

April 11, 2023

***VIA ELECTRONIC FILING***

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

Attention: Gary Widerburg  
Commission Administration

RE: **Docket No. 23-035-19**  
Major Event Report for March 10-11, 2023

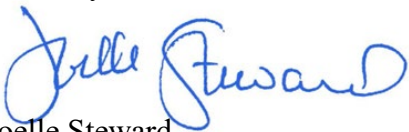
Rocky Mountain Power submits a request for a major event exclusion for the snowstorm in the Salt Lake City metro and Jordan Valley areas of Utah on March 10-11, 2023, which exceeded the Commission approved threshold for customer minutes lost in a 24-hour period.

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 Alex Vaz, Director of Asset Management, at (801) 220-2112.

Sincerely,



Joelle Steward  
Senior Vice President, Regulation and Customer and Community Solutions

Enclosures

**Report to the Utah Public Utility Commission  
Electric Service Reliability  
Major Event Report for March 10-11, 2023**

Event Date:	March 10-11, 2023
Date Submitted:	April 11, 2023
Primary Affected Locations:	SLC Metro and Jordan Valley, Utah
Primary Cause:	Loss of Transmission and Windstorm
Exclude from Reporting Status:	Yes
Report Prepared by:	Tia Solis
Report Approved by:	Kevin Benson and Alex Vaz

**Event Description and Restoration Summary**

From March 10<sup>th</sup>, 2023, into March 11<sup>th</sup>, 2023, Utah experienced a weather system combined with an atmospheric river weather feature across Utah to yield a strong event that began early on the 10<sup>th</sup>. Atmospheric rivers compromise of two components: anomalous atmospheric moisture content and strong winds both aloft and at the surface. In this event, the strong winds were present both aloft (in the middle part of the atmosphere) and at the surface. As a result, strong winds were observed beginning early on the 10<sup>th</sup>, through the evening hours. Restoration efforts were challenging due to the wind gusts, crews would make repairs then debris and trees would fall, taking service back offline.

In addition to the windstorm, a second factor leading to power outages occurred from a car hitting a transmission pole in the late evening of March 10<sup>th</sup>, resulting in the loss of Kearns Substation, and impacting approximately 15,000 customers. Power was restored to most customers within 3 hours. The remaining customers were restored after evaluating the situation and removing hazards from the public way. The transmission pole, with distribution underbuild, had to be replaced before all customers were finally restored.

The storm related outage restoration was coordinated locally in the field with line maintenance workers and vegetation crews clearing branches, debris and making repairs to local distribution lines and restoring power by replacing blown junction fuses. The vehicle accident was

able to be restored through SCADA switching in the substation and local switching in the field. Field crews needed to first clear the lines from the roadway before allowing SCADA and field switching to restore customers. Local Salt Lake County vegetation and line maintenance workers, both internal and contracted, were able to handle the volume of outages. No outside resources were brought in to support restoration efforts.

Approximately 27,347 sustained customers were affected with outage durations ranging from 1 minute to 23 hours and 57 minutes. Customer outages peaked March 10, 2023, with 15,277 customers out of service. During the event approximately 29% of customer minutes lost and 37% of all customer outages were the result of damages from weather effects to equipment and downed trees, while approximately 64% of customer minutes lost and 55% of customer outages were the result of loss of transmission lines and substations.

A summary of different regions across Utah with the corresponding wind values are located below as well as subsequent figures showing observed wind speeds on the 10<sup>th</sup>.

#### Northern Utah Winds

Gusts of 45 to 60 mph, with some gusts up to 70 mph in locations below 6,500 feet. Stronger gusts were noted above 7,000 feet, with an observed gust of 98mph at Logan Peak (see Figure 1 below).

#### Central Utah Winds

Widespread gusts of 35-50 mph were observed, with stronger gusts up to 60 mph located in mostly valley locations. Above 6,000 feet, stronger gusts were noted of 60-65 mph, with some isolated gusts over 70 mph. Observed wind gusts for this region can be seen in Figure 2 below.

