13	20
February16	33.50	37	36	31	28	26	24	34	28	34	13	19
February17	33.20	36	36	31	28	25	24	33	28	33	12	19
February18	32.80	36	36	31	27	25	24	33	27	33	12	19
February19	32.50	36	35	30	27	25	24	33	27	33	12	19
February20	32.10	35	35	30	27	24	23	32	27	32	12	18
February21	31.80	35	35	29	27	24	23	32	26	32	12	18

Design Day Temperature Lookup			
Station Name	Date	HDD	HDD(-1)
KBRL	2/3/1996	83	80
KMWA	1/19/1994	73.5	57.5
KSPI	12/24/1983	78.5	73
KUIN	12/22/1989	79	72
KPAH	1/20/1985	72	48.5
KIRK	12/24/1983	80.5	75
KMCI	12/22/1989	80.5	73.5
KPOF	1/21/1985	69	54.5
KSTL	1/20/1985	73.5	60
KCSG	1/21/1985	54.5	41.5
KGVL	1/21/1985	56	46

Calendar Date	KUIN	KBRL	KIRK	KMCI	KMWA	KPAH	KPOF	KSPI	KSTL	KUIN	KCSG	KGVL
February22	31.40	34	34	29	26	24	23	31	26	31	11	18
February23	31.00	34	34	29	26	23	23	31	26	31	11	18
February24	30.70	34	33	28	26	23	22	31	25	31	11	17
February25	30.30	33	33	28	25	23	22	30	25	30	11	17
February26	29.90	33	33	28	25	22	22	30	25	30	11	17
February27	29.50	32	32	27	25	22	22	30	24	30	10	17
February28	29.10	32	32	27	24	22	21	29	24	29	10	17
February29	28.90	32	32	27	24	22	21	29	24	29	10	16
March1	28.70	31	31	26	24	21	21	29	24	29	10	16
March2	28.40	31	31	26	24	21	21	28	23	28	10	16
March3	28.00	31	31	26	23	21	20	28	23	28	10	16
March4	27.60	30	30	25	23	21	20	28	23	28	9	16
March5	27.20	30	30	25	23	20	20	27	22	27	9	15
March6	26.80	29	29	25	22	20	20	27	22	27	9	15
March7	26.40	29	29	24	22	20	19	26	22	26	9	15
March8	26.00	28	29	24	22	19	19	26	21	26	9	15
March9	25.70	28	28	23	21	19	19	26	21	26	8	14
March10	25.30	28	28	23	21	19	18	25	21	25	8	14
March11	24.90	27	27	23	21	18	18	25	20	25	8	14
March12	24.50	27	27	22	20	18	18	24	20	25	8	14
March13	24.10	26	27	22	20	18	17	24	20	24	8	13
March14	23.70	26	26	21	20	17	17	24	19	24	7	13
March15	23.40	26	26	21	19	17	17	23	19	23	7	13
March16	23.00	25	25	21	19	17	17	23	19	23	7	12
March17	22.60	25	25	20	19	17	16	22	18	23	7	12
March18	22.20	24	25	20	18	16	16	22	18	22	7	12
March19	21.90	24	24	20	18	16	16	22	18	22	7	12
March20	21.50	23	24	19	17	16	15	21	17	22	6	11
March21	21.10	23	23	19	17	15	15	21	17	21	6	11
March22	20.70	23	23	19	17	15	15	21	17	21	6	11
March23	20.40	22	23	18	16	15	14	20	16	20	6	11
March24	20.00	22	22	18	16	14	14	20	16	20	6	10
March25	19.60	22	22	18	16	14	14	19	16	20	6	10
March26	19.30	21	22	17	15	14	13	19	15	19	5	10
March27	18.90	21	21	17	15	14	13	19	15	19	5	10
March28	18.60	20	21	17	15	13	13	18	15	19	5	10
March29	18.20	20	21	16	14	13	12	18	14	18	5	9
March30	17.80	20	20	16	14	13	12	18	14	18	5	9
March31	17.50	19	20	16	14	12	12	17	14	18	5	9
April1	17.10	19	20	15	13	12	11	17	13	17	4	9
April2	16.80	18	19	15	13	12	11	17	13	17	4	9
April3	16.40	18	19	15	13	12	11	16	13	16	4	8
April4	16.10	18	18	14	13	11	10	16	12	16	4	8
April5	15.70	17	18	14	12	11	10	16	12	16	4	8
April6	15.40	17	18	14	12	11	10	15	12	15	4	8
April7	15.10	16	17	14	12	10	9	15	11	15	4	8
April8	14.70	16	17	13	11	10	9	15	11	15	3	7
April9	14.40	16	17	13	11	10	9	14	11	14	3	7
April10	14.10	15	16	13	11	10	9	14	10	14	3	7
April11	13.70	15	16	12	10	9	8	14	10	14	3	7
April12	13.40	15	16	12	10	9	8	13	10	13	3	7
April13	13.00	14	15	12	10	9	8	13	10	13	3	6
April14	12.70	14	15	11	10	9	8	13	9	13	3	6

