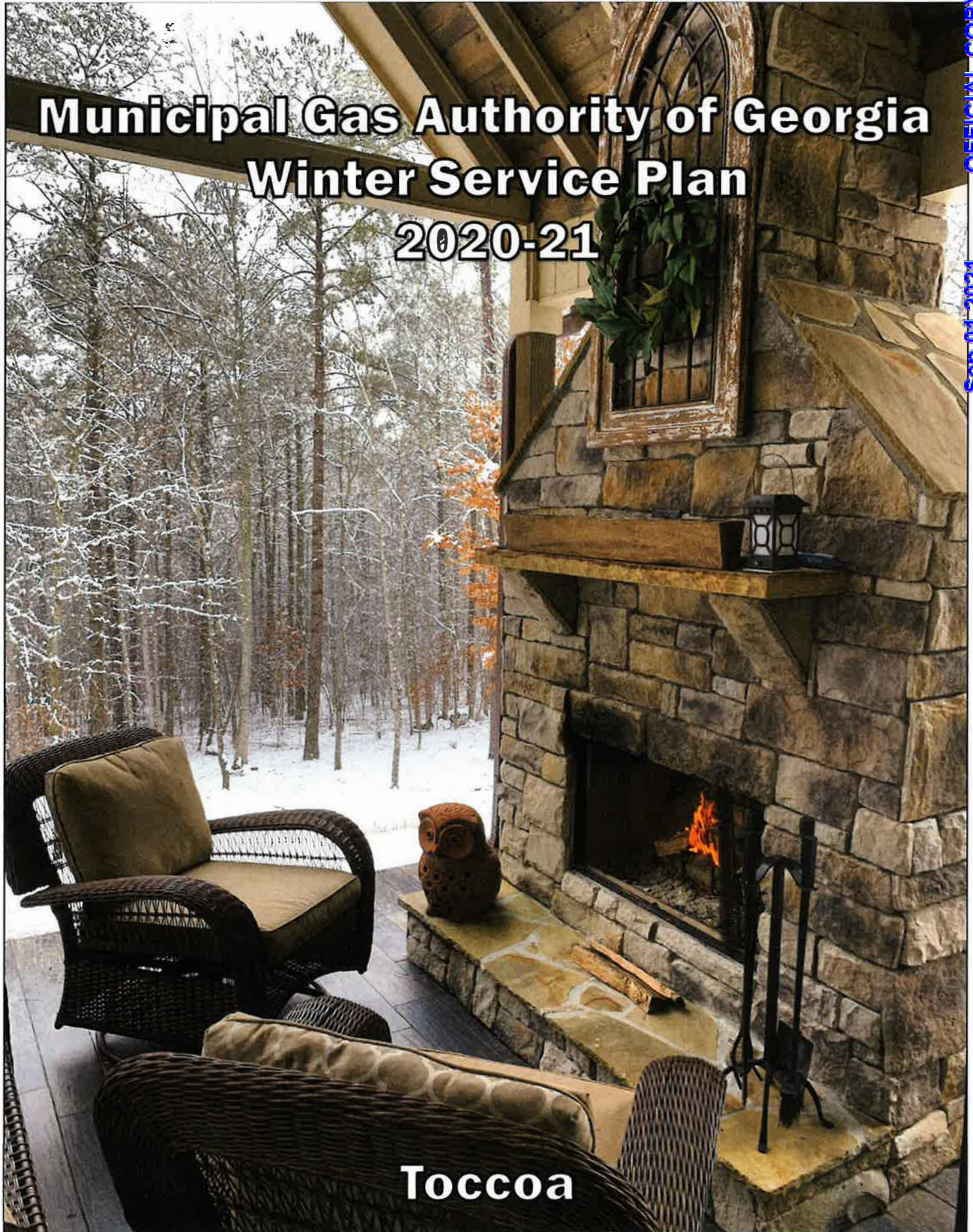


Municipal Gas Authority of Georgia Winter Service Plan 2020-21



Toccoa

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In advance of the 2020-21 winter season, this plan has been prepared to communicate your design day needs. Please let us know if you have any questions.

ACTION ITEMS

Feedback Requested:

Please review the Forecast Design Day on page 1 for both firm and interruptible load. Let us know if we have identified the interruptible demand (if applicable) correctly.

SUMMARY

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ACTUAL HISTORY

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CONTACT INFORMATION

PHOTO CONTEST

This year's cover photo was taken by Tara LeCroy of Canton, GA.

