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January 25, 2022

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. 22-035-04**
Major Event Report for December 14-16, 2021

Rocky Mountain Power submits a request for a major event exclusion for the winter storm in northern and central Utah on December 14-16, 2021, 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, and 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

Enclosures



Report to the Utah Public Utility Commission Electric Service Reliability December 14, 2021

Event Date:	December 14 - 16, 2021
Date Submitted:	January 25, 2022
Primary Affected Locations:	Northern and Central Utah
Primary Cause:	Snowstorm
Exclude from Reporting Status:	Yes
Report Prepared by:	Kyle Williamson
Report Approved by:	Alex Vaz, Heide Caswell

Event Description and Restoration Summary

On December 14 - 16, 2021, Utah experienced a severe winter storm. Significant wet snowfall, icing conditions, and high winds resulted in service interruptions, with the most severe impacts experienced in Salt Lake City, Ogden, and Jordan Valley operating districts within Utah. The Rocky Mountain Power Emergency Operations Center activated at 9:30 a.m. MDT December 14, 2021. Multiple line and vegetation crewmen responded to the event to remove limbs from overhead lines, replace damage poles, re-attach broken power lines, and replace blown fuses. Damages were seen in wires, poles, crossarms, and insulators on both primary and secondary lines. Crews from outside the local area were needed to assist in the highest impacted areas. Internal and external crews from along the Wasatch Front were mobilized to assist with power restoration. Restoration efforts faced challenges due to snow accumulation, high winds and poor visibility; in addition, access was difficult in certain areas because of heavy snow and icy conditions. The event impacted 44,165 customers with outage durations ranging from five minutes to 37 hours 11 minutes, and an average outage duration of three hours 29 minutes. Customer outages peaked December 14, 2021, at 10:44 p.m. with 16,696 customers out of service. During the event 48% of customer minutes lost and 44% of all customer outages were the result of weather, 19% of customer minutes lost and 12% of customer outages were the result of failed equipment, and 17% of customer minutes lost and 20% of customer outages were the



result of loss of supply outages. The Emergency Operations Center deactivated as of 10:00 a.m. MDT December 16, 2021.

At the Cozydale Substation, the number seventeen distribution breaker relay was unable to clear the fault on the circuit being fed from circuit breaker seventeen. This resulted in high side breaker operation and a complete loss of the substation. The relay identified the fault; however, it did not trip and lockout the breaker and the designed sequence of protection resulted in the overcurrent protection relay locking out the number one transformer. When restoring power, by closing in the transrupter, a visual indicator displayed that the transrupter would need to be replaced based on an unknown internal issue. Power was restored to the customers by making parallel in the field with neighboring circuits. The transrupter was replaced and the cause of the failure is currently under investigation. The number seventeen circuit breaker relay was also replaced. This event resulted in 1,171,030 customer minutes lost and affected 5,281 customers.

