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March 3, 2021

VIA ELECTRONIC FILING

Utah Public Service Commission
Heber M. Wells Building, 4th Floor
160 East 300 South
Salt Lake City, UT 84114

Attention: Gary Widerburg
Commission Administration

RE: **Docket No. 21-035-15**
Major Event Report for September 7 - 16, 2020

Rocky Mountain Power is requesting major event exclusion for the events related to a severe windstorm on September 7, 2020, causing widespread outages in the greater Salt Lake City area.

The attached provides details including costs incurred, restoration resources, number of customers off supply, customer minutes lost, and SAIDI, SAIFI, CAIDI figures.

Upon Commission approval, Rocky Mountain Power will exclude outage information for these events from its network performance reporting and from customer guarantee failure payments.

Informal inquiries may be made to Jana Saba at (801) 220-2823 or Russ Updike, Director Regional Investment Delivery, at (801) 220-2478.

Sincerely,

Joelle Steward
Vice President, Regulation

Enclosures



REPORT TO THE PUBLIC SERVICE COMMISSION OF UTAH
ELECTRIC SERVICE RELIABILITY – MAJOR EVENT REPORT UT-20-3

Event Date: September 7-16, 2020
Date Submitted: March 3, 2021
Primary Affected Locations: Northern Utah
Primary Cause: Weather – Windstorm
Exclude From Reporting Status: Yes
Report Prepared By: Brett Carleton/Chase Talbot
Report Approved By: Curtis Mansfield/Russ Updike

Event Description and Restoration Summary

On the afternoon of September 7, 2020, a surge of cold air from Canada unleashed damaging winds in northern Utah. Wind gusts measured 99 mph in Farmington and 112 mph in Salt Lake City at the University of Utah, with east downslope winds of 60 to 90 mph that continued throughout the day September 8, 2020. The high winds caused trees to fall, lines to tangle and equipment to fail. The event impacted 373,674 customers in northern Utah and outages lasted multiple days due to the widespread damage. The peak of the outages occurred the morning of September 8, 2020 when 203,930 Rocky Mountain Power customers were without service.

On September 7, 2020, the National Weather Service forecast that a dry cold front would move across northern Utah with northwest gusts of 45 mph. Later that evening, at 11:52 p.m., the National Weather Service updated their forecast with strong downslope winds from the east that would impact the Wasatch Front around 3:00 a.m. At 12:00 a.m. September 8, 2020, Rocky Mountain Power placed its emergency operations center on alert. The emergency operations center was activated at 4:30 a.m. September 8, 2020 and remained active until it was suspended September 15, 2020, at 5:17 p.m.

The strong winds uprooted trees, damaged equipment and caused lines to fall. Aerial restoration efforts were hampered as wind gusts continued through September 8, 2020. Restoration efforts were prioritized to restore as many customers as possible. A large uprooted tree tore down the fiber communication ring on the East Bench, resulting in a loss of communication to multiple substations. Due to the extent of the damage across the system, resources were sent out to record and update dispatch with the status of the system. At the end of September 8, service had been restored to 163,217 customers. Once the winds calmed September 9, Rocky Mountain Power focused on mainline restoration, which reconnected an additional 98,638 customers. The emphasis September 10 through September 11 was on lateral tap restorations, which restored 66,856 customers. The final phase was reconnecting secondary and service lines to individual homes.

Much of the system damage occurred in back lots, which impacted assessment and restoration efforts. Restoration efforts were divided into four stages. The first stage was to assess the damage; this stage was conducted by a circuit captain, engineer or estimator. The second phase was tree removal activity, which required the use of cranes in most locations. The third stage involved the primary system rebuild, which required cranes and/or hand-carrying poles into backyards. And finally, in the last stage, secondary and service rebuild.

Internal crews from southern Utah that were not impacted by the storm were brought in to help with restoration efforts. The windstorm also impacted Rocky Mountain Power service territory in Idaho and Wyoming. After three days, resources from Idaho and Wyoming moved into northern Utah to assist with the restoration effort. Rocky Mountain Power requested external mutual assistance was requested and personnel from MidAmerican Energy, NV Energy, and utility contractor INTREN were deployed to help. The company also requested support through the Western Region Mutual Assistance Group, but regional wildfire and storms delayed mutual assistance and the request was ultimately terminated. In total, Rocky Mountain Power had 893 personnel assisting in restoration efforts including 189 internal crew members, 227 vegetation crew members, 125 company contract crew members, 42 crew members from MidAmerican Energy, 28 crew members from NV Energy, and 15 crew members from INTREN helping to restore power to customers.