#### Salt Lake Valley Winds

Gusts in the valley were generally observed between 35-55mph, with a few isolated gusts of 60 mph, including the Salt Lake City Airport. Observed wind gusts for this region can be seen in Figure 3 below.

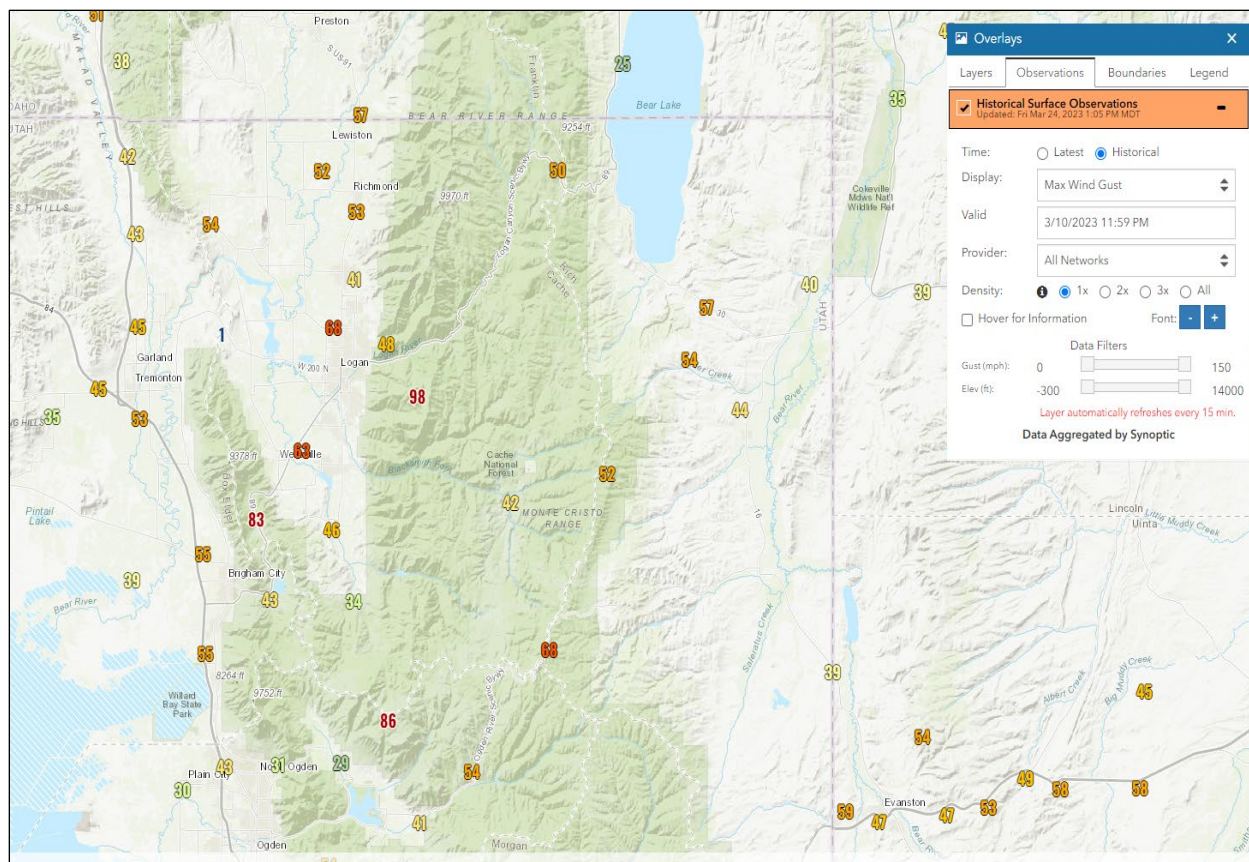


Figure 1 Northern Utah Maximum Wind gust through 1159pm, March 10, 2023

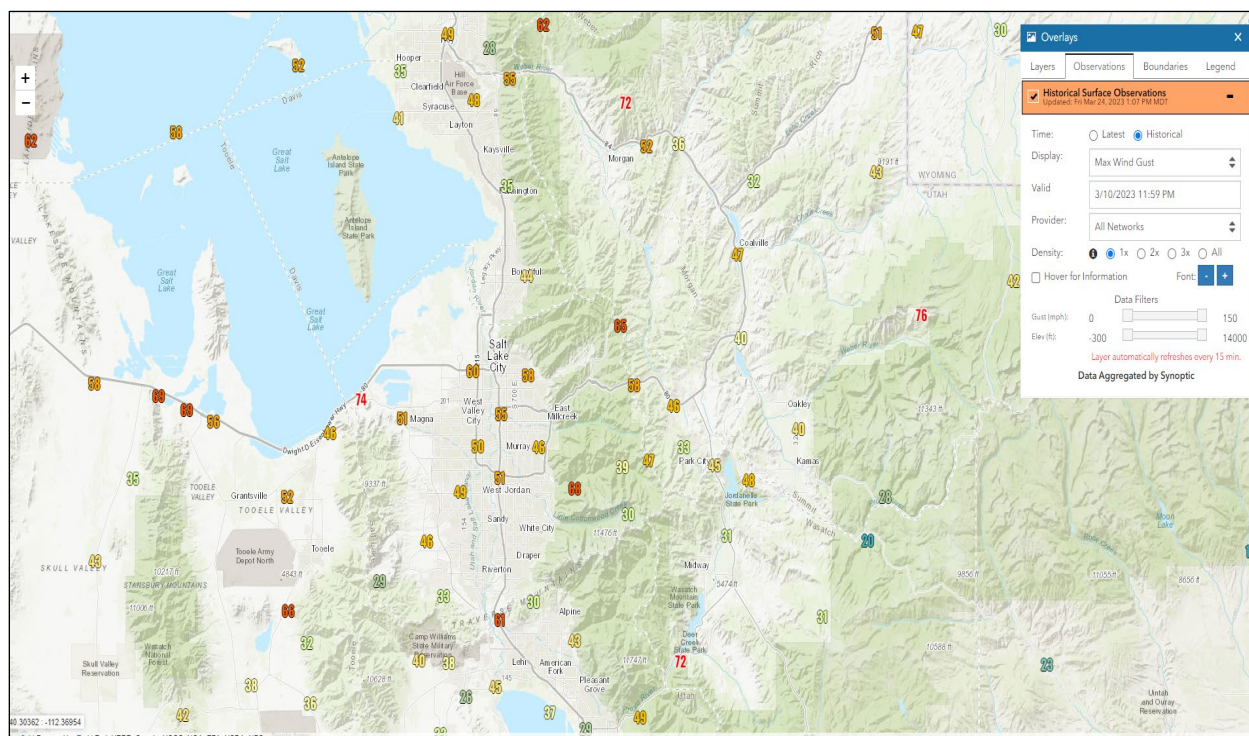