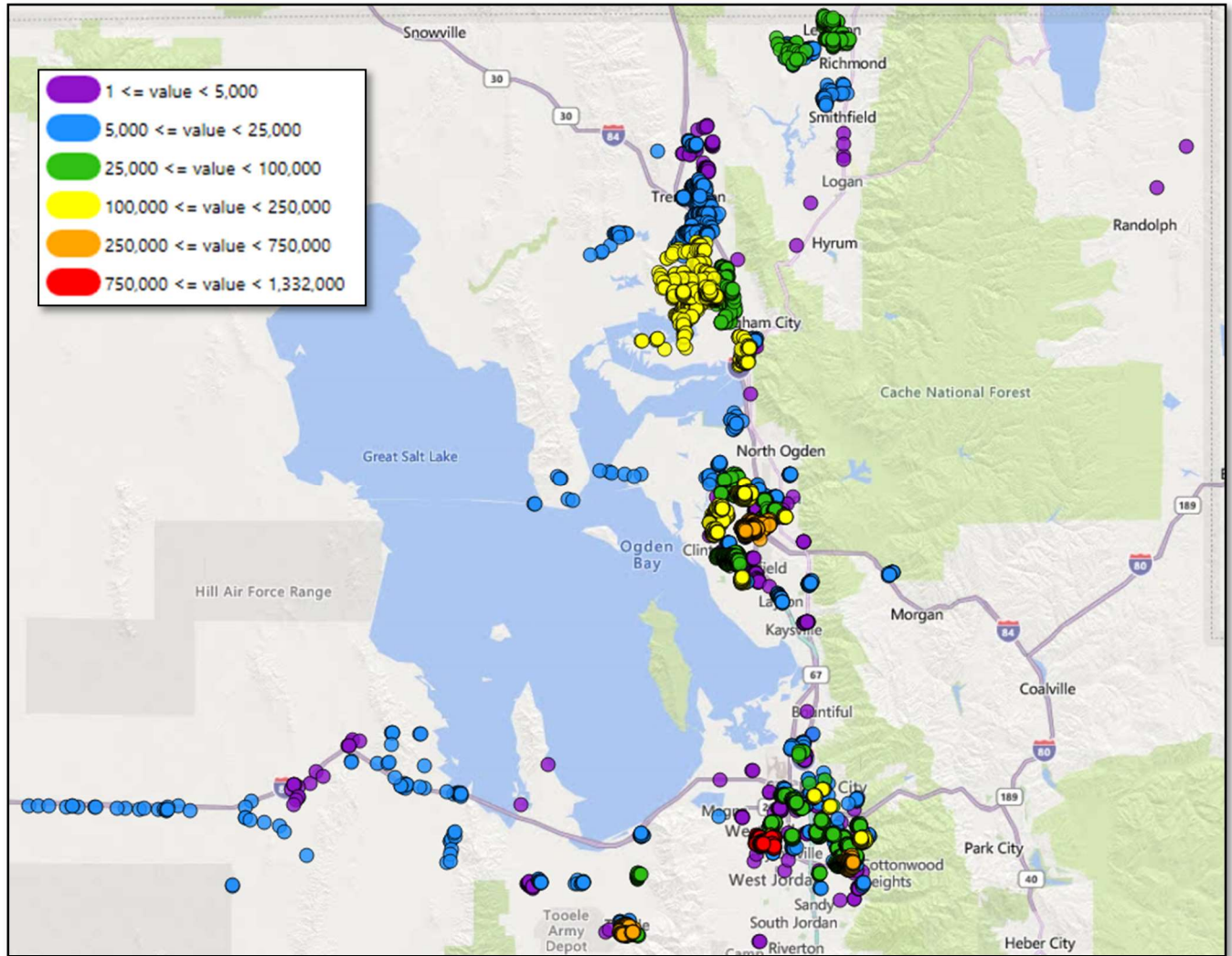
Outage Summary

Event Outage Summary	
Number Interruptions (sustained events)	469
Total Customer Interrupted (sustained events)	44,165
Total Customer Minutes Lost	9,080,499
State Event SAIDI Impact	7.49
CAIDI	206
Major Event Start	12/14/21 12:00 AM
Major Event End	12/16/21 2:31 AM

Restoration Intervals

Total Customer Sustained Outage Events	< 3 Hrs.	3 – 24 Hrs.	24+ Hrs.
45,165	23,096	21,032	37

Power Outages on Tuesday December 14th through Thursday December 16th in CML



Restoration Resources ¹

Personnel	
Troubleman/assessors	25
Internal local crewmembers	134
Internal borrowed crewmembers	2
External (contract) crewmembers	0
Substation crewmembers	15
Vegetation crewmembers	0
# Support staff	1
Line crewman	0
Contract crewman	90
Troubleman	0
Assessor	0
Tree crewman	18
Foreman	33
Administrative	3
Substation	0
Transmission	0
Transportation	2
Warehouseman	2
Total	325

Materials	
# Poles (Distribution)	10
# Poles (Transmission)	0
Approximate Line Conductor (Feet)	1,230
# Transformers	2
# Crossarms	7
Insulators	55
Cutouts	30
Line fuses	0
Line splices	40
Guy Wire	5