To date, there have been two company and 23 commission customer complaints made regarding this major event.

Below are some photographs of the devastation and resulting restoration activity.

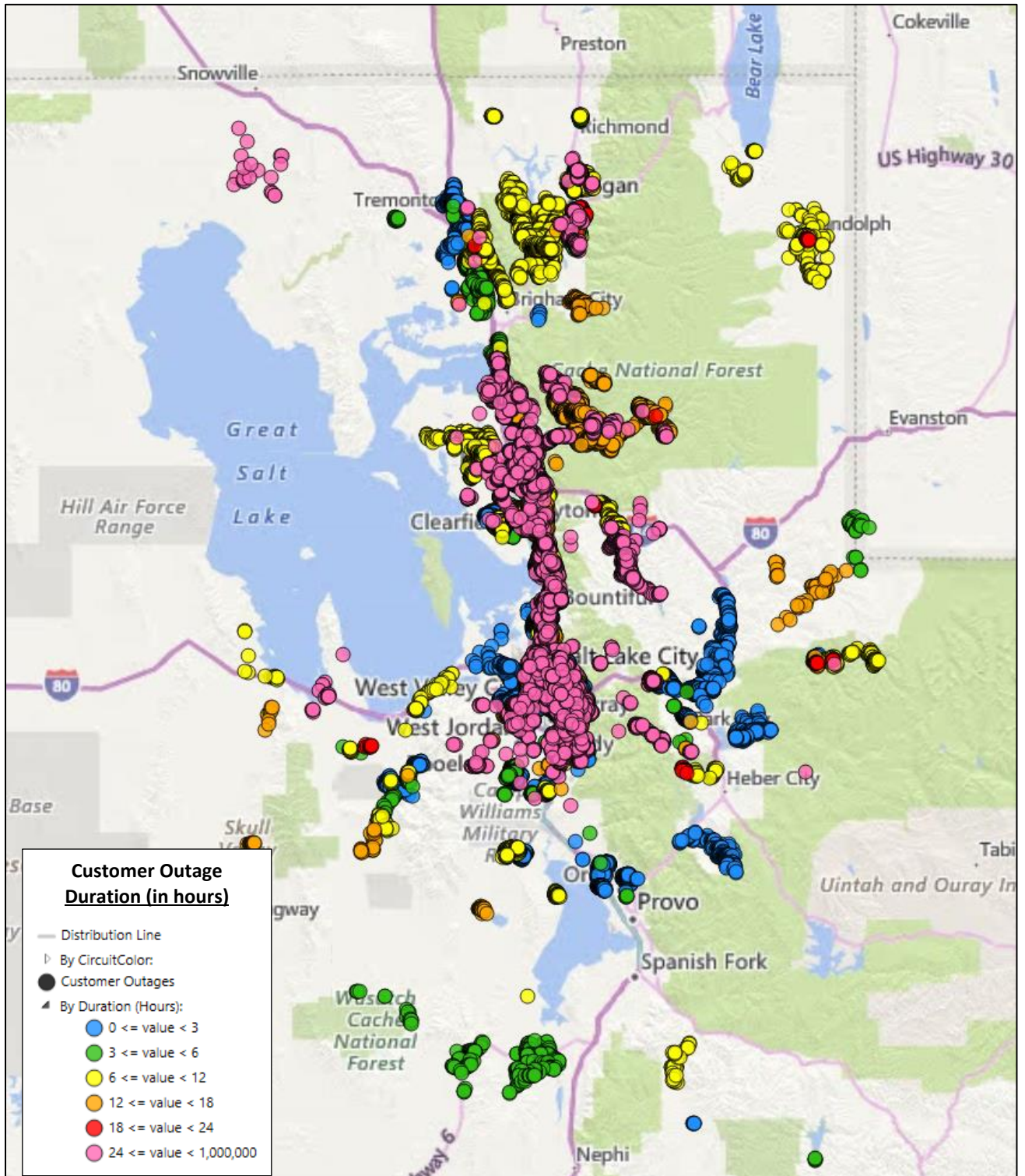






Event Outage Summary	
# Interruptions (sustained events)	3,811
Total Customer Interrupted (sustained events)	373,674
Total Customer Minutes Lost	523,700,243
State Event SAIDI Impact	548.7 minutes
CAIDI	1,401
Major Event Start	9/7/20 12:00 p.m.
Major Event End	9/16/20 8:42 p.m.