Please be on the lookout for any great winter photo opportunities this season. Submit your photos to forecasting@gasauthority.com to be entered in the contest for the 2021-22 Winter Service Plan cover photo. Employees of Member cities as well as MGAG staff are encouraged to participate. We look forward to highlighting our member cities in future years!!!

Design Day Summary for 2020-21 Winter Toccoa

Actual Peak Days (see page 2 for more details)

	<u>HDD</u>	<u>Date</u>	<u>Dth</u>
Historical 5-Year Peak:	41	01/04/18	10,698
Last Winter Peak Day:	33	01/21/20	9,272

Note: Actual Peak Days include firm and interruptible load in dekatherms.

Customers (see page 3 for more details)

	<u>Customer Count</u>
Active meters as of 12/31/2019	
Firm R&C:	6,673
Firm Industrial:	-
Interruptible:	8
Total:	6,681

Forecasted Design Day (Dekatherms) (see page 5 for more details)

	<u>Design Day Forecast</u>
Firm R&C Forecasted Load at 51 HDD	10,077
Firm Industrial Demand	-
Interruptible Demand	1,497
Total Design Day Demand	11,574

Firm Services (see page 8 for more details)

	<u>2019-20 Capacity</u>	<u>Planned 2020-21</u>
Pipeline Capacity	6,993	6,993
Pine Needle/LGA/GSS Storage	3,909	3,914
Winter Service Pool *	-	-
Seasonal Capacity	-	-
Propane Air Plant Capacity	-	-
TOTAL FIRM SERVICES	10,902	10,907

Firm Surplus / (Deficit) **830**

* Transco delivered supply service. Pricing and terms will be sent separately

Note: A Member that is short Firm Services to meet the forecasted Firm Design Day need increases the likelihood of incurring pipeline penalties on cold weather days that have pipeline Operational Flow Orders (OFO's) in effect.

Top 20 Peak Days - Last 5 Years

Toccoa

Degree Day

Heating Degree Days (HDD) are defined as the number of degrees the average temperature for a day is below 65 degrees. If the average temperature is 65 degrees or warmer, there are zero heating degree days and no heating is expected for the typical home or business. As the average temperatures get colder, more and more energy is needed to maintain a comfortable interior temperature. As an example, a high temperature of 46 degrees with a low of 24 degrees will result in an average temperature of 35 degrees and 30 HDD.

Historic Peak Days - Last 5 Years

<u>Rank</u>	<u>Date</u>	<u>Day of Week</u>	<u>HDD</u>	<u>Dth</u>
1	01/04/18	Thu	41	10,698
2	01/02/18	Tue	36	10,492
3	01/17/18	Wed	46	10,463
4	01/01/18	Mon	45	10,241
5	01/05/18	Fri	37	10,199
6	01/30/19	Wed	31	9,955
7	02/09/16	Tue	36	9,824
8	02/10/16	Wed	32	9,698
9	01/03/18	Wed	35	9,446
10	01/18/16	Mon	37	9,381
11	01/21/20	Tue	33	9,272
12	03/15/17	Wed	31	9,059
13	02/15/16	Mon	20	9,008
14	01/29/19	Tue	33	8,964
15	01/18/18	Thu	34	8,903
16	01/21/19	Mon	30	8,854
17	01/31/19	Thu	23	8,661
18	01/05/16	Tue	31	8,616
19	01/09/17	Mon	29	8,587
20	01/22/19	Tue	23	8,535

Industrial Customer Demand

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Interruptible Service

Customers who receive all or a portion of their gas service without a guarantee of constant supply in return for a lower rate are interruptible. An interruptible customer typically has an alternate fuel that can be utilized when natural gas is curtailed. Each Gas Authority member city determines the exact curtailment procedures that apply in their respective service area. If the member city does not curtail the load as a matter of policy, the load is considered firm.

When a customer's load is classified as interruptible and subject to curtailment, that demand is not included in the firm design day requirements and capacity will not be reserved to serve them. Service will be maintained whenever possible utilizing capacity not needed for firm demand which will occur on many days.