Specialized Equipment	
Crane	1

Estimated Major Event Costs ¹

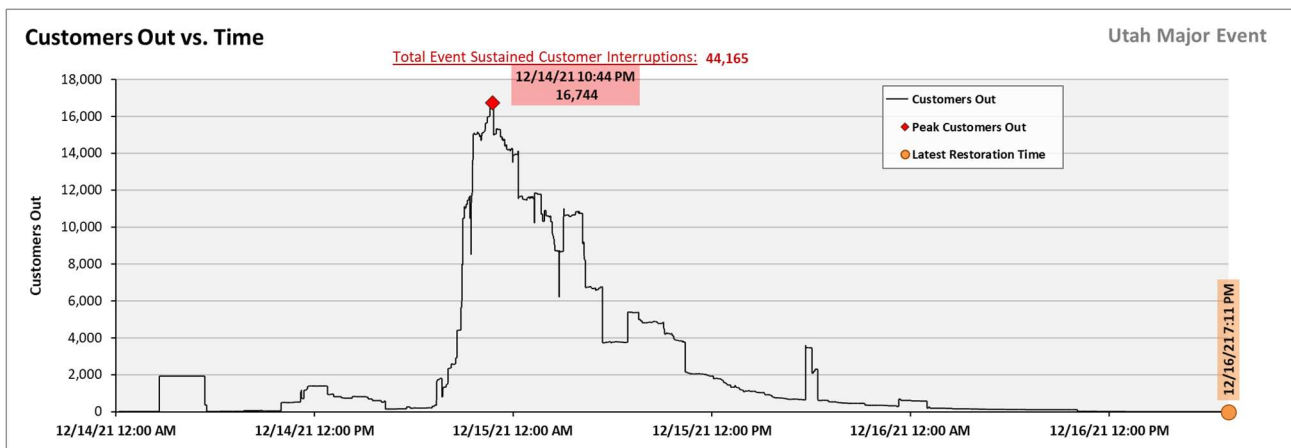
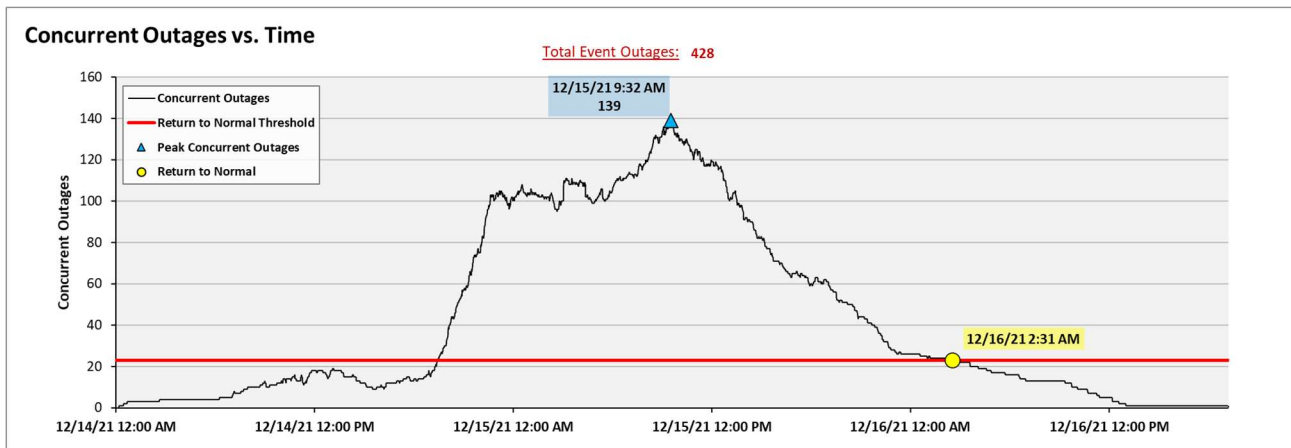
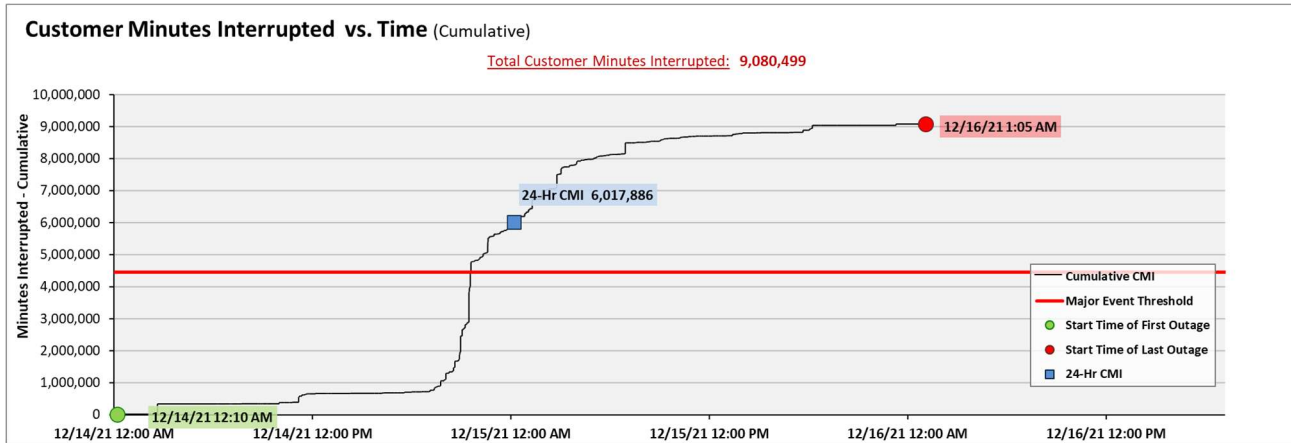
Estimate	Labor	Contracts	Materials	Overheads	Total
Capital	\$63,697	\$35,130	\$10,154	\$6,093	\$115,074
Expense	\$614,105	\$324,294	\$9,168	\$27,908	\$975,475
Total	\$677,802	\$359,424	\$19,322	\$34,001	\$1,090,549