Figure 2 Central Utah Maximum Wind Gusts through 1159pm, March 10, 2023



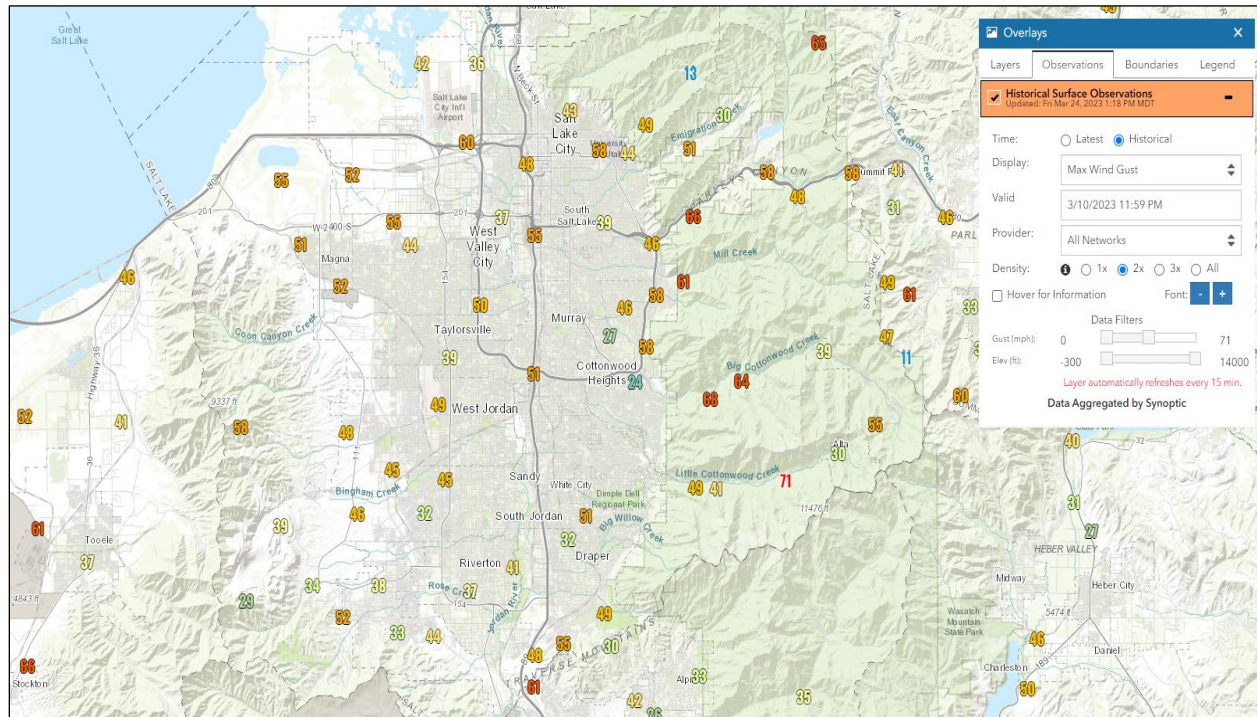


Figure 3 Salt Lake Valley Maximum Wind gusts through 1159pm, March 10, 2023

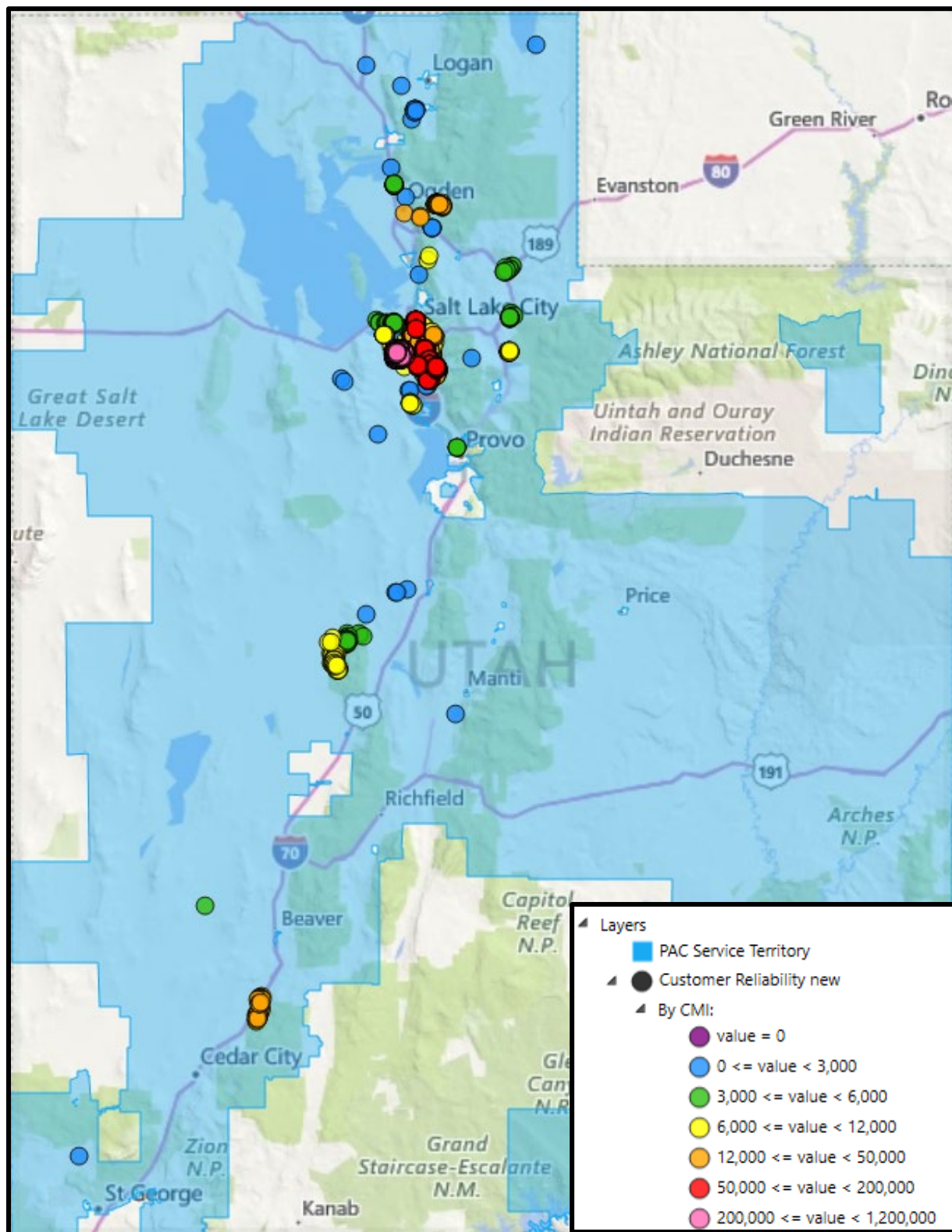
## Outage Summary

Event Outage Summary	
Number Interruptions (sustained events)	184
Total Customers Interrupted (sustained events)	27,347
Total Customer Minutes Lost	4,647,491
State Event SAIDI Impact	4.62
CAIDI	170
Major Event Start	03/10/2023 12:30 AM
Major Event End	03/11/2023 01:37 AM

## Restoration Intervals

Total Customer Sustained Outage Events	< 3 Hrs.	3 – 24 Hrs.	24+ Hrs.
27,347	22,161	5,186	0

**Power Outages March 10th 12:30 through March 11 01:37, 2023**



### Restoration Resources

Personnel	
Trouble man/assessors	13
Internal local crewmembers	38
# Support staff	1
Contact crewmen	33
Tree crewmen	5
Foreman	7
<b>Total</b>	<b>97</b>

Materials	
# Poles (D)	2
# Approx. conductor Line (feet)	100
# Transformers	2
# Crossarms	3
Insulators	5
Cutouts	11
Line splices	11

### Estimated Major Event Costs

Estimated \$	Labor	Contracts	Materials	Overheads	TOTAL
Capital	\$383	\$24,823	\$4,982	\$4,222	\$34,410
Expense	\$124,675	\$62,714	\$5,066	\$417	\$192,872
<b>Total</b>	<b>\$125,058</b>	<b>\$87,537</b>	<b>\$10,048</b>	<b>\$4,638</b>	<b>\$227,282</b>