Calendar Date	KUIN	KBRL	KIRK	KMCI	KMWA	KPAH	KPOF	KSPI	KSTL	KUIN	KCSG	KGVL
April15	12.30	13	15	11	9	8	7	12	9	12	2	6
April16	12.00	13	14	11	9	8	7	12	9	12	2	6
April17	11.60	13	14	11	9	8	7	12	8	12	2	5
April18	11.30	12	14	10	8	7	6	11	8	11	2	5
April19	11.00	12	13	10	8	7	6	11	8	11	2	5
April20	10.60	12	13	10	8	7	6	11	7	11	2	5
April21	10.30	11	13	9	8	7	5	10	7	10	2	5
April22	10.00	11	12	9	7	6	5	10	7	10	1	4
April23	9.60	11	12	9	7	6	5	10	6	10	1	4
April24	9.30	10	12	8	7	6	5	9	6	9	1	4
April25	9.00	10	11	8	6	5	4	9	6	9	1	4
April26	8.70	10	11	8	6	5	4	9	6	9	1	4
April27	8.50	9	11	7	6	5	4	8	5	9	1	3
April28	8.20	9	10	7	6	5	4	8	5	8	1	3
April29	7.90	9	10	7	5	5	4	8	5	8	1	3
April30	7.60	8	10	7	5	4	4	7	5	8	1	3
May1	7.30	8	9	6	5	4	3	7	4	7	1	3
May2	7.00	8	9	6	5	4	3	7	4	7	1	3
May3	6.80	7	9	6	4	4	3	7	4	7	1	2
May4	6.60	7	8	5	4	3	3	6	4	7	1	2
May5	6.30	7	8	5	4	3	3	6	4	6	1	2
May6	6.10	7	8	5	4	3	3	6	4	6	0	2
May7	5.90	6	7	5	4	3	3	6	3	6	0	2
May8	5.70	6	7	5	3	3	2	5	3	6	0	2
May9	5.50	6	7	4	3	3	2	5	3	6	0	2
May10	5.30	6	7	4	3	3	2	5	3	5	0	2
May11	5.10	5	6	4	3	3	2	5	3	5	0	1
May12	4.90	5	6	4	3	2	2	5	3	5	0	1
May13	4.70	5	6	4	3	2	2	4	3	5	0	1
May14	4.50	5	6	4	3	2	2	4	3	5	0	1
May15	4.30	5	5	3	3	2	2	4	2	4	0	1
May16	4.10	4	5	3	3	2	2	4	2	4	0	1
May17	3.90	4	5	3	2	2	2	4	2	4	0	1
May18	3.70	4	5	3	2	2	2	4	2	4	0	1
May19	3.60	4	5	3	2	2	1	3	2	4	0	1
May20	3.40	4	4	3	2	2	1	3	2	3	0	1
May21	3.20	3	4	2	2	1	1	3	2	3	0	1
May22	3.00	3	4	2	2	1	1	3	2	3	0	1
May23	2.80	3	4	2	2	1	1	3	1	3	0	1
May24	2.60	3	3	2	2	1	1	3	1	3	0	1
May25	2.40	3	3	2	1	1	1	2	1	2	0	1
May26	2.30	3	3	2	1	1	1	2	1	2	0	1
May27	2.10	2	3	2	1	1	1	2	1	2	0	0
May28	2.00	2	3	2	1	1	1	2	1	2	0	0
May29	1.80	2	2	1	1	1	0	2	1	2	0	0
May30	1.70	2	2	1	1	1	0	2	1	2	0	0
May31	1.60	2	2	1	1	1	0	2	1	2	0	0
June1	1.40	2	2	1	1	0	0	1	1	1	0	0
June2	1.30	2	2	1	1	0	0	1	1	1	0	0
June3	1.10	1	2	1	1	0	0	1	0	1	0	0
June4	1.00	1	2	1	1	0	0	1	0	1	0	0
June5	0.90	1	1	1	1	0	0	1	0	1	0	0
June6	0.80	1	1	1	0	0	0	1	0	1	0	0

