

Estimate of Covid-19 load impacts

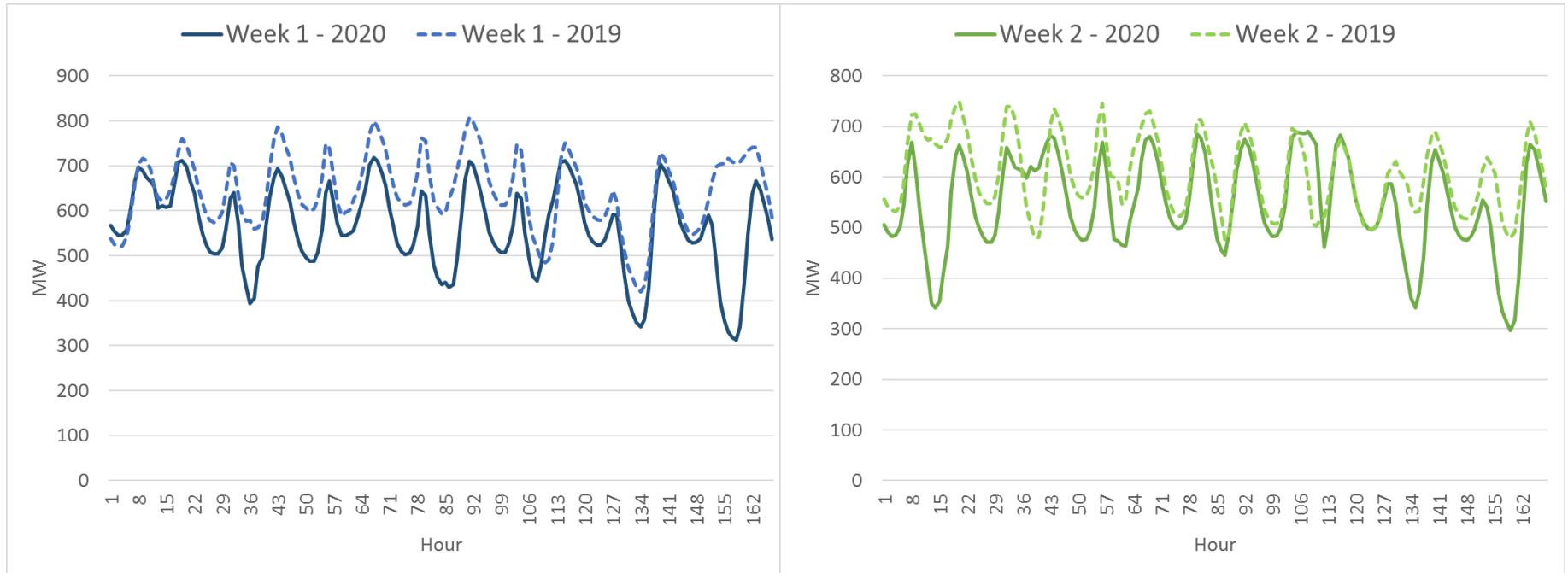
April 1 2020



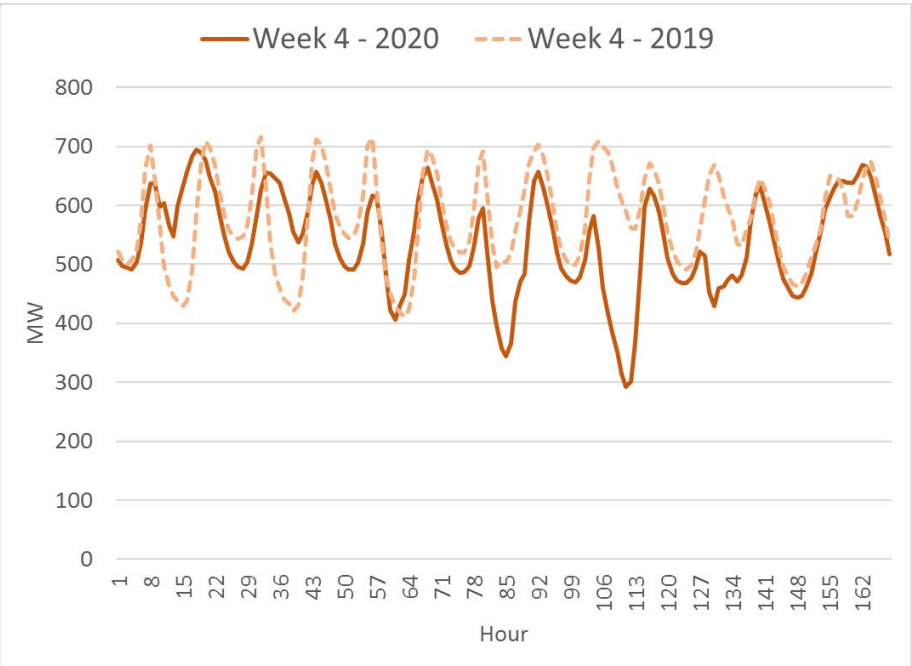
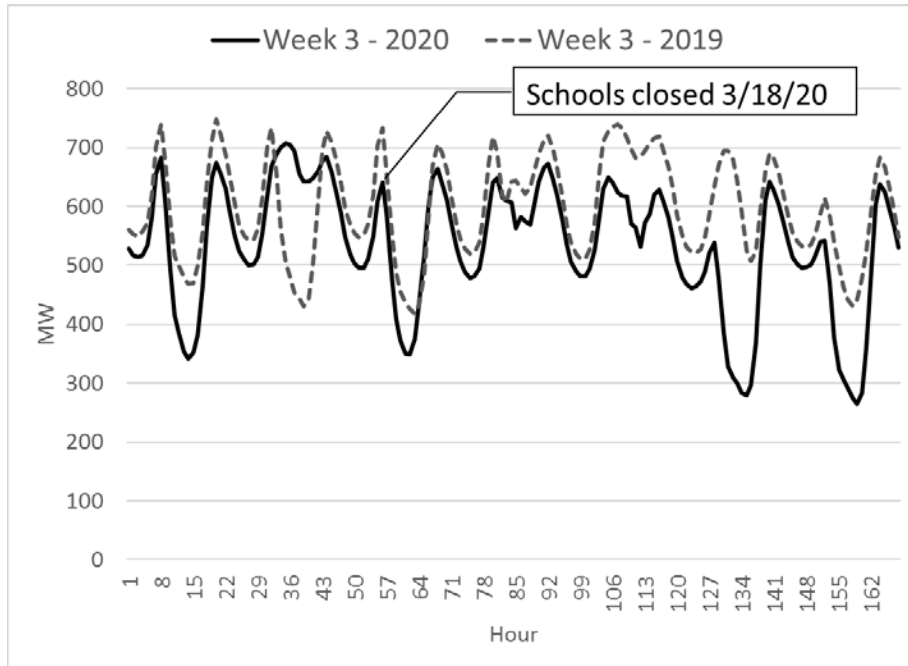
Governor Scott Order EO 01-20