Interruptible Customers:

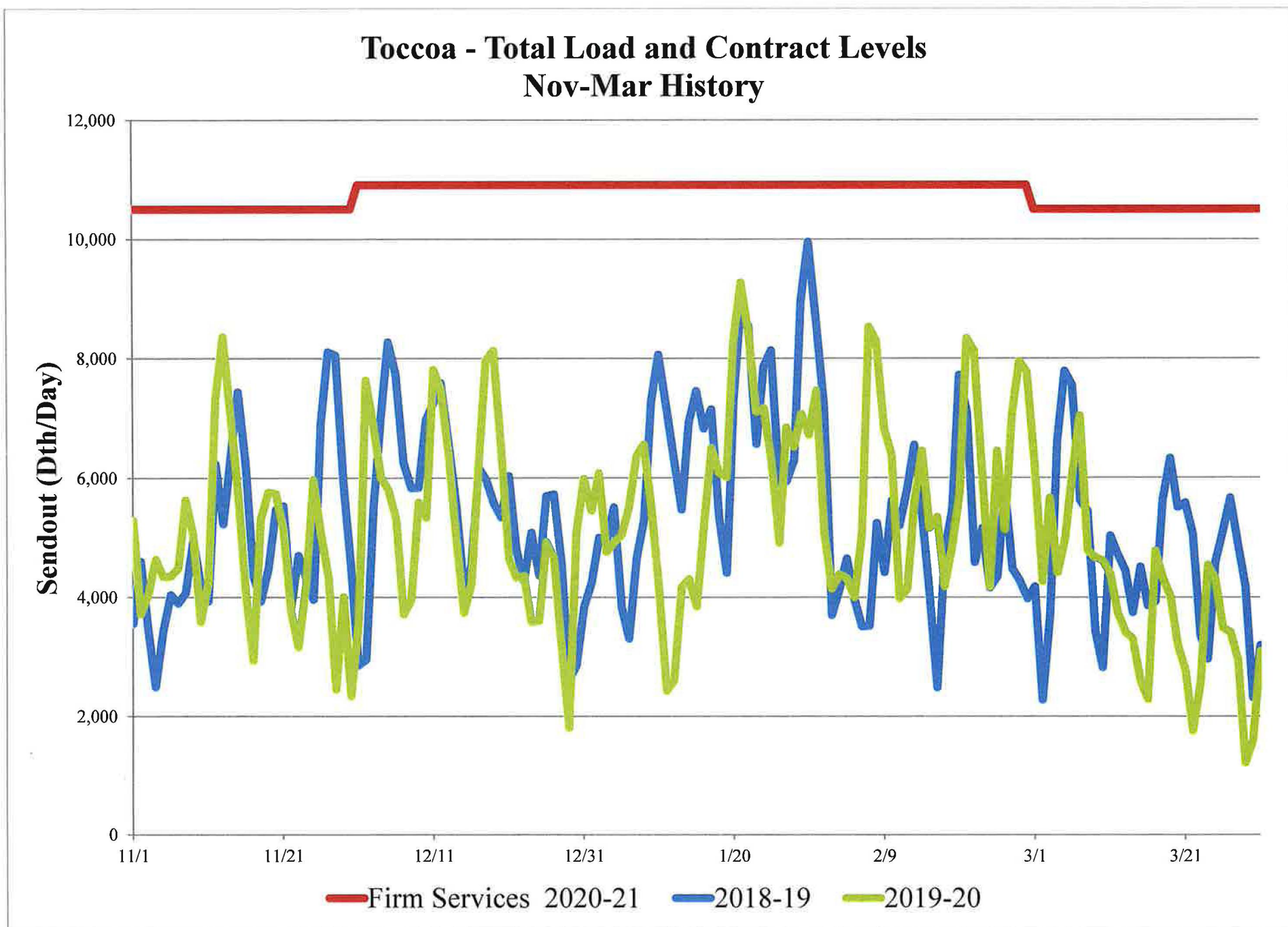
(Quantities in Dekatherms)

<u>Customer Name</u>	<u>2020-21 Design Day Forecast</u>
Columbia Farms	40
Fieldale Farms	1,026
Stephens Co. Hospital	53
Dewtex, Inc.	165
Catepillar, Inc.	-
Angel Medical	50
Beasley Flooring	124
C.W. Matthews - asphalt plant	39
Total	<hr/> 1,497

Firm Customers:

(Quantities in Dekatherms)

<u>Customer Name</u>	<u>2020-21 Design Day Forecast</u>
None Reported	-
Total	<hr/> -



2020-21 Load Forecast Chart (Dth)

