

<p style="text-align: center;">Report to the Utah Public Utility Commission</p> <p style="text-align: center;">Electric Service Reliability - Major Event Report UT-20-2</p>
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Event Date:	June 5, 2020
Date Submitted:	August 4, 2020
Primary Affected Locations:	Ogden/Tooele/Tremonton/Jordan Valley/SLC Metro
Primary Cause:	Weather – Wind Storm
Exclude from Reporting Status:	Yes
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Report Approved by:	Curtis Mansfield/Joshua Jones

Event Description and Restoration Summary

A storm system moved across the state of Utah beginning June 5, 2020, and extending over a three day period. The storm brought strong winds and precipitation to the region causing widespread outages to Rocky Mountain Power customers. The damage to company facilities resulted in 50,451 customer interruptions.

During the storm, wind gusts reached up to 60 mph, with the strongest wind gusts occurring on Friday afternoon into Saturday morning. The winds caused wires to wrap together, poles to blow down and tree branches to fall through power lines. This was followed by light rain, leading to pole fires due to dirt contamination from the wind storm. The pattern of wind followed by rain continued over a long period of time causing difficulty in restoration efforts. As crews began to restore service to customers, new outages would emerge and continue to grow.

Restoration efforts included line and vegetation crews which were dispatched to clear tree branches, tangled lines and repair fallen lines and poles. These outages ranged from circuit level outages to individual customer outages spread throughout the Wasatch Front region. Due to the volume of outages, a portion of the restoration efforts were supported by contract labor along the Wasatch Front. With the storm impacting much of the state, additional resources from other districts were not available due to widespread outages. In some cases, resources were also limited due to the COVID-19 pandemic such as the Tremonton offices where the entire staff was under quarantine and not available for restoration efforts. Additionally, due to the event lasting greater than 24 hours, periods of crew rest were required to ensure a safe working environment. Together these conditions led to labor resource shortages and extended outage durations.

One significant event occurred in the evening of June 5, 2020, when strong winds in the Ogden area caused two transmission structures to fall, causing the overhead conductor to collapse across I-15. This resulted in a pair of vehicle accidents, a brush fire, a closed freeway, and power outages to 2,063 customers. Crews responded quickly and were able to get the conductor off of the freeway and power restored within three hours 30 minutes.

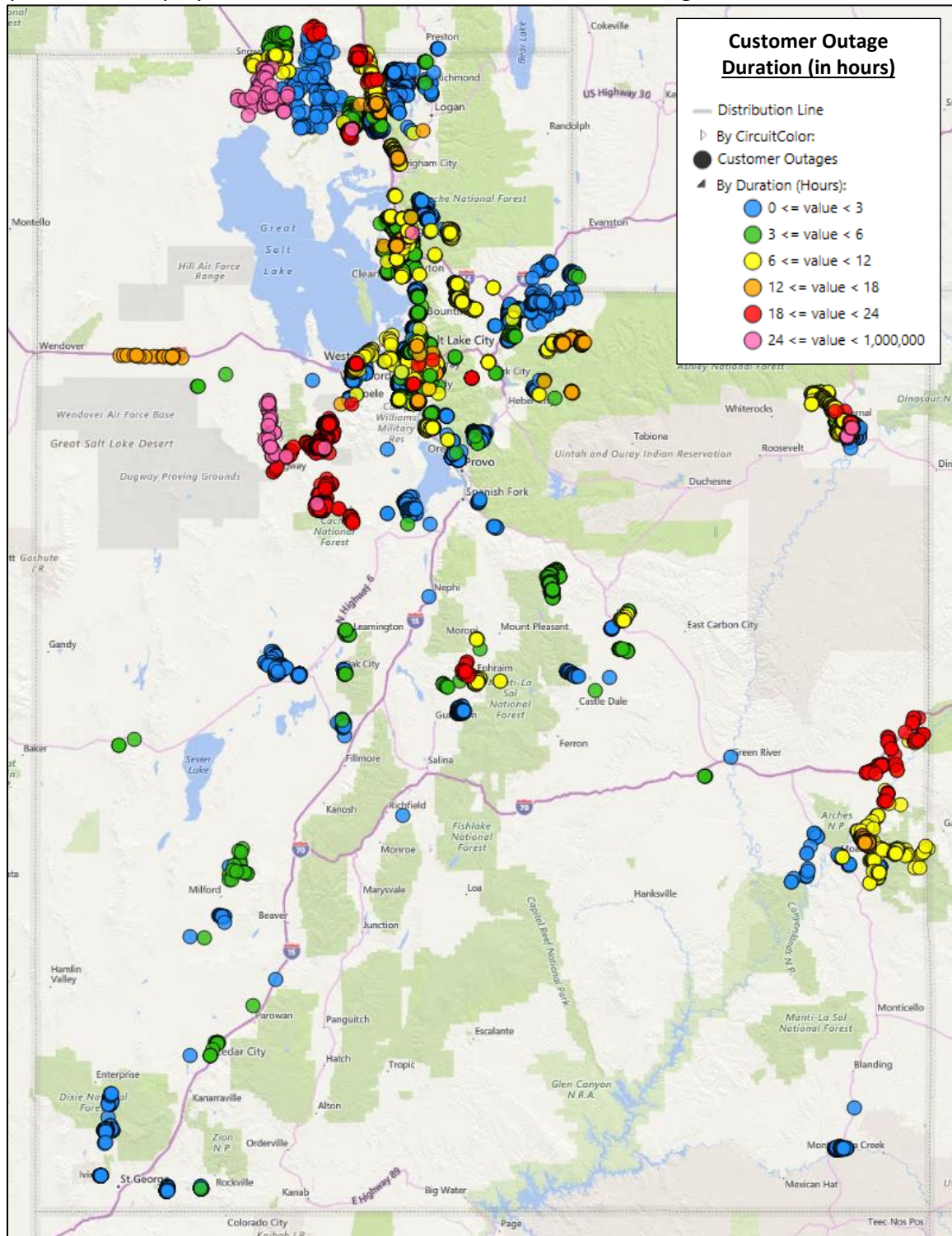
Another significant event occurred in the morning of June 6, 2020, near Tooele, when high winds caused 10 transmission structures to fall in a remote area and six distribution poles. The event impacted 1,573 customers with restoration efforts requiring extensive resources with limited options available for switching.