1. **Original Order – March 13th**
 - *Prohibits gatherings of more than 250 people; Restricts visitor access to long term care facilities; Suspends non-essential out-of-state for travel state employees; Encourages employees telecommuting*
 - **March 15th Directive 1** – *Public and independent schools are dismissed by Wednesday **March 18th***
2. **Addendum 1 – March 16th** *Prohibits gatherings of more than 50 people or 50% of the occupancy of a facility*
3. **Addendum 2 – March 16th** *Bars, restaurants and similar establishments only offer take-out and delivery of food on March 17th*
 - **March 17th Directive 2** – *All state regulated **child care programs to close** no later than Wednesday **March 18th**; Other child care programs and schools encouraged to follow spirit and guidance of Directive*
 - **March 18th Directive 3** – *DMV services provided online, by mail or phone. All other in-person services suspended; DMV Commissioner to develop Continuity of Services Plan; expiration dates extended 90days*
 - **March 19th Directive 4** – *Take out, curbside pickup, delivery of alcohol products allowed*
4. **Addendum 3 – March 20th** *Suspends all non-essential adult elective surgery and medical procedures*
5. **Addendum 4 – March 21st** *Prohibits in-person operations at close-contact businesses by 8:00 p.m. on Monday, March 23; Other businesses implement CDC guidance to ensure social distancing; Prohibits non-essential gatherings of more than 10 people; Enterprises post notices requiring compliance with CDC and VT Dept. of Health recommendations*
6. **Addendum 5 – March 23rd** *Work from home for all businesses and non-profits*
7. **Addendum 6 – March 24th** *Stay at home; Businesses and non-profits to suspend in-person transactions on March 25th, except those entities critical to public health and safety , as well as economic and national security*
 - **March 26th Directive 5** – *Schools are required to have continuity of learning plans for remote learning implemented on or before Monday, April 13, 2020.*
8. **Addendum 7 – March 30th** *Quarantine (14 days) prohibitions for travelers arriving in Vermont; Online reservations suspended; **Lodging restricted***

Comparison of 1st two weeks of March



Comparison of 2nd two weeks of March



Recent energy reduction observed

Year	Total March energy	% drop in March energy	Average hourly March load	Total March HDD	Total March Precipitation	Annual PV addition
2016	463233		623	867	2.26	
2017	481165	-4%	648	1157	3.27	59
2018	456039	5%	614	1039	2.63	49
2019	450526	1%	606	1066	2.31	58
2020	406353	10%	547	851	2.01	-----