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.	1 – 2 Days	2 – 3 Days	3 – 4 Days	4+ Days
373,674	62,551	184,824	74,611	28,942	13,304	9,442

Restoration Resources ¹

Personnel Resources	
Internal Local Crew Members	189
External (Contract) Crew Members	249
Troublemakers	43
Substation Crew Members	23
Vegetation Crew Members	227
Foremen	56
Administrative	5
Support Staff	38
Warehousemen	30
Estimators	33
TOTAL	893

Materials	
# Poles (Distribution)	465
# Poles (Transmission)	9
Approximate Line Conductor (Feet)	292,938
# Transformers	170
# Crossarms	543
Insulators	3,371
Cutouts	801
Line Fuses	2,095
Line Splices	13,589
Guy Wire	381
Arresters	552
Helicopters	1

State Estimated Major Event Costs

Estimate \$	Labor	Contracts	Materials	Overheads	TOTAL
Capital	\$686,122	\$3,520,634	\$685,095	\$541,823	\$5,433,674
Expense	\$3,940,554	\$5,010,865	\$639,024	\$118,759	\$9,709,202
Total	\$4,626,676	\$8,531,499	\$1,324,119	\$660,582	\$15,142,876

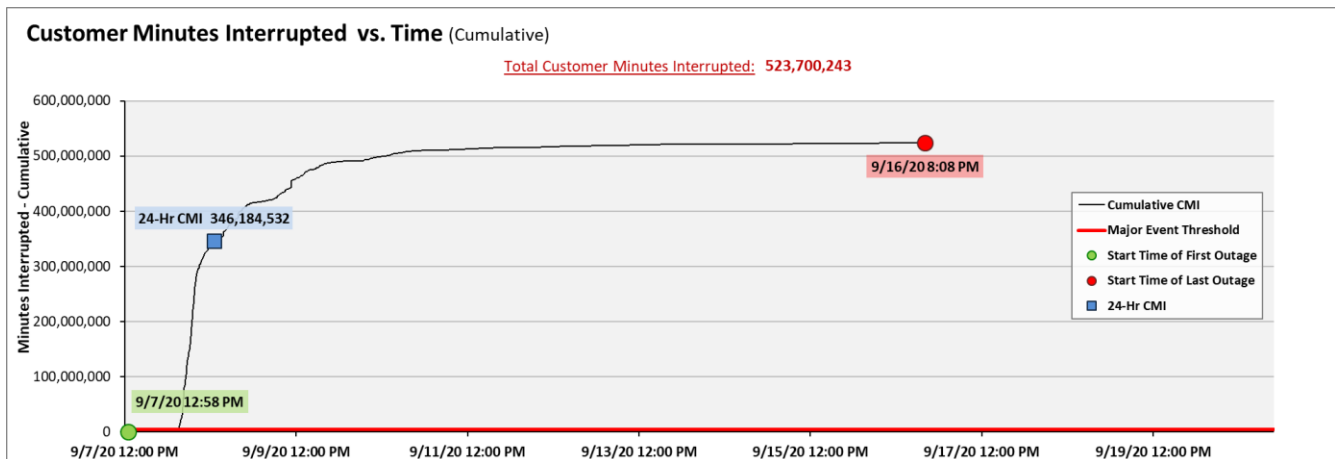
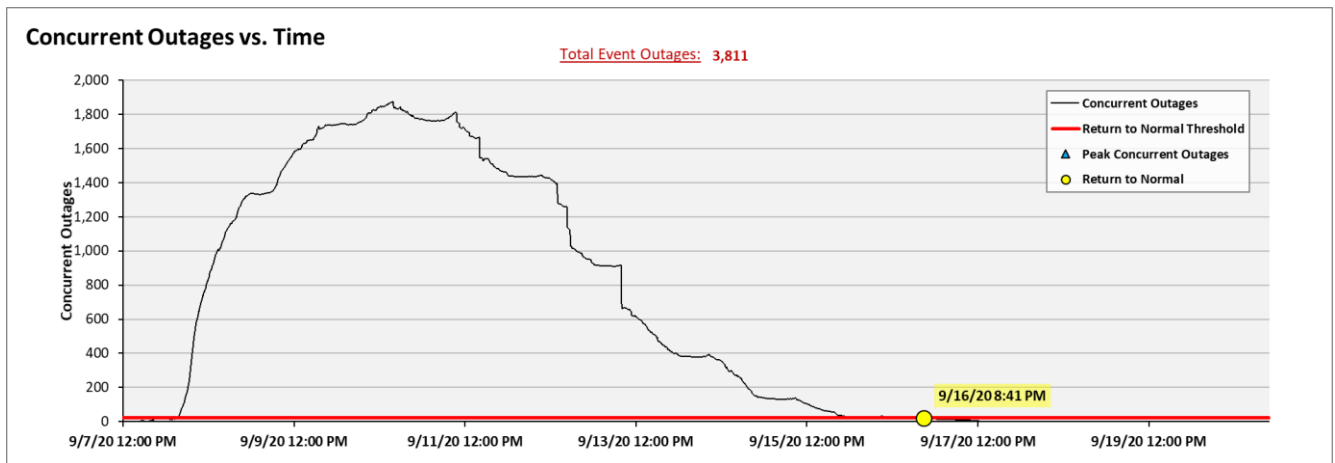
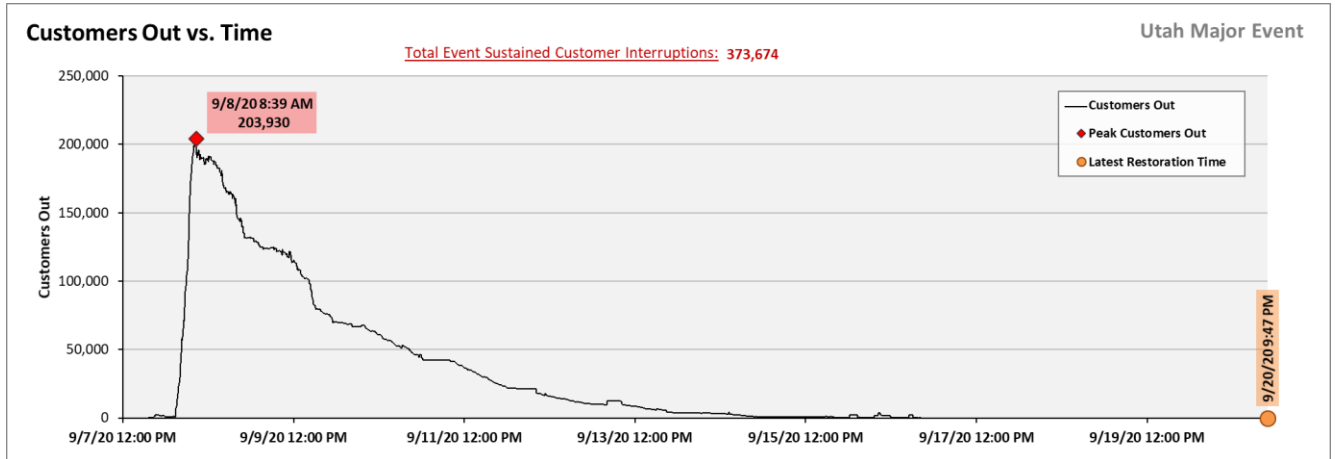
¹ Data provided represents specific system records for personnel, resources and costs; and is specific to the event, not inclusive of state delineation. However, additional resources whose participation was not individually captured in transaction recording systems were used during the event. Thus, the data presented here may not fully capture the resources, including cost, involved in restoring the system.