Toccoa

Dec - Feb Total Firm Services: 10,907

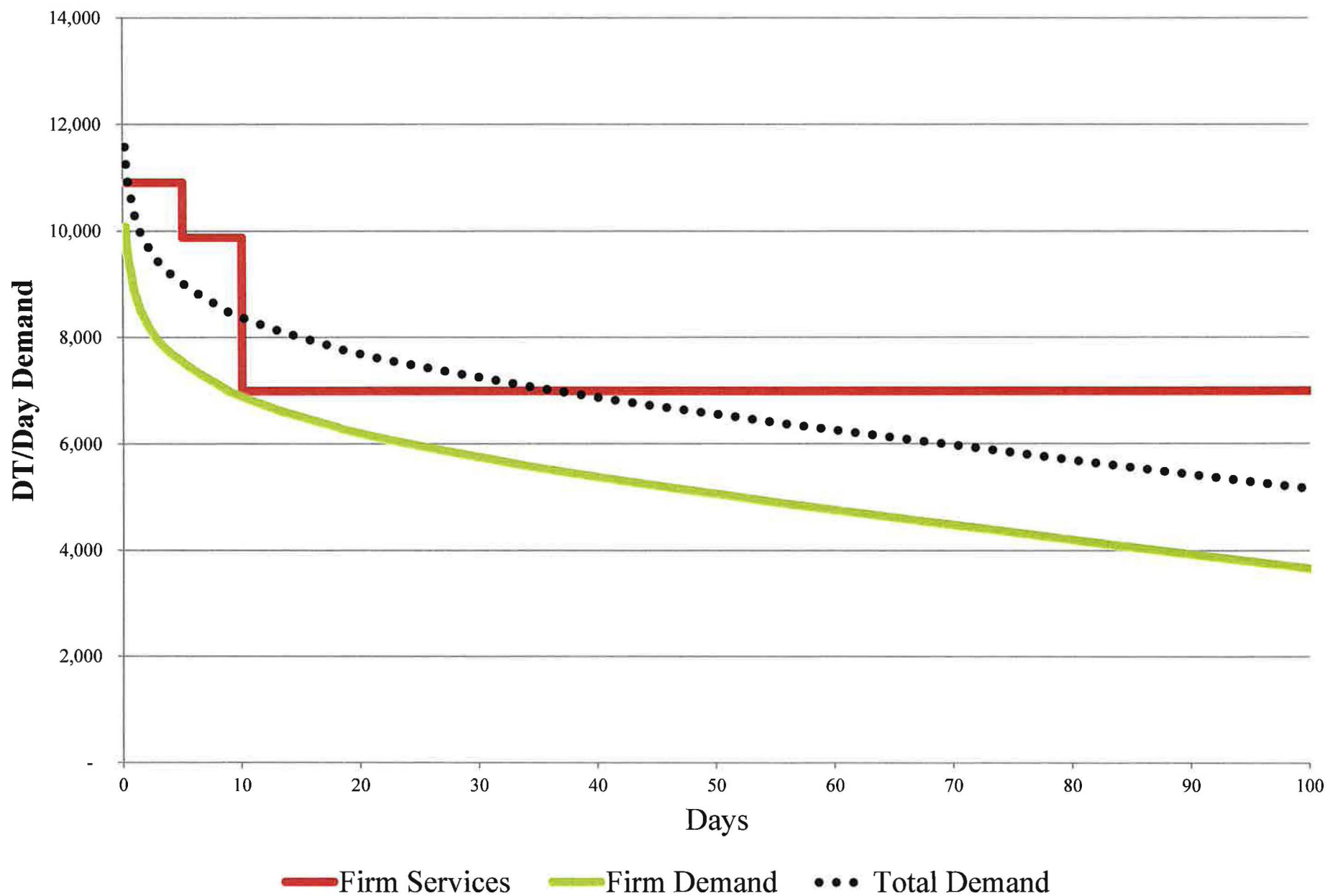
Heating Degree

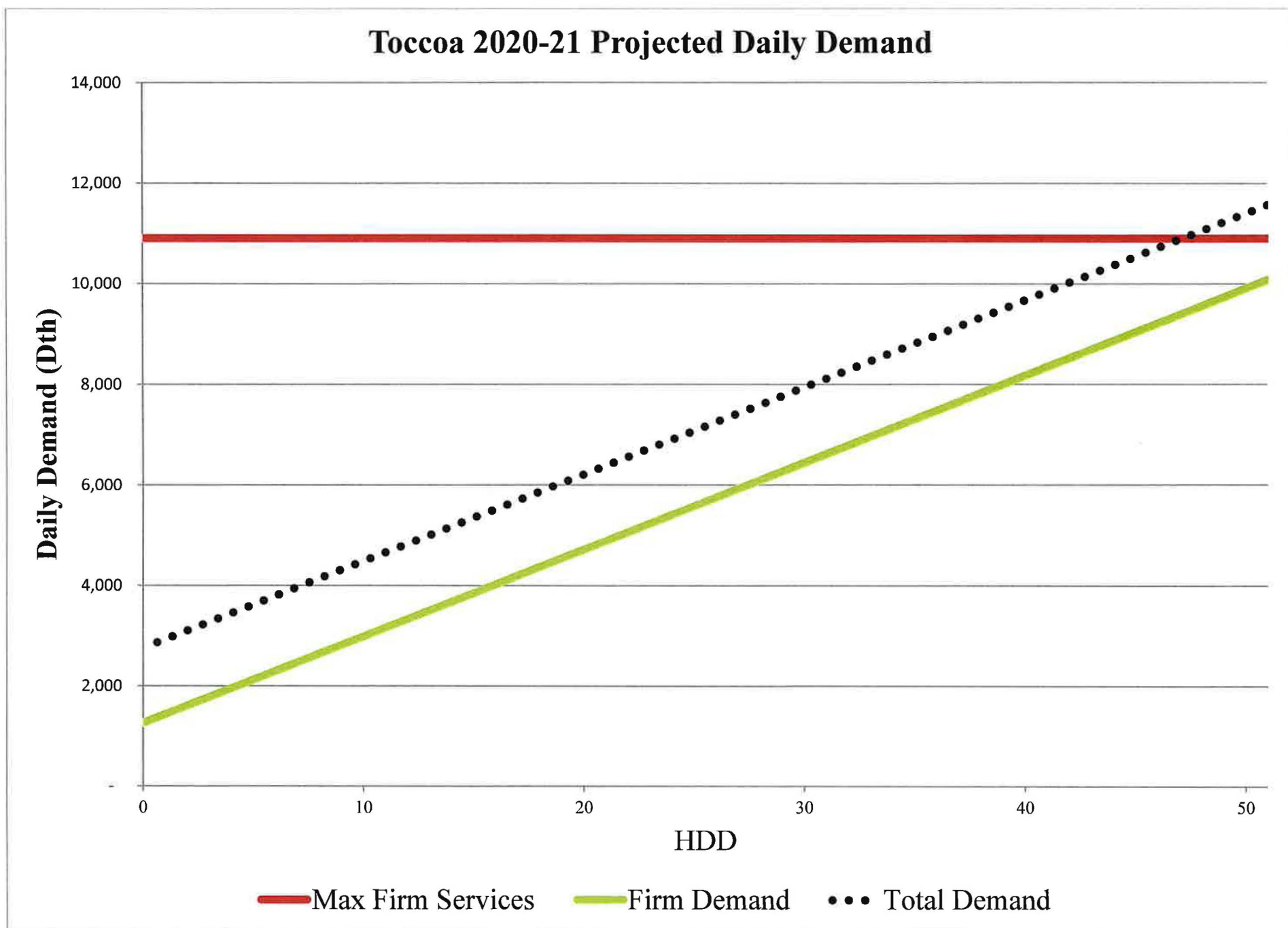
Day	Average Temp.	Firm Load	Total Load
0	65	1,262	2,759
1	64	1,435	2,932
2	63	1,608	3,105
3	62	1,781	3,278
4	61	1,953	3,450
5	60	2,126	3,623
6	59	2,299	3,796
7	58	2,472	3,969
8	57	2,645	4,142
9	56	2,818	4,315
10	55	2,990	4,487
11	54	3,163	4,660
12	53	3,336	4,833
13	52	3,509	5,006
14	51	3,682	5,179
15	50	3,855	5,352
16	49	4,028	5,525
17	48	4,200	5,697
18	47	4,373	5,870
19	46	4,546	6,043
20	45	4,719	6,216
21	44	4,892	6,389
22	43	5,065	6,562
23	42	5,238	6,735
24	41	5,410	6,907
25	40	5,583	7,080

Heating Degree

Day	Average Temp.	Firm Load	Total Load
26	39	5,756	7,253
27	38	5,929	7,426
28	37	6,102	7,599
29	36	6,275	7,772
30	35	6,447	7,944
31	34	6,620	8,117
32	33	6,793	8,290
33	32	6,966	8,463
34	31	7,139	8,636
35	30	7,312	8,809
36	29	7,485	8,982
37	28	7,657	9,154
38	27	7,830	9,327
39	26	8,003	9,500
40	25	8,176	9,673
41	24	8,349	9,846
42	23	8,522	10,019
43	22	8,694	10,191
44	21	8,867	10,364
45	20	9,040	10,537
46	19	9,213	10,710
47	18	9,386	10,883
48	17	9,559	11,056
49	16	9,732	11,229
50	15	9,904	11,401
51	14	10,077	11,574