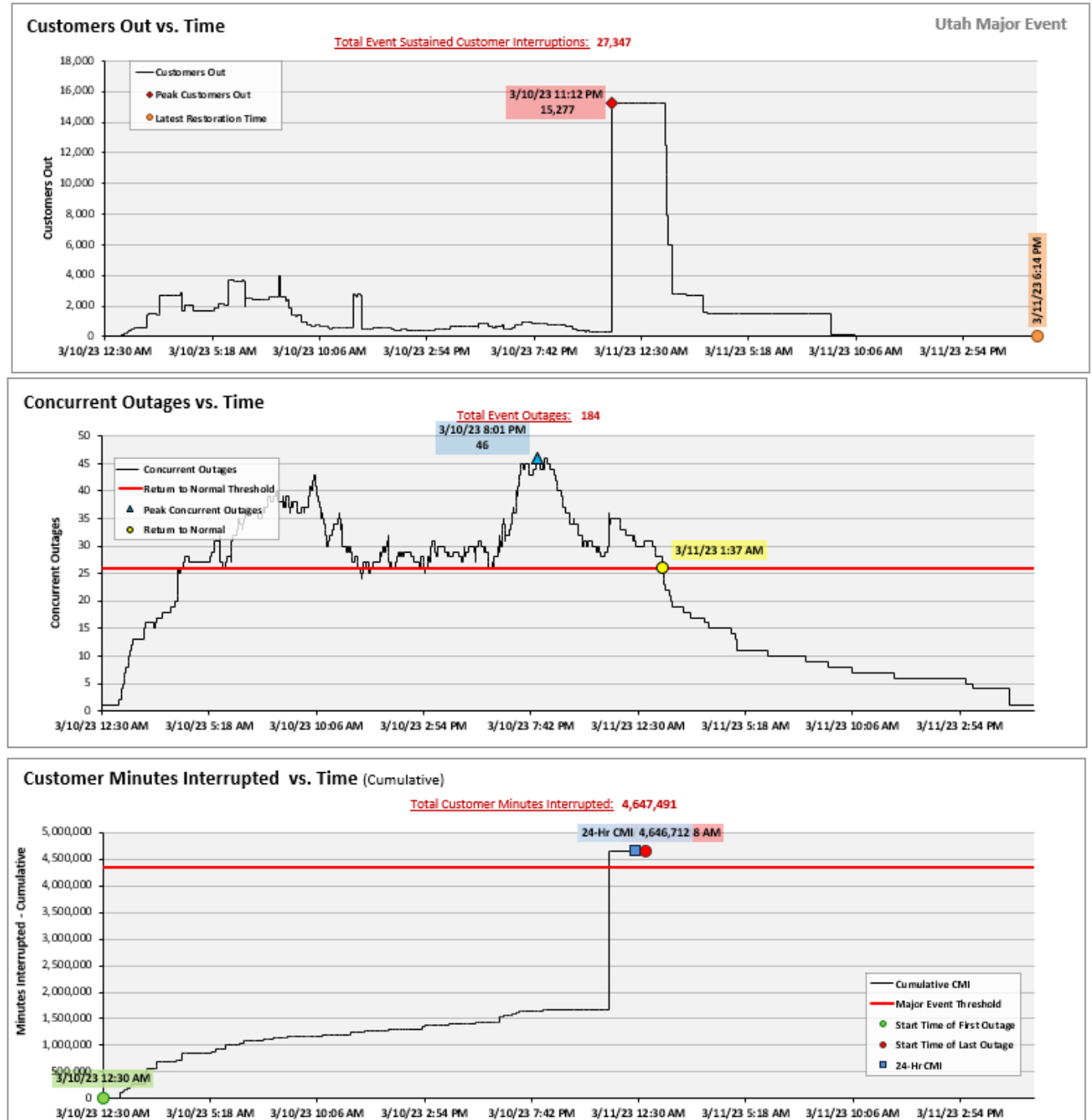


## **Major Event Declaration**

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 2023 annual threshold for Utah is 4,352,711 customer minutes lost (4.31 State SAIDI minutes).