Calendar Date	KUIN	KBRL	KIRK	KMCI	KMWA	KPAH	KPOF	KSPI	KSTL	KUIN	KCSG	KGVL
July30	-	0	0	0	0	0	0	0	0	0	0	0
July31	-	0	0	0	0	0	0	0	0	0	0	0
August1	-	0	0	0	0	0	0	0	0	0	0	0
August2	-	0	0	0	0	0	0	0	0	0	0	0
August3	-	0	0	0	0	0	0	0	0	0	0	0
August4	-	0	0	0	0	0	0	0	0	0	0	0
August5	-	0	0	0	0	0	0	0	0	0	0	0
August6	-	0	0	0	0	0	0	0	0	0	0	0
August7	0.10	0	0	0	0	0	0	0	0	0	0	0
August8	0.10	0	0	0	0	0	0	0	0	0	0	0
August9	0.10	0	0	0	0	0	0	0	0	0	0	0
August10	0.10	0	0	0	0	0	0	0	0	0	0	0
August11	0.10	0	0	0	0	0	0	0	0	0	0	0
August12	0.10	0	0	0	0	0	0	0	0	0	0	0
August13	0.10	0	0	0	0	0	0	0	0	0	0	0
August14	0.10	0	0	0	0	0	0	0	0	0	0	0
August15	0.10	0	0	0	0	0	0	0	0	0	0	0
August16	0.10	0	0	0	0	0	0	0	0	0	0	0
August17	0.10	0	0	0	0	0	0	0	0	0	0	0
August18	0.10	0	0	0	0	0	0	0	0	0	0	0
August19	0.10	0	0	0	0	0	0	0	0	0	0	0
August20	0.10	0	0	0	0	0	0	0	0	0	0	0
August21	0.10	0	0	0	0	0	0	0	0	0	0	0
August22	0.10	0	0	0	0	0	0	0	0	0	0	0
August23	0.10	0	0	0	0	0	0	0	0	0	0	0
August24	0.10	0	0	0	0	0	0	0	0	0	0	0
August25	0.20	0	0	0	0	0	0	0	0	0	0	0
August26	0.20	0	0	0	0	0	0	0	0	0	0	0
August27	0.20	0	0	0	0	0	0	0	0	0	0	0
August28	0.30	0	1	0	0	0	0	0	0	0	0	0
August29	0.30	0	1	0	0	0	0	0	0	0	0	0
August30	0.40	1	1	0	0	0	0	0	0	0	0	0
August31	0.40	1	1	0	0	0	0	0	0	0	0	0
September1	0.50	1	1	0	0	0	0	0	0	1	0	0
September2	0.50	1	1	0	0	0	0	0	0	1	0	0
September3	0.60	1	1	0	0	0	0	0	0	1	0	0
September4	0.60	1	1	0	0	0	0	1	0	1	0	0
September5	0.70	1	1	0	0	0	0	1	0	1	0	0
September6	0.80	1	1	1	0	0	0	1	0	1	0	0
September7	0.90	1	1	1	0	0	0	1	0	1	0	0
September8	1.00	1	2	1	0	0	0	1	0	1	0	0
September9	1.20	1	2	1	0	0	0	1	0	1	0	0
September10	1.30	1	2	1	1	0	0	1	0	1	0	0
September11	1.40	2	2	1	1	0	0	1	0	1	0	0
September12	1.60	2	2	1	1	0	0	1	1	2	0	0
September13	1.70	2	3	1	1	1	0	2	1	2	0	0
September14	1.90	2	3	2	1	1	1	2	1	2	0	0
September15	2.10	2	3	2	1	1	1	2	1	2	0	0
September16	2.30	3	3	2	1	1	1	2	1	2	0	0
September17	2.50	3	3	2	2	1	1	3	1	3	0	0
September18	2.70	3	4	2	2	1	1	3	1	3	0	0
September19	2.80	3	4	3	2	1	1	3	1	3	0	0
September20	3.00	4	4	3	2	2	1	3	1	3	0	0