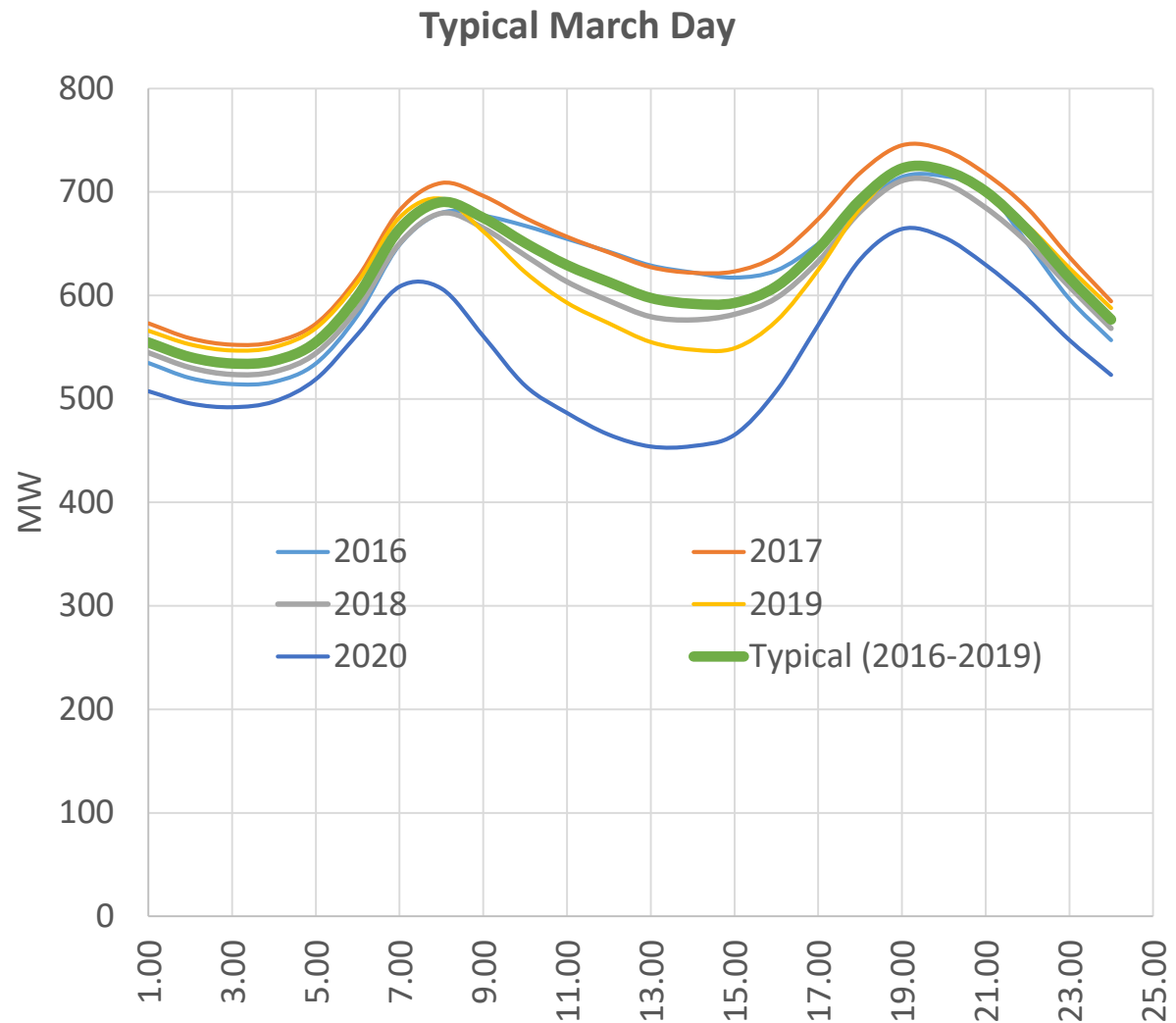
- Loads are lower in March 2020 for several reasons
 - Weather – it has been warmer (851 HDD vs 1050)
 - Behind the meter generation (58 MW of solar PV in 2019)
 - Covid-19 – some of the directives affect consumptions

Typical daily loads in March

Time	2016	2017	2018	2019	2020	Typical (2016-2019)	2020 %drop
1	535	573	545	566	507	555	9%
2	520	559	530	553	496	540	8%
3	514	552	524	547	492	534	8%
4	517	555	526	550	497	537	7%
5	534	573	544	568	519	555	6%
6	581	618	587	613	563	600	6%
7	649	682	650	675	609	664	8%
8	680	709	679	693	607	690	12%
9	677	696	665	662	561	675	17%
10	667	675	639	622	513	651	21%
11	655	657	613	593	486	629	23%
12	642	642	595	573	465	613	24%
13	629	627	579	555	454	598	24%
14	622	622	576	548	454	592	23%
15	617	623	582	549	465	593	22%
16	624	638	598	575	508	609	17%
17	650	674	633	624	571	645	11%
18	686	718	681	684	635	692	8%
19	715	745	711	721	664	723	8%
20	715	741	709	720	656	721	9%
21	703	718	685	698	630	701	10%
22	651	684	651	667	596	663	10%
23	597	637	609	627	557	617	10%
24	557	594	568	588	523	577	9%