In the Vernal area, high winds and heavy rainfall downed many trees which fell onto overhead conductors breaking poles and cross arms, tearing down conductor and service wire. Crews repaired or replaced ten distribution poles, 15 crossarms, four transformers, and several spans of conductor. There were widespread outages that affected the whole basin area, but Naples was hit particularly hard, where over 3,000 customers were out at times. Restoration efforts began in the morning of June 6 and continued until Monday June 8 and involved two Rocky Mountain Power crews, two contract line crews and two trees crews.

To date, there have been no company or commission customer complaints made regarding the major event.

Event Outage Summary	
# Interruptions (sustained events)	519
Total Customer Interrupted (sustained events)	50,451
Total Customer Minutes Lost	12,259,314
State Event SAIDI Impact	12.85 minutes
CAIDI	243
Major Event Start	6/5/20 12:00 PM
Major Event End	6/8/20 6:42 PM

The graphic below displays the extent and duration of the event throughout the state.



Restoration Intervals

Total Customer Sustained Outage Events (entire major event period)	< 3 Hrs.	3 – 24 Hrs.	24+ Hrs.
50,451	26,323	24,075	53

Restoration Resources

Personnel Resources	
Internal Local Crewmembers	130
External (Contract) Crewmembers	43
Troubleman	12
Substation Crewmembers	12
Vegetation Crewmembers	6
Foreman	2
Administrative	2
Transportation	4
Warehouseman	10
Estimators	6
TOTAL	227

Materials	
# Poles (Distribution)	56
# Poles (Transmission)	14
Approximate Line Conductor (Feet)	35,413
# Transformers	9
# Crossarms	79
Insulators	432
Cutouts	113
Line fuses	3
Line splices	179
Guy Wire	6,275
Arrestors	44