Toccoa 2020-21 Load Duration Curve





Toccoa

11/1/2020

Transco Monthly Contract Quantities (Dth)

<u>Contract Type</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>
PSFT *	-	-	-	-	-	-	-	-	-	-	-	-
FTG * (One Part FT)	-	-	-	-	-	-	-	-	-	-	-	-
CFT *	1,381	1,898	2,300	2,300	2,300	1,898	1,381	346	346	294	290	346
IFT	-	-	-	-	-	-	-	-	-	-	-	-
SE94	-	-	-	-	-	-	-	-	-	-	-	-
SE95/96	-	-	-	-	-	-	-	-	-	-	-	-
SFT *	-	-	-	-	-	-	-	-	-	-	-	-
Sunbelt	518	518	518	518	518	518	518	518	518	518	518	518
BG&E	-	-	-	-	-	-	-	-	-	-	-	-
Cherokee	2,070	2,070	2,070	2,070	2,070	2,070	2,070	2,070	2,070	2,070	2,070	2,070
SouthCoast	2,105	2,105	2,105	2,105	2,105	2,105	2,105	2,105	2,105	2,105	2,105	2,105
Sundance	-	-	-	-	-	-	-	-	-	-	-	-
Momentum	-	-	-	-	-	-	-	-	-	-	-	-
Temp Release of BG&E	-	-	-	-	-	-	-	-	-	-	-	-
Total FT	6,074	6,591	6,993	6,993	6,993	6,591	6,074	5,039	5,039	4,987	4,983	5,039
GSS - 50d	-	-	-	-	-	-	-	-	-	-	-	-
Winter Service Pool	-	-	-	-	-	-	-	-	-	-	-	-
Pine Needle - 10d	-	2,898	2,898	2,898	2,898	2,898	-	-	-	-	-	-
PN - Transco 5-4 Fuel**	-	(19)	(19)	(19)	(19)	(19)	-	-	-	-	-	-
LNG - 5d	-	1,035	1,035	1,035	1,035	1,035	-	-	-	-	-	-
Total Storage/Peaking	-	3,914	3,914	3,914	3,914	3,914	-	-	-	-	-	-
Seasonal Capacity	-	-	-	-	-	-	-	-	-	-	-	-
Total Capacity (Dth/Day)	6,074	10,505	10,907	10,907	10,907	10,505	6,074	5,039	5,039	4,987	4,983	5,039

* Capacity entitlement varies by month

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MGAG 5 Year Demand and Capacity Analysis - Toccoa

	2016-17	2017-18	2018-19	Prev Year 2019-20	Year 1 2020-21	Year 2 2021-22	Year 3 2022-23	Year 4 2023-24	Year 5 2024-25
Customer Count	6,596		6,617	6,681	6,708	6,735	6,762	6,789	6,816
Growth Rate				1.0%	0.4%	0.4%	0.4%	0.4%	0.4%
Projected Design Day			HDD	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Firm Design Day Demand			51	9,164	10,069	10,110	10,150	10,191	10,231
NGV Demand				8	8	8	8	8	8
Interruptible Demand				1,532	1,497	1,497	1,497	1,497	1,497
Total Projected Design Day Demand				10,704	11,574	11,615	11,655	11,696	11,736
Firm Services									
FT				6,993	6,993	6,993	6,993	6,993	6,993
GSS				-	-	-	-	-	-
Winter Service Pool				-	-	-	-	-	-
Pine Needle				2,874	2,879	2,879	2,879	2,879	2,879
LNG/LGA				1,035	1,035	1,035	1,035	1,035	1,035
Propane Plant				-	-	-	-	-	-
Seasonal Capacity / (Shared with Others)				-	-	-	-	-	-
Total Firm Services				10,902	10,907	10,907	10,907	10,907	10,907
Firm Long/(Short) Dth				1,730	830	789	749	708	668
				16%	8%	7%	7%	6%	6%

Long - There are firm services sufficient to meet the projected firm requirements on the design day

Short - The projected firm requirements on the design day are greater than the firm services available and more capacity is recommended if available