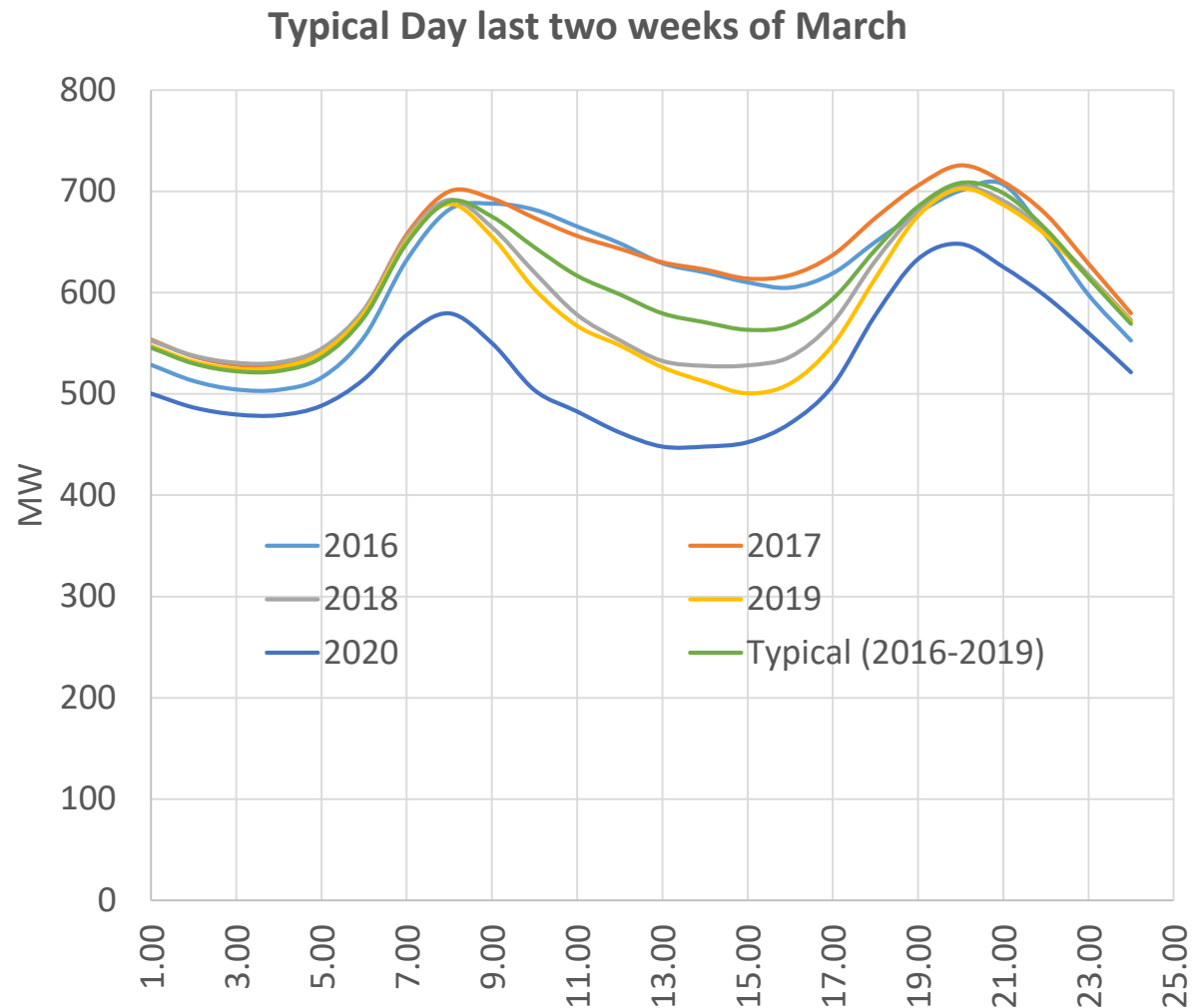
Comparison of the month of March

Time	2020	Typical (2016-2019)	2020 %drop
1	507	555	9%
2	496	540	8%
3	492	534	8%
4	497	537	7%
5	519	555	6%
6	563	600	6%
7	609	664	8%
8	607	690	12%
9	561	675	17%
10	513	651	21%
11	486	629	23%
12	465	613	24%
13	454	598	24%
14	454	592	23%
15	465	593	22%
16	508	609	17%
17	571	645	11%
18	635	692	8%
19	664	723	8%
20	656	721	9%
21	630	701	10%
22	596	663	10%
23	557	617	10%
24	523	577	9%



Comparison of last two weeks of March

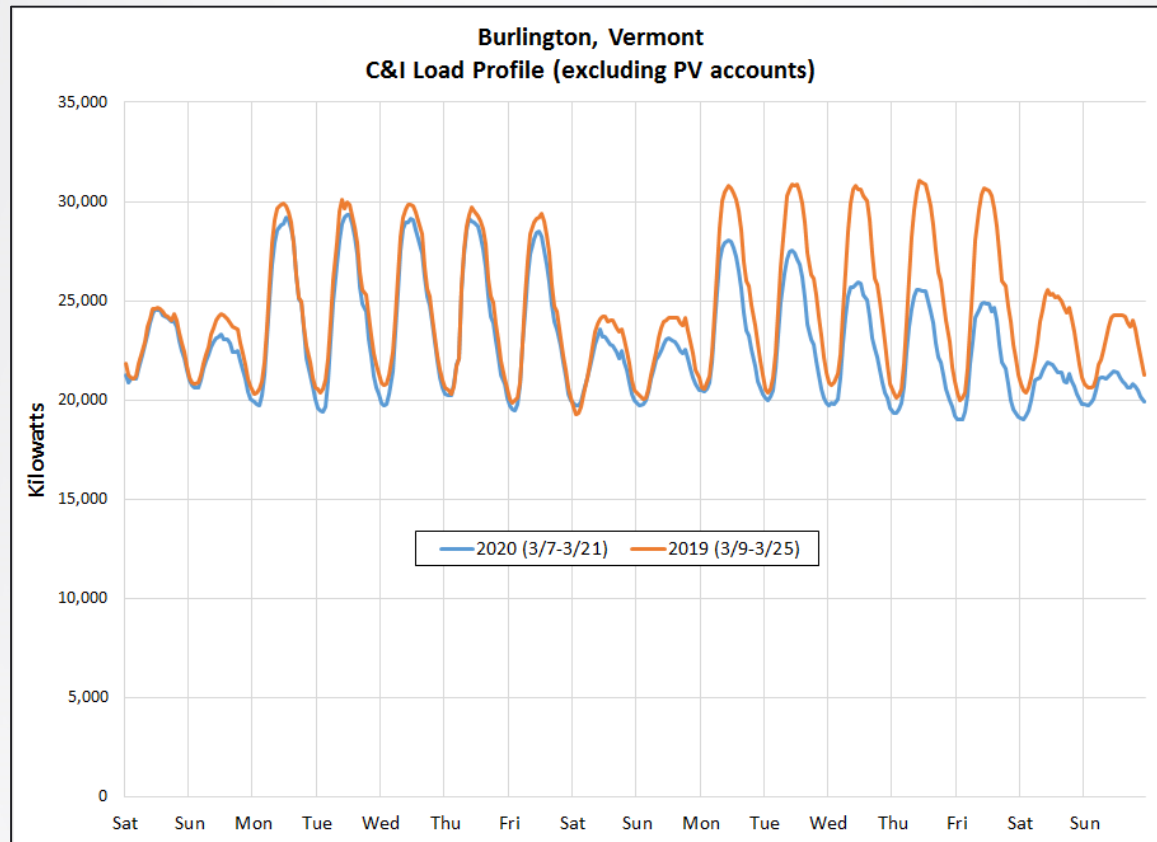
Time	2020	Typical (2016-2019)	2020 %drop
1	500	546	8%
2	487	530	8%
3	480	522	8%
4	479	523	8%
5	489	536	9%
6	515	576	11%
7	558	649	14%
8	580	690	16%
9	550	675	18%
10	504	645	22%
11	483	617	22%
12	462	598	23%
13	448	579	23%
14	448	571	21%
15	452	563	20%
16	471	567	17%
17	508	594	14%
18	578	642	10%
19	633	685	8%
20	648	708	9%
21	625	698	10%
22	596	663	10%
23	560	615	9%
24	521	569	8%