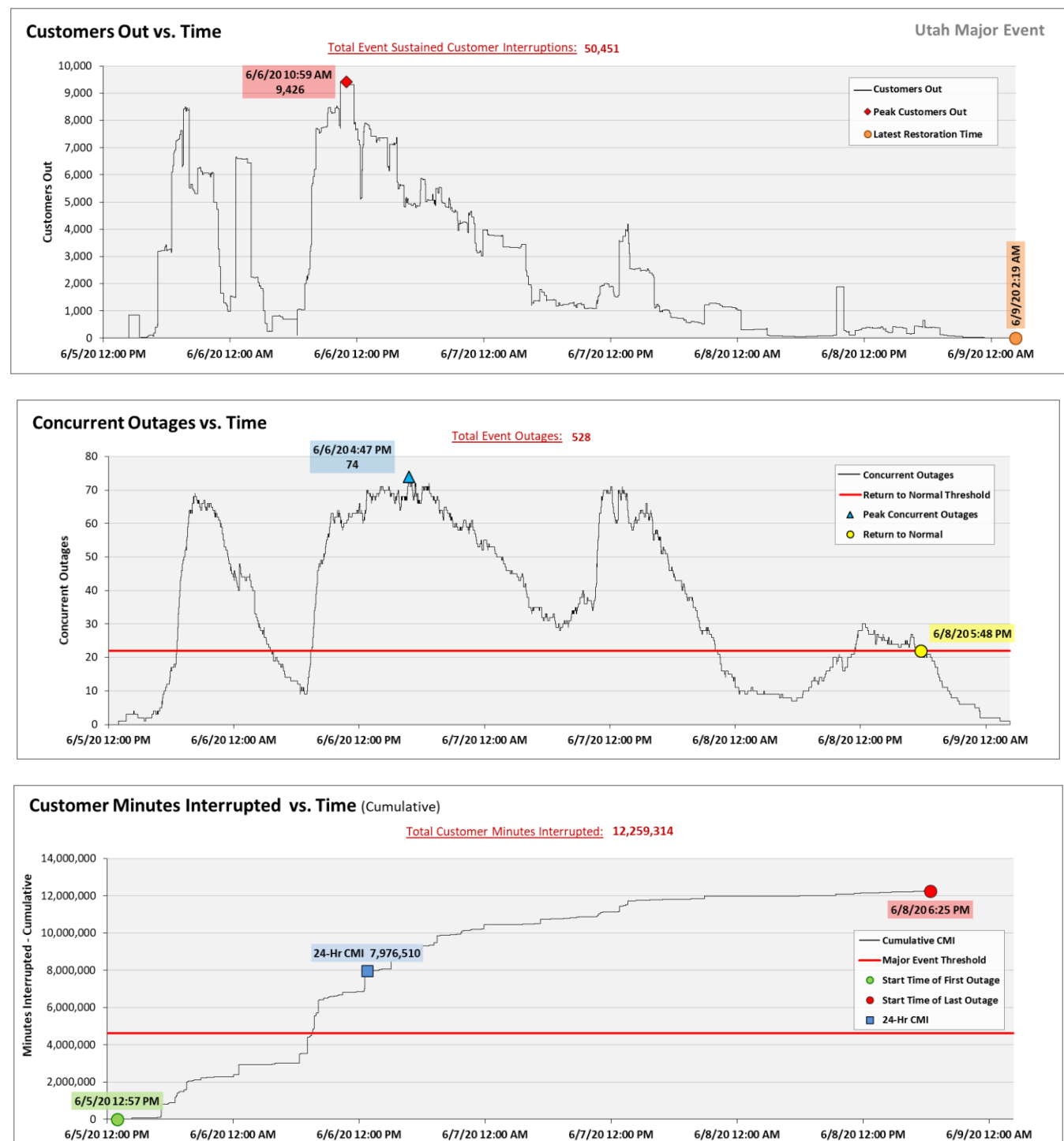
State Estimated Major Event Costs

Estimate \$	Labor	Contracts	Materials	Overheads	TOTAL
Capital	\$39,901	\$155,884	\$91,923	\$26,267	\$313,975
Expense	\$118,885	\$363,700	\$47,082	\$8,496	\$538,164
Total	\$158,787	\$519,584	\$139,005	\$34,763	\$852,139

Major Event Declaration

Rocky Mountain Power is requesting designation of these events and its consequences to be classified as a “Major Event” for exclusion from network performance reporting. This major event exceeded the Company’s current Utah threshold for customer minutes lost in a 24-hour period, consistent with Utah Administrative Code R746-313. The 2020 annual threshold for Utah is 4,614,773 (4.84 state SAIDI minutes).

Event Details



SAIDI, SAIFI, CAIDI by Reliability Reporting Region

Please see the attached system-generated reports.