Calendar Date	KUIN	KBRL	KIRK	KMCI	KMWA	KPAH	KPOF	KSPI	KSTL	KUIN	KCSG	KGVL
September21	3.20	4	5	3	2	2	1	3	1	3	0	1
September22	3.40	4	5	3	3	2	1	4	2	3	0	1
September23	3.60	4	5	3	3	2	1	4	2	4	0	1
September24	3.80	5	5	4	3	2	2	4	2	4	0	1
September25	4.10	5	6	4	3	3	2	5	2	4	0	1
September26	4.40	5	6	4	3	3	2	5	2	4	0	1
September27	4.70	6	6	4	4	3	2	5	3	5	0	1
September28	4.90	6	7	5	4	3	2	6	3	5	0	1
September29	5.20	6	7	5	4	4	3	6	3	5	0	1
September30	5.50	7	7	5	4	4	3	6	3	6	0	2
October1	5.70	7	8	5	5	4	3	6	3	6	0	2
October2	6.00	7	8	6	5	4	3	7	4	6	0	2
October3	6.30	8	8	6	5	4	3	7	4	6	0	2
October4	6.60	8	9	6	5	5	4	7	4	7	0	2
October5	6.90	8	9	6	5	5	4	8	4	7	1	2
October6	7.20	9	9	7	6	5	4	8	4	7	1	3
October7	7.60	9	9	7	6	5	4	8	5	8	1	3
October8	7.90	9	10	7	6	6	4	8	5	8	1	3
October9	8.20	10	10	7	6	6	5	9	5	8	1	3
October10	8.50	10	10	8	7	6	5	9	5	9	1	3
October11	8.80	10	11	8	7	6	5	9	6	9	1	4
October12	9.10	10	11	8	7	6	5	9	6	9	1	4
October13	9.40	11	11	8	7	7	6	10	6	9	1	4
October14	9.70	11	11	9	8	7	6	10	6	10	1	4
October15	10.10	11	12	9	8	7	6	10	7	10	1	4
October16	10.40	12	12	9	8	7	6	11	7	10	1	4
October17	10.80	12	12	10	8	7	7	11	7	11	2	5
October18	11.20	12	13	10	9	8	7	11	8	11	2	5
October19	11.60	13	13	10	9	8	7	11	8	12	2	5
October20	12.00	13	13	10	9	8	8	12	8	12	2	5
October21	12.40	13	14	11	9	8	8	12	9	12	2	6
October22	12.70	14	14	11	10	9	9	12	9	13	3	6
October23	13.10	14	14	11	10	9	9	12	10	13	3	6
October24	13.50	14	15	12	10	9	9	13	10	14	3	6
October25	13.90	15	15	12	11	9	10	13	10	14	3	7
October26	14.30	15	15	12	11	10	10	13	11	14	4	7
October27	14.70	16	16	13	11	10	10	14	11	15	4	7
October28	15.10	16	16	13	12	10	11	14	11	15	4	7
October29	15.50	16	17	13	12	11	11	14	12	16	4	8
October30	15.90	17	17	14	12	11	12	15	12	16	5	8
October31	16.30	17	17	14	13	11	12	15	13	16	5	8
November1	16.70	18	18	14	13	12	12	15	13	17	5	8
November2	17.10	18	18	15	13	12	13	16	13	17	5	9
November3	17.60	19	19	15	13	12	13	16	14	18	6	9
November4	18.00	19	19	16	14	12	14	17	14	18	6	9
November5	18.40	19	20	16	14	13	14	17	15	18	6	9
November6	18.80	20	20	17	14	13	14	17	15	19	6	10
November7	19.20	20	20	17	15	14	15	18	15	19	7	10
November8	19.60	21	21	18	15	14	15	18	16	20	7	10
November9	20.10	21	21	18	16	14	15	19	16	20	7	10
November10	20.50	22	22	19	16	15	16	19	17	21	7	11
November11	20.90	23	22	19	16	15	16	20	17	21	8	11
November12	21.30	23	23	19	17	15	17	20	17	21	8	11