COVID 19 IMPACT

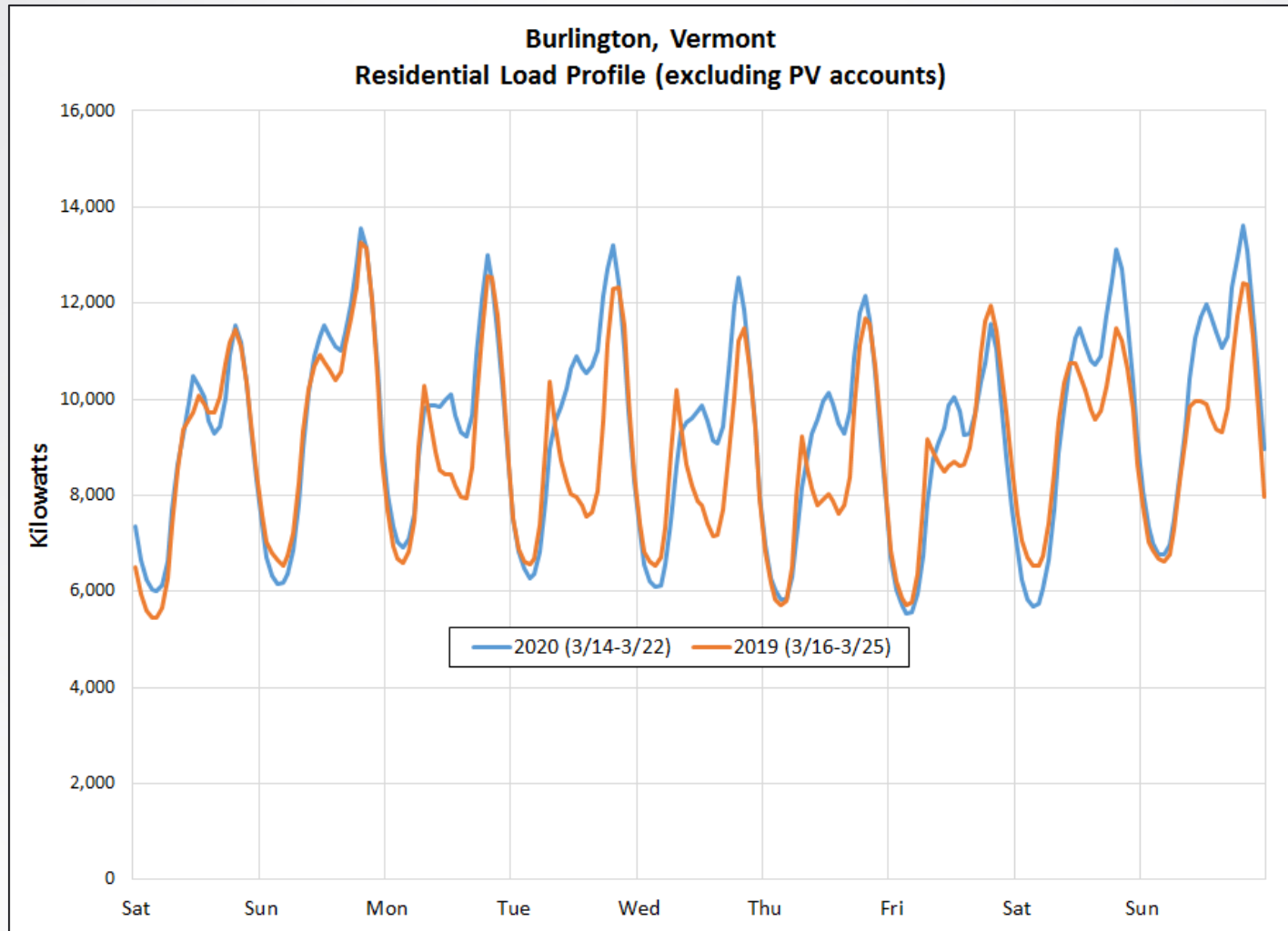
BURLINGTON ELECTRIC COMMERCIAL LOAD

March Comparison



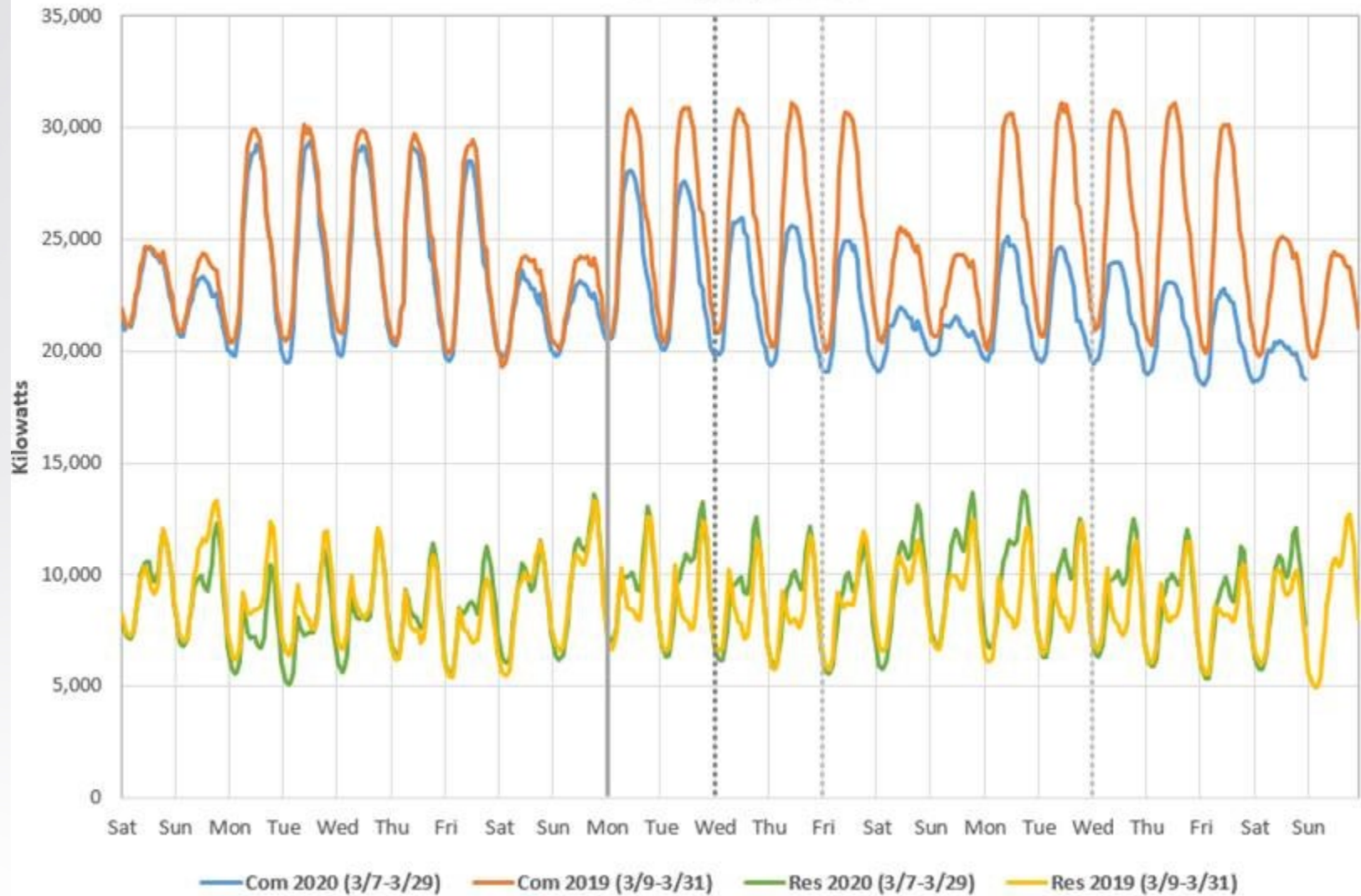
BURLINGTON ELECTRIC RESIDENTIAL LOAD