PacifiCorp Major Event Report

Customer Analysis

Utah		Customer Analysis 6/5/20 12:00 PM through 6/8/20 6:42 PM					Customers Restored by Intervals								Major Event Metrics - metric by operating area customer counts		
<i>PacifiCorp</i> Major Events Report Customer Analysis*		Sustained Customers Off	% Sustained Customers Off	CML	Number of Sustained Interruptions	Customer Count	< 5 min	5 min - 3 hrs	3 hrs - 24 hrs	24 hrs - 48 hrs	48 hrs - 72 hrs	72 hrs - 96 hrs	96 + hrs	% Sustained Customers Restored in 3 Hours PS4	SAIDI	SAIFI	CAIDI
PC	PACIFICORP	50,451	3%	12,259,314	519	1,982,346	40,719	26,323	24,075	37	16	-	-	52%	6.18	0.025	243
RMP	Rocky Mountain Power	50,451	4%	12,259,314	519	1,183,049	40,719	26,323	24,075	37	16	-	-	52%	10.36	0.043	243
UT	Utah	50,451	5%	12,259,314	519	954,372	40,719	26,323	24,075	37	16	-	-	52%	12.85	0.053	243
UT	AMERICAN FORK	482	0%	85,571	22	114,373	9,076	367	115	-	-	-	-	76%	0.75	0.004	178
UT	CEDAR CITY	510	1%	54,729	13	35,637	234	434	76	-	-	-	-	85%	1.54	0.014	107
UT	CEDAR CITY (MILFORD)	997	36%	239,419	9	2,783	-	24	973	-	-	-	-	2%	86.03	0.358	240
UT	EVANSTON	24	3%	3,026	2	801	-	22	2	-	-	-	-	92%	3.78	0.030	126
UT	JORDAN VALLEY	7,781	3%	1,396,513	62	237,516	5,298	4,643	3,137	1	-	-	-	60%	5.88	0.033	179
UT	LAYTON	3,283	4%	525,715	20	74,224	4,235	2,163	1,120	-	-	-	-	66%	7.08	0.044	160
UT	MOAB	1,453	16%	302,803	23	9,030	729	1,063	390	-	-	-	-	73%	33.53	0.161	208
UT	OGDEN	9,724	9%	2,843,660	81	110,720	10,157	1,758	7,966	-	-	-	-	18%	25.68	0.088	292
UT	PARK CITY	1,791	5%	510,148	24	34,361	2,384	1,198	593	-	-	-	-	67%	14.85	0.052	285
UT	PRICE	736	7%	148,451	15	10,472	-	93	643	-	-	-	-	13%	14.18	0.070	202
UT	RICHFIELD	236	1%	90,282	14	15,805	-	129	107	-	-	-	-	55%	5.71	0.015	383
UT	RICHFIELD (DELTA)	217	6%	23,080	7	3,868	-	199	18	-	-	-	-	92%	5.97	0.056	106
UT	SLC METRO	8,937	4%	1,310,862	130	227,375	6,126	6,170	2,767	-	-	-	-	69%	5.77	0.039	147
UT	SMITHFIELD	834	3%	37,469	12	25,241	-	821	13	-	-	-	-	98%	1.48	0.033	45
UT	TOOELE	3,021	12%	1,830,758	25	24,945	2,474	512	2,509	-	-	-	-	17%	73.39	0.121	606
UT	TREMONTON	7,173	66%	1,572,732	29	10,947	-	5,396	1,741	20	16	-	-	75%	143.67	0.655	219
UT	VERNAL	3,252	25%	1,284,096	31	12,916	6	1,331	1,905	16	-	-	-	41%	99.42	0.252	395

*Only current event specific metric impact shown. Exempted planned outages are excluded from these values.

		Customer Interrupted by Date 6/5/20 12:00 PM through 6/8/20 6:42 PM					Customers Restored by Intervals								Major Event Metrics - metric by state customer counts		
Date*		Sustained Customers Off	% Sustained Customers Off	CML	Number of Sustained Interruptions	Average Customer Count	< 5 min	5 min - 3 hrs	3 hrs - 24 hrs	24 hrs - 48 hrs	48 hrs - 72 hrs	72 hrs - 96 hrs	96 + hrs	% Sustained Customers Restored in 3 Hours PS4	SAIDI	SAIFI	CAIDI
6/5/2020		12,814	1%	2,284,175	98	954,372	8,784	7,753	5,061	-	-	-	-	61%	2.39	0.010	178
6/6/2020		27,768	3%	8,159,918	205	954,372	23,028	13,048	14,668	36	16	-	-	47%	8.55	0.030	294
6/7/2020		6,689	1%	1,540,930	153	954,372	8,417	2,585	4,103	1	-	-	-	39%	1.61	0.010	230
6/8/2020		3,180	0%	274,291	63	954,372	490	2,937	243	-	-	-	-	92%	0.29	-	86