Major Event Declaration

Rocky Mountain Power is requesting designation of these events and their 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 9/7/20 12:00 PM through 9/16/20 8:42 PM					Customers Restored by Intervals									Major Event Metrics - metric by operating area customer counts		
<i>PacifiCorp Major Events Report Customer Analysis*</i>		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	373,674	19%	523,700,243	3,802	1,982,346	206,099	62,551	184,824	74,611	28,942	13,304	9,442	17%	264.18	0.190	1,401	
RMP	Rocky Mountain Power	373,674	32%	523,700,243	3,802	1,183,049	206,099	62,551	184,824	74,611	28,942	13,304	9,442	17%	442.67	0.320	1,401	
UT	Utah	373,674	39%	523,700,243	3,802	954,372	206,099	62,551	184,824	74,611	28,942	13,304	9,442	17%	548.74	0.390	1,401	
UT	AMERICAN FORK	7,317	6%	1,324,358	34	114,373	5,827	5,676	1,641	-	-	-	-	78%	11.58	0.060	181	
UT	CEDAR CITY	208	1%	30,489	14	35,637	-	175	33	-	-	-	-	84%	0.86	0.010	147	
UT	CEDAR CITY (MILFORD)	6	0%	531	5	2,783	-	5	1	-	-	-	-	83%	0.19	-	88	
UT	EVANSTON	493	62%	209,147	5	801	-	-	493	-	-	-	-	0%	261.11	0.620	424	
UT	JORDAN VALLEY	26,393	11%	45,498,425	514	237,516	21,110	4,962	8,568	7,454	2,977	908	1,524	19%	191.56	0.110	1,724	
UT	LAYTON	41,851	56%	29,734,611	260	74,224	55,097	7,826	28,178	5,039	678	124	6	19%	400.61	0.560	710	
UT	MOAB	46	1%	20,855	2	9,030	-	-	46	-	-	-	-	0%	2.31	0.010	453	
UT	MONTPELIER	54	2%	26,999	4	3,358	-	-	54	-	-	-	-	0%	8.04	0.020	500	
UT	OGDEN	81,670	74%	148,965,695	814	110,720	26,907	10,396	37,110	15,679	10,770	4,321	3,394	13%	1,345.43	0.740	1,824	
UT	PARK CITY	1,466	4%	973,310	48	34,361	5,551	209	1,231	26	-	-	-	14%	28.33	0.040	664	
UT	PRICE	200	2%	85,272	12	10,472	-	13	187	-	-	-	-	7%	8.14	0.020	426	
UT	RICHFIELD	81	1%	8,635	7	15,805	-	81	-	-	-	-	-	100%	0.55	0.010	107	
UT	RICHFIELD (DELTA)	115	3%	10,431	3	3,868	-	115	-	-	-	-	-	100%	2.70	0.030	91	
UT	SLC METRO	187,553	82%	286,457,418	1,912	227,375	88,864	21,779	93,220	45,568	14,517	7,951	4,518	12%	1,259.85	0.820	1,527	
UT	SMITHFIELD	15,525	62%	7,988,970	73	25,241	1,787	4,614	10,122	789	-	-	-	30%	316.51	0.620	515	
UT	TOOELE	3,687	15%	738,658	37	24,945	156	2,824	840	23	-	-	-	77%	29.61	0.150	200	
UT	TREMONTON	5,673	52%	1,325,147	34	10,947	800	3,690	1,950	33	-	-	-	65%	121.05	0.520	234	
UT	VERNAL	1,336	10%	301,293	24	12,916	-	186	1,150	-	-	-	-	14%	23.33	0.100	226	

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

PacifiCorp Major Event Report

Customer Analysis

Date*	Customer Interrupted by Date 9/7/20 12:00 PM through 9/16/20 8:42 PM					Customers Restored by Intervals								Major Event Metrics - metric by state customer counts		
	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
9/7/2020	3,375	0%	527,775	38	954,372	3,849	2,370	997	7	1	-	-	70%	0.55	-	156
9/8/2020	291,169	31%	414,520,319	1,536	954,372	164,954	36,822	157,026	60,383	18,576	10,607	7,755	13%	434.34	0.310	1,424
9/9/2020	37,706	4%	75,156,906	740	954,372	11,180	5,661	12,583	7,644	8,418	2,035	1,365	15%	78.75	0.040	1,993
9/10/2020	14,426	2%	20,220,641	471	954,372	5,956	3,933	3,918	4,435	1,329	555	256	27%	21.19	0.020	1,402
9/11/2020	4,074	0%	4,964,567	352	954,372	3,559	742	1,933	982	271	90	56	18%	5.20	-	1,219
9/12/2020	4,270	0%	3,323,192	196	954,372	4,873	2,077	1,391	504	272	17	9	49%	3.48	-	778
9/13/2020	5,223	1%	2,590,135	170	954,372	2,532	1,324	3,324	500	75	-	-	25%	2.71	0.010	496
9/14/2020	2,943	0%	770,536	141	954,372	8,441	2,096	731	116	-	-	-	71%	0.81	-	262
9/15/2020	2,102	0%	488,198	84	954,372	631	1,283	780	39	-	-	-	61%	0.51	-	232
9/16/2020	8,386	1%	1,137,975	74	954,372	124	6,243	2,141	1	-	-	1	74%	1.19	0.010	136