March Comparison



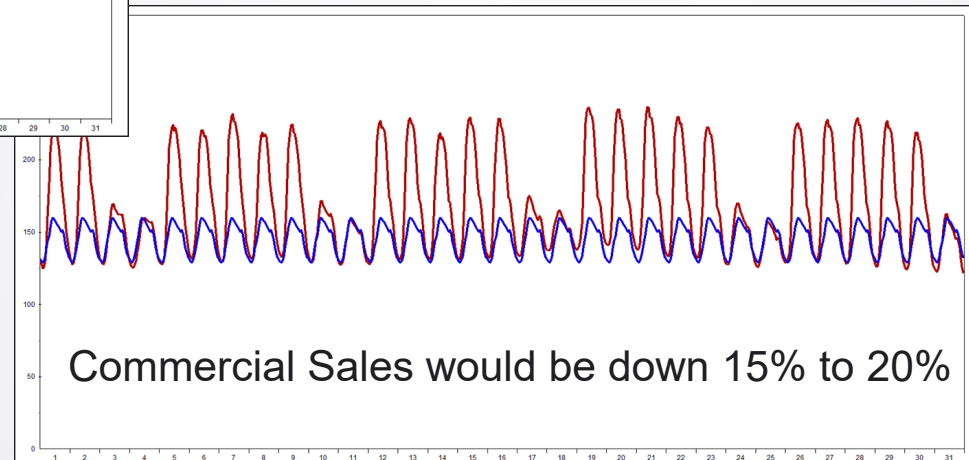
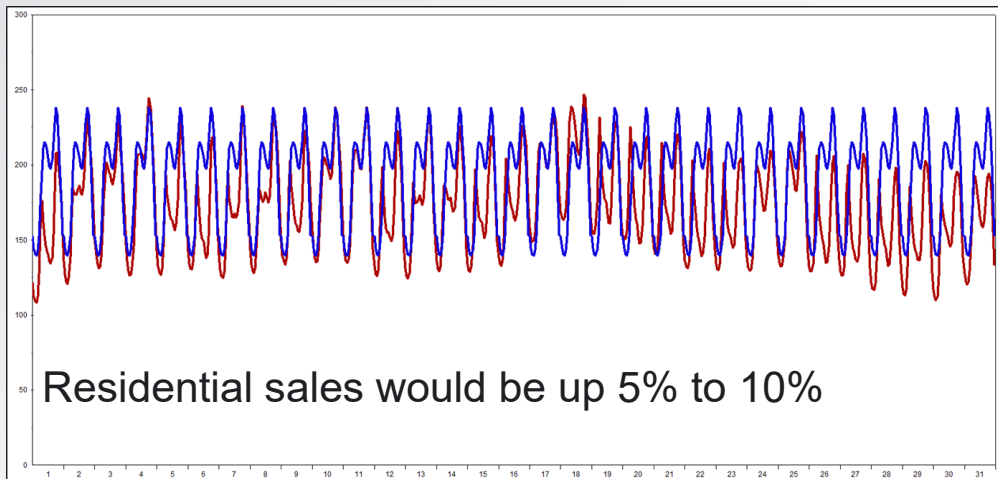
Residential & Commercial Load Profiles (excluding PV accounts)