Data as of

PacifiCorp Major Event Report

SSC by State Analysis

Utah		Event 6/5/20 12:00 PM through 6/8/20 6:42 PM						Month 06/01/20 through 06/30/20						YTD FY2021 01/01/20 through 06/30/20					
		Major Events Included			Major Event Excluded			Major Events Included			Major Events Excluded*			Major Events Included			Major Events Excluded*		
PacifiCorp Major Events Report SSC by State		SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI
PC	PacifiCorp	6.18	0.025	243	-	-	-	11.69	0.073	160	5.50	0.048	116	34.99	0.260	135	21.80	0.206	106
RMP	Rocky Mountain Power	10.36	0.043	243	-	-	-	19.58	0.122	160	9.22	0.080	116	58.64	0.435	135	36.53	0.345	106
UT	Utah	12.85	0.053	243	-	-	-	24.27	0.152	160	11.43	0.099	116	72.69	0.539	135	45.29	0.427	106
UT	AMERICAN FORK	0.09	0.001	178	-	-	-	1.06	0.008	136	0.97	0.007	133	4.25	0.052	83	4.16	0.051	82
UT	CEDAR CITY	0.06	0.001	107	-	-	-	0.49	0.007	69	0.43	0.007	66	2.46	0.026	93	2.33	0.025	92
UT	CEDAR CITY (MILFORD)	0.25	0.001	240	-	-	-	0.29	0.001	243	0.04	0.000	266	0.85	0.005	164	0.60	0.004	145
UT	EVANSTON	0.00	0.000	126	-	-	-	0.03	0.000	203	0.03	0.000	219	0.05	0.000	195	0.05	0.000	203
UT	JORDAN VALLEY	1.46	0.008	179	-	-	-	6.48	0.055	118	5.01	0.047	107	11.90	0.106	113	10.42	0.097	107
UT	LAYTON	0.55	0.003	160	-	-	-	1.10	0.010	116	0.55	0.006	91	2.72	0.030	90	2.17	0.027	81
UT	MOAB	0.32	0.002	208	-	-	-	0.47	0.003	173	0.15	0.001	128	0.66	0.004	146	0.34	0.003	114
UT	MONTPELIER	-	-	-	-	-	-	0.00	0.000	147	0.00	0.000	147	0.07	0.001	140	0.07	0.001	140
UT	OGDEN	2.98	0.010	292	-	-	-	3.78	0.019	196	0.80	0.009	89	9.18	0.067	138	6.20	0.056	110
UT	PARK CITY	0.53	0.002	285	-	-	-	0.82	0.003	235	0.28	0.002	176	3.19	0.022	148	2.65	0.020	135
UT	PRICE	0.16	0.001	202	-	-	-	0.24	0.002	153	0.08	0.001	106	1.35	0.012	111	1.20	0.011	105
UT	RICHFIELD	0.09	0.000	383	-	-	-	0.31	0.002	148	0.21	0.002	116	0.88	0.008	112	0.78	0.008	103
UT	RICHFIELD (DELTA)	0.02	0.000	106	-	-	-	0.41	0.002	216	0.39	0.002	231	0.68	0.003	199	0.66	0.003	206
UT	SLC METRO	1.37	0.009	147	-	-	-	3.36	0.022	155	1.99	0.012	161	24.68	0.158	157	9.99	0.093	107
UT	SMITHFIELD	0.04	0.001	45	-	-	-	0.07	0.001	64	0.03	0.000	127	0.43	0.006	68	0.39	0.005	71
UT	TOOELE	1.92	0.003	606	-	-	-	2.28	0.006	402	0.36	0.003	144	5.41	0.022	247	2.37	0.015	156
UT	TREMONTON	1.65	0.008	219	-	-	-	1.72	0.008	216	0.07	0.000	165	2.45	0.013	184	0.80	0.006	139
UT	VERNAL	1.35	0.003	395	-	-	-	1.36	0.004	378	0.02	0.000	96	1.48	0.004	352	0.11	0.001	153

*Operating areas are calculated by the state frozen customer count metrics. Exempted planned outages are excluded from these values.

Data as/of
10/6/2020