Data as of
2/23/2021

PacifiCorp Major Event Report

SSC by State Analysis

Utah		Event 9/7/20 12:00 PM through 9/16/20 8:42 PM						Month 09/01/20 through 09/30/20						YTD FY2021 01/01/20 through 09/30/20					
		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	264.18	0.189	1,401	-	-	-	267.98	0.217	1,237	3.81	0.028	136	315.89	0.583	541	38.52
RMP	Rocky Mountain Power	442.67	0.316	1,401	-	-	-	449.04	0.363	1,237	6.38	0.047	136	529.31	0.978	541	64.54	0.571	113
UT	Utah	548.73	0.392	1,401	-	-	-	556.64	0.450	1,237	7.90	0.058	136	656.14	1.212	541	80.00	0.708	113
UT	AMERICAN FORK	1.39	0.008	181	-	-	-	1.72	0.012	142	0.34	0.004	75	7.89	0.081	97	6.42	0.073	88
UT	CEDAR CITY	0.03	0.000	147	-	-	-	0.43	0.004	118	0.40	0.003	116	3.53	0.036	97	3.37	0.035	95
UT	CEDAR CITY (MILFORD)	0.00	0.000	88	-	-	-	0.01	0.000	290	0.00	0.000	391	0.89	0.006	161	0.64	0.004	143
UT	EVANSTON	0.22	0.001	424	-	-	-	0.22	0.001	423	0.00	0.000	185	0.28	0.001	313	0.06	0.000	162
UT	JORDAN VALLEY	47.67	0.028	1,724	-	-	-	49.97	0.037	1,359	2.30	0.009	252	68.62	0.190	361	19.46	0.154	126
UT	LAYTON	31.16	0.044	710	-	-	-	32.02	0.050	641	0.87	0.006	142	36.18	0.095	382	4.47	0.047	94
UT	MOAB	0.02	0.000	453	-	-	-	0.03	0.000	322	0.01	0.000	194	2.09	0.016	128	1.75	0.015	118
UT	MONTPELIER	0.03	0.000	500	-	-	-	0.03	0.000	483	0.00	0.000	168	0.45	0.003	150	0.42	0.003	143
UT	OGDEN	156.08	0.086	1,824	-	-	-	157.58	0.094	1,673	1.50	0.009	174	169.12	0.180	942	10.06	0.084	120
UT	PARK CITY	1.02	0.002	664	-	-	-	1.26	0.004	333	0.24	0.002	107	6.34	0.042	150	4.78	0.039	123
UT	PRICE	0.09	0.000	426	-	-	-	0.09	0.000	326	0.00	0.000	53	1.62	0.014	118	1.37	0.013	108
UT	RICHFIELD	0.01	0.000	107	-	-	-	0.07	0.001	106	0.06	0.001	106	2.10	0.023	91	2.00	0.023	88
UT	RICHFIELD (DELTA)	0.01	0.000	91	-	-	-	0.02	0.000	113	0.01	0.000	180	0.73	0.004	190	0.69	0.003	199
UT	SLC METRO	300.15	0.197	1,527	-	-	-	301.99	0.219	1,382	1.83	0.022	83	333.39	0.425	784	18.55	0.164	113
UT	SMITHFIELD	8.37	0.016	515	-	-	-	8.39	0.016	512	0.02	0.000	194	9.59	0.031	309	1.18	0.014	85
UT	TOOELE	0.77	0.004	200	-	-	-	0.96	0.004	220	0.18	0.000	369	6.66	0.030	221	2.83	0.019	146
UT	TREMONTON	1.39	0.006	234	-	-	-	1.52	0.007	224	0.13	0.001	155	4.39	0.023	191	1.35	0.009	143
UT	VERNAL	0.32	0.001	226	-	-	-	0.33	0.001	222	0.02	0.000	172	2.29	0.012	188	0.60	0.007	83

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

Data as/of
2/23/2021

CERTIFICATE OF SERVICE

Docket No. 21-035-15

I hereby certify that on March 3, 2021, a true and correct copy of the foregoing was served by electronic mail to the following:

Utah Office of Consumer Services

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Rocky Mountain Power

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Katie Savarin
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