## SAIDI, SAIFI, CAIDI by Reliability Reporting Region





## PacifiCorp Major Event Report - Customer Analysis

	Utah	Customer Analysis 3/10/2023 through 3/11/2023					Customers Restored by Intervals								Major Event Only - metric by operating area customer counts		
		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
	<b>PacifiCorp Major Events Report Customer Analysis*</b>																
PC	PACIFICORP	27,355	1%	4,663,911	184	2,054,233	3,371	22,160	5,186	9	-	-	-	81%	2.27	0.013	170
RMP	Rocky Mountain Power	27,355	2%	4,663,911	184	1,241,779	3,371	22,160	5,186	9	-	-	-	81%	3.76	0.022	170
UT	Utah	27,355	3%	4,663,911	184	1,009,615	3,371	22,160	5,186	9	-	-	-	81%	4.62	0.027	170
UT	AMERICAN FORK	79	0%	4,805	3	130,189	-	79	-	-	-	-	-	100%	0.04	0.001	61
UT	CEDAR CITY	92	0%	14,835	4	38,949	-	56	36	-	-	-	-	61%	0.38	0.002	161
UT	CEDAR CITY (MILFORD)	8	0%	3,060	1	2,888	-	-	8	-	-	-	-	0%	1.06	0.003	382
UT	JORDAN VALLEY	22,831	9%	4,099,977	74	250,145	2,743	18,338	4,493	-	-	-	-	80%	16.39	0.091	180
UT	LAYTON	14	0%	6,890	4	78,497	-	8	6	-	-	-	-	57%	0.09	0.000	492
UT	MOAB	2	0%	217	2	9,327	-	2	-	-	-	-	-	100%	0.02	0.000	108
UT	OGDEN	9	0%	1,669	1	3,744	-	-	9	-	-	-	-	0%	0.45	0.002	185
UT	PARK CITY	319	0%	42,028	15	115,203	-	304	6	9	-	-	-	95%	0.36	0.003	132
UT	PRICE	188	1%	22,081	3	36,840	-	169	19	-	-	-	-	90%	0.60	0.005	117
UT	RICHFIELD	2	0%	227	2	16,260	-	2	-	-	-	-	-	100%	0.01	0.000	114
UT	SLC METRO	126	3%	14,616	5	3,904	-	126	-	-	-	-	-	100%	3.74	0.032	116
UT	SMITHFIELD	3,655	2%	450,815	59	231,629	302	3,049	606	-	-	-	-	83%	1.95	0.016	123
UT	TOOELE	21	0%	1,493	5	28,227	326	19	2	-	-	-	-	90%	0.05	0.001	71
UT	TREMONTON	8	0%	1,087	5	27,671	-	7	1	-	-	-	-	88%	0.04	0.000	136
UT	VERNAL	1	0%	111	1	12,092	-	1	-	-	-	-	-	100%	0.01	0.000	111

\*Only current event specific metric impact shown. Does not include values from other events which may have occurred in other regions during the same time period.