Calendar Date	KUIN	KBRL	KIRK	KMCI	KMWA	KPAH	KPOF	KSPI	KSTL	KUIN	KCSG	KGVL
November13	21.70	24	23	20	17	16	17	21	18	22	8	12
November14	22.20	24	24	21	17	16	17	21	18	22	8	12
November15	22.60	25	25	21	18	17	18	21	19	23	8	12
November16	23.00	25	25	22	18	17	18	22	19	23	9	13
November17	23.40	26	26	22	19	17	18	22	19	23	9	13
November18	23.80	26	26	23	19	18	19	23	20	24	9	13
November19	24.20	27	27	23	19	18	19	24	20	24	9	14
November20	24.60	27	27	24	20	19	19	24	21	25	10	14
November21	25.10	28	28	24	20	19	20	25	21	25	10	14
November22	25.50	29	28	25	21	20	20	25	21	26	10	15
November23	25.90	29	29	25	21	20	20	26	22	26	10	15
November24	26.20	30	29	26	22	20	21	26	22	26	11	15
November25	26.60	30	30	26	22	21	21	27	22	27	11	16
November26	27.00	31	30	27	22	21	21	27	23	27	11	16
November27	27.40	31	31	27	23	22	22	28	23	27	11	16
November28	27.80	32	31	28	23	22	22	28	23	28	11	17
November29	28.10	32	32	28	24	23	22	29	24	28	12	17
November30	28.50	33	32	29	24	23	23	29	24	29	12	17
December1	28.90	33	33	29	25	23	23	30	24	29	12	18
December2	29.20	34	33	30	25	24	23	30	25	29	12	18
December3	29.60	34	33	30	25	24	23	30	25	30	12	18
December4	29.90	35	34	30	26	24	24	31	25	30	13	19
December5	30.30	35	34	31	26	25	24	31	26	30	13	19
December6	30.60	35	35	31	27	25	24	32	26	31	13	19
December7	30.90	36	35	31	27	26	24	32	26	31	13	20
December8	31.20	36	35	32	27	26	25	33	27	31	13	20
December9	31.60	37	36	32	28	26	25	33	27	32	14	20
December10	31.90	37	36	32	28	26	25	33	27	32	14	20
December11	32.20	37	36	33	28	27	25	34	27	32	14	21
December12	32.50	38	37	33	29	27	26	34	28	33	14	21
December13	32.80	38	37	33	29	27	26	34	28	33	14	21
December14	33.10	38	37	34	29	28	26	35	28	33	14	21
December15	33.30	38	38	34	29	28	26	35	28	33	15	21
December16	33.60	39	38	34	30	28	26	35	29	34	15	22
December17	33.90	39	38	34	30	28	27	35	29	34	15	22
December18	34.20	39	38	35	30	28	27	36	29	34	15	22
December19	34.40	39	39	35	30	29	27	36	29	34	15	22
December20	34.70	40	39	35	31	29	27	36	30	35	15	22
December21	34.90	40	39	35	31	29	27	36	30	35	15	23
December22	35.20	40	39	35	31	29	27	37	30	35	16	23
December23	35.40	40	39	35	31	29	28	37	30	35	16	23
December24	35.60	40	39	35	32	29	28	37	31	36	16	23
December25	35.90	40	40	36	32	30	28	37	31	36	16	23
December26	36.10	41	40	36	32	30	28	37	31	36	16	23
December27	36.30	41	40	36	32	30	28	37	31	36	16	23
December28	36.50	41	40	36	32	30	28	37	31	37	16	23
December29	36.70	41	40	36	32	30	28	38	32	37	16	23
December30	36.90	41	40	36	32	30	29	38	32	37	17	24
December31	37.10	41	40	36	32	30	29	38	32	37	17	24

Calendar Date

KUIN

KBRL

KIRK

KMCI

KMWA

KPAH

KPOF

KSPI

KSTL

KUIN

KCSG

KGVL