Burlington, Vermont

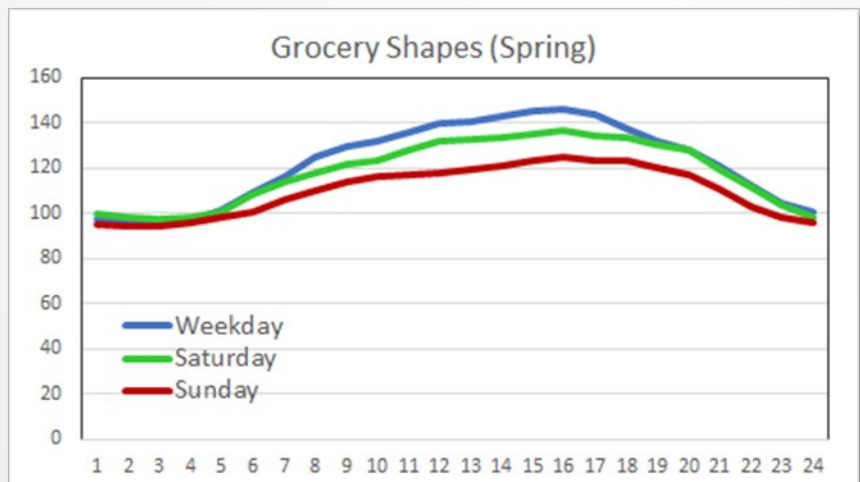
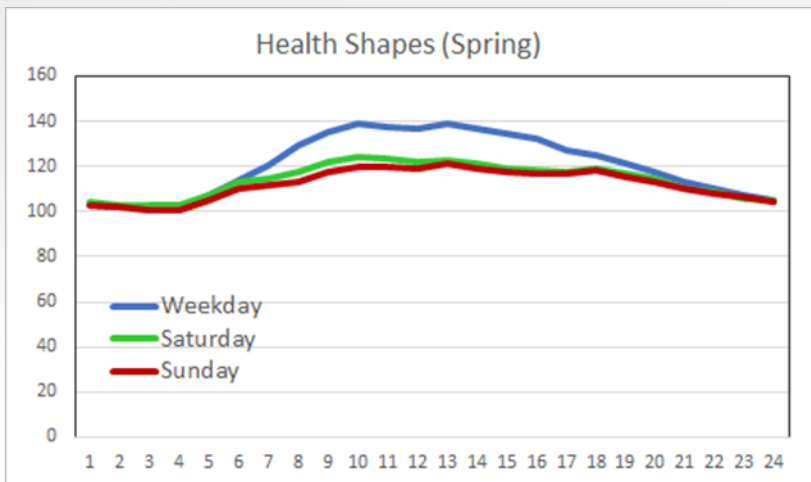
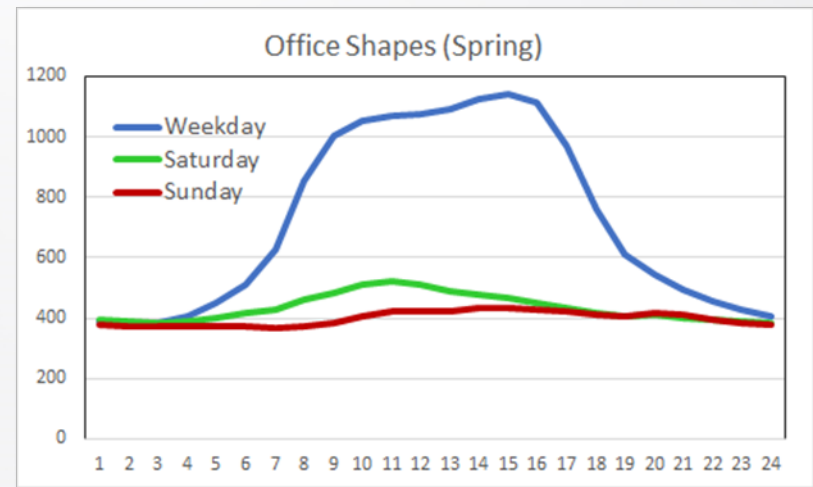
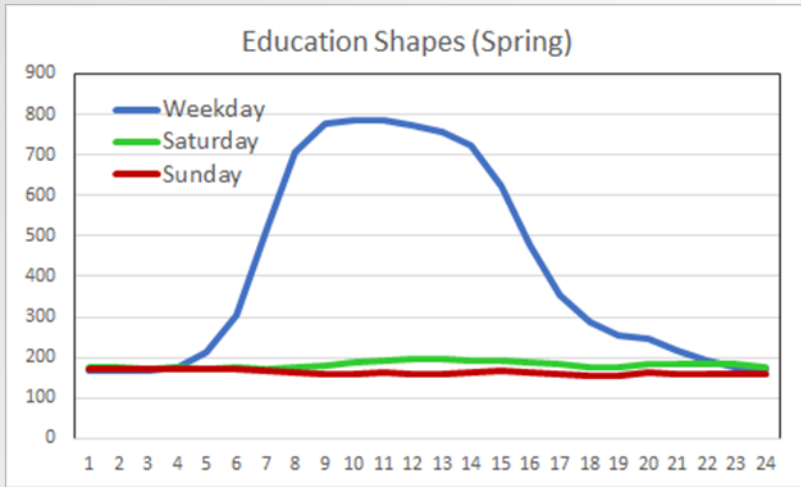