Data as of
3/24/2023



## PacifiCorp Major Event Report – SSC by State Analysis

	Utah	Event 03/10/23 through 03/11/23						Month 03/01/23 through 03/31/23						YTD FY2024 01/01/23 through 01/31/23					
		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	2.91	0.021	139	0.44	0.003	149	11.39	0.075	152	4.99	0.041	123	40.23	0.240	168	20.82	0.165	126
RMP	Rocky Mountain Power	4.24	0.026	162	0.48	0.004	118	10.49	0.072	146	4.28	0.040	106	35.73	0.190	188	17.31	0.132	131
UT	Utah	4.79	0.030	162	0.17	0.002	69	8.80	0.067	132	4.18	0.040	106	37.29	0.184	203	17.65	0.124	142
UT	AMERICAN FORK	0.01	0.000	62	0.00	0.000	99	0.94	0.006	159	0.94	0.006	160	4.70	0.022	210	3.66	0.021	171
UT	CEDAR CITY	0.02	0.000	176	0.01	0.000	221	0.08	0.000	167	0.07	0.000	168	1.19	0.011	106	1.16	0.011	107
UT	CEDAR CITY (MILFORD)	0.00	0.000	382	-	-	-	0.01	0.000	410	0.01	0.000	425	0.04	0.000	205	0.03	0.000	189
UT	EVANSTON	-	-	-	-	-	-	0.00	0.000	497	0.00	0.000	497	0.28	0.001	380	0.28	0.001	380
UT	JORDAN VALLEY	4.20	0.025	169	0.14	0.002	62	4.97	0.034	145	0.91	0.012	77	17.17	0.065	266	2.45	0.021	115
UT	LAYTON	0.01	0.000	363	0.00	0.000	62	0.43	0.004	104	0.42	0.004	103	1.55	0.017	89	1.54	0.017	89
UT	MOAB	0.00	0.000	108	-	-	-	0.01	0.000	77	0.01	0.000	76	0.85	0.005	190	0.85	0.004	190
UT	MONTPELIER	0.00	0.000	185	-	-	-	0.00	0.000	182	0.00	0.000	173	0.06	0.000	597	0.05	0.000	644
UT	OGDEN	0.04	0.000	131	0.00	0.000	102	0.35	0.002	222	0.31	0.001	245	1.96	0.008	261	1.62	0.007	248
UT	PARK CITY	0.02	0.000	117	0.00	0.000	112	0.19	0.001	271	0.17	0.001	328	2.18	0.014	157	1.87	0.009	198
UT	PRICE	-	-	-	-	-	-	0.01	0.000	163	0.01	0.000	163	0.09	0.000	377	0.06	0.000	312
UT	RICHFIELD	0.00	0.000	114	-	-	-	0.04	0.000	319	0.04	0.000	323	0.20	0.001	241	0.17	0.001	218
UT	RICHFIELD (DELTA)	0.02	0.000	112	0.00	0.000	86	0.03	0.001	50	0.02	0.001	35	0.14	0.001	139	0.12	0.001	142
UT	SLC METRO	0.46	0.004	125	0.02	0.000	190	0.91	0.011	86	0.47	0.007	66	4.70	0.027	176	2.57	0.020	126
UT	SMITHFIELD	0.00	0.000	117	0.00	0.000	205	0.06	0.002	34	0.06	0.002	33	0.20	0.003	65	0.13	0.002	62
UT	TOOELE	0.00	0.000	136	-	-	-	0.17	0.002	113	0.17	0.002	113	0.48	0.003	148	0.28	0.002	134
UT	TREMONTON	0.00	0.000	194	0.00	0.000	235	0.53	0.004	127	0.53	0.004	127	0.63	0.005	128	0.63	0.005	128
UT	VERNAL	-	-	-	-	-	-	0.07	0.000	148	0.07	0.000	148	0.86	0.001	837	0.14	0.001	228

\*may include other regional major event exclusions during the same period. Operating areas are calculated by the state frozen customer count metrics.

Data as of
3/24/2023

## **CERTIFICATE OF SERVICE**

Docket No. 23-035-19

I hereby certify that on April 11, 2023, a true and correct copy of the foregoing was served by electronic mail to the following:

### **Utah Office of Consumer Services**

Michele Beck [mbeck@utah.gov](mailto:mbeck@utah.gov)  
[ocs@utah.gov](mailto:ocs@utah.gov)

### **Division of Public Utilities**

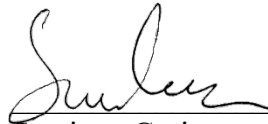
[dpudatarequest@utah.gov](mailto:dpudatarequest@utah.gov)

### **Assistant Attorney General**

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### **Rocky Mountain Power**

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Santiago Gutierrez  
Coordinator, Regulatory Operations