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 did not get individually captured in transaction recording systems were utilized during the event, thus the data presented here effectively understates the resources, including cost, involved in restoring the system to normal.

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 2021 annual threshold for Utah is 4,456,512 (4.54 State SAIDI minutes).

SAIDI, SAIFI, CAIDI by Reliability Reporting Region





PacifiCorp Major Event Report - Customer Analysis (Also provided as a separate Excel file)

Utah		Customer Analysis 12/14/2021 through 12/16/2021					Customers Restored by Intervals								Major Event Only - metric by operating area customer counts		
PacifiCorp 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	44,165	2%	9,080,499	426	2,019,764	48,425	23,096	21,032	37	-	-	-	52%	4.50	0.022	206
RMP	Rocky Mountain Power	44,165	4%	9,080,499	426	1,212,523	48,425	23,096	21,032	37	-	-	-	52%	7.49	0.036	206
UT	Utah	44,165	5%	9,080,499	426	981,102	48,425	23,096	21,032	37	-	-	-	52%	9.26	0.022	206
UT	AMERICAN FORK	446	0%	88,332	22	120,574	-	358	74	14	-	-	-	80%	0.73	0.004	198
UT	CEDAR CITY	638	2%	72,410	17	36,829	-	518	120	-	-	-	-	81%	1.97	0.017	113
UT	CEDAR CITY (MILFORD)	2,489	86%	190,457	15	2,895	-	2,456	33	-	-	-	-	99%	65.79	0.860	77
UT	EVANSTON	2	0%	526	2	792	-	1	1	-	-	-	-	50%	0.66	0.003	263
UT	JORDAN VALLEY	9,638	4%	1,305,432	48	247,019	2,706	6,463	3,165	10	-	-	-	67%	5.28	0.039	135
UT	LAYTON	2,773	4%	270,188	18	76,120	8,141	2,537	236	-	-	-	-	91%	3.55	0.036	97
UT	MOAB	709	8%	370,989	5	9,225	-	3	706	-	-	-	-	0%	40.22	0.077	523
UT	OGDEN	10,391	9%	2,323,515	77	113,954	18,897	2,819	7,571	1	-	-	-	27%	20.39	0.091	224
UT	PARK CITY	487	1%	38,047	10	34,919	578	474	13	-	-	-	-	97%	1.09	0.014	78
UT	PRICE	11	0%	9,466	3	10,553	-	1	10	-	-	-	-	9%	0.90	0.001	861
UT	RICHFIELD	145	1%	21,272	5	16,063	-	145	-	-	-	-	-	100%	1.32	0.009	147
UT	RICHFIELD (DELTA)	13	0%	1,911	4	3,924	-	12	1	-	-	-	-	92%	0.49	0.003	147
UT	SLC METRO	10,260	4%	3,350,823	122	228,261	13,480	3,297	6,951	12	-	-	-	32%	14.68	0.045	327
UT	SMITHFIELD	544	2%	100,817	22	26,253	382	356	188	-	-	-	-	65%	3.84	0.021	185
UT	TOOELE	2,938	11%	559,015	30	26,010	3,244	2,463	475	-	-	-	-	84%	21.49	0.113	190
UT	TREMONTON	2,294	20%	295,309	21	11,262	997	1,191	1,103	-	-	-	-	52%	26.22	0.204	129
UT	VERNAL	387	3%	81,991	5	12,946	-	2	385	-	-	-	-	1%	6.33	0.030	212