EVERY DAY IS A SUNDAY

- » Residential sales would be up 5% to 10%
- » Commercial sales would be down 15% to 20%



UTILIZE BUILDING-TYPE PROFILES

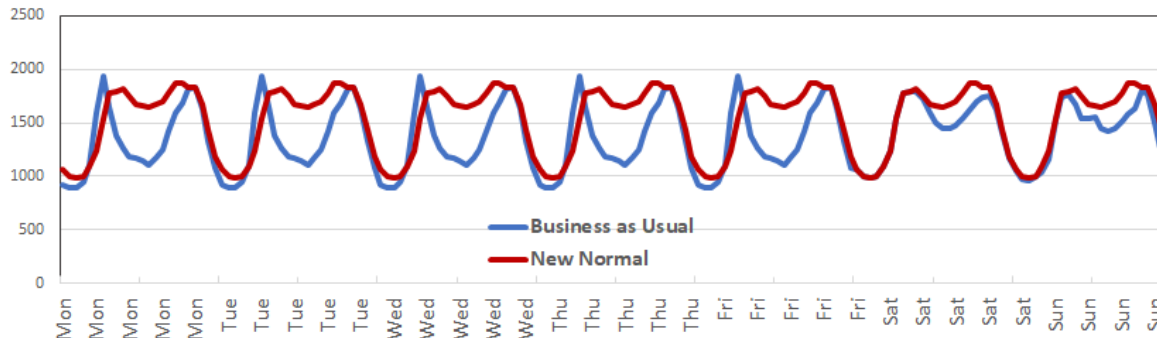


MODIFY PROFILES TO REFLECT OPERATION

- » Food Service – Closed except takeout
- » Retail – Many are closed, except big box stores, reduced hours
- » Services – Many are closed, working from home if possible
- » Schools - Closed
- » Warehouse – Open at some level to keep things moving
- » Lodging – No one is traveling unless necessary
- » Hospitals – Full operation

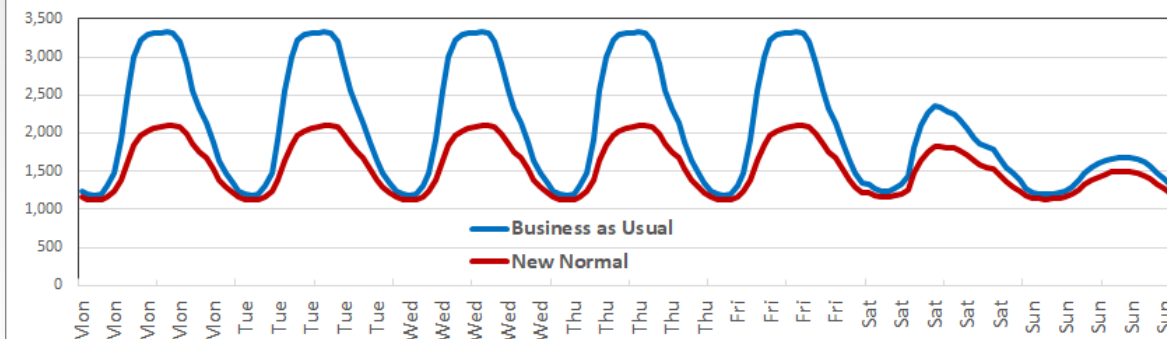
NEAR-TERM SCENARIO

Residential Spring Week -- Hourly Load



Multiplier	Value
Weekday Impact	1.15
Saturday Impact	1.05
Sunday Impact	1.09
7 Day Impact	1.13

Commercial Spring Week -- Hourly Load



Multiplier	Value
Weekday Impact	0.72
Saturday Impact	0.84
Sunday Impact	0.91
7 Day Impact	0.75