*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
1/10/2022



PacifiCorp Major Event Report – SSC by State Analysis (Also provided as a separate Excel file)

	Utah	Event 12/14/21 through 12/16/21						Month 12/01/21 through 12/31/21						YTD FY2022 01/01/21 through 12/31/21					
		Major Events Included			Major Event Excluded			Major Events Included			Major Events Excluded*			Major Events Included			Major Events Excluded*		
		SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI
	PacifiCorp Major Events Report SSC by State																		
PC	PacifiCorp	4.53	0.023	201	0.04	0.001	53	7.50	0.047	159	3.00	0.025	118	60.06	0.472	127	52.47	0.443	118
RMP	Rocky Mountain Power	7.55	0.038	201	0.06	0.001	53	12.49	0.079	159	5.00	0.042	118	100.05	0.786	127	87.40	0.738	118
UT	Utah	9.33	0.047	201	0.08	0.001	53	15.43	0.097	159	6.18	0.052	118	123.65	0.972	127	108.02	0.912	118
UT	AMERICAN FORK	0.09	0.000	198	0.00	0.000	85	0.69	0.006	109	0.60	0.006	103	7.02	0.049	144	6.93	0.048	144
UT	CEDAR CITY	0.07	0.001	113	0.00	0.000	84	0.98	0.004	274	0.90	0.003	309	5.52	0.050	111	5.40	0.049	111
UT	CEDAR CITY (MILFORD)	0.19	0.003	77	-	-	-	0.25	0.003	90	0.06	0.000	198	0.99	0.009	116	0.80	0.006	133
UT	EVANSTON	0.00	0.000	263	-	-	-	0.00	0.000	510	0.00	0.000	593	0.22	0.002	113	0.22	0.002	112
UT	JORDAN VALLEY	1.34	0.010	136	0.01	0.000	146	2.00	0.017	116	0.67	0.007	89	28.68	0.250	115	27.22	0.240	113
UT	LAYTON	0.28	0.003	97	0.00	0.000	97	0.49	0.005	98	0.22	0.002	98	6.52	0.068	96	6.21	0.065	96
UT	MOAB	0.38	0.001	523	0.00	0.000	133	0.39	0.001	477	0.02	0.000	147	1.75	0.012	150	1.38	0.011	126
UT	MONTPELIER	-	-	-	-	-	-	-	-	-	-	-	-	1.14	0.016	73	1.14	0.016	73
UT	OGDEN	2.37	0.011	224	0.00	0.000	308	2.73	0.014	189	0.36	0.004	94	17.10	0.126	136	14.67	0.115	127
UT	PARK CITY	0.04	0.000	78	-	-	-	0.17	0.002	106	0.13	0.001	119	5.10	0.028	182	4.30	0.026	166
UT	PRICE	0.01	0.000	861	-	-	-	0.03	0.000	107	0.02	0.000	79	0.70	0.011	64	0.69	0.011	63
UT	RICHFIELD	0.02	0.000	146	0.00	0.000	29	0.55	0.002	249	0.53	0.002	256	4.03	0.023	179	3.48	0.020	174
UT	RICHFIELD (DELTA)	0.00	0.000	147	-	-	-	0.17	0.002	98	0.17	0.002	98	1.35	0.010	129	1.33	0.010	128
UT	SLC METRO	3.47	0.012	294	0.06	0.001	43	5.60	0.031	179	2.18	0.021	105	29.84	0.231	129	26.42	0.221	120
UT	SMITHFIELD	0.10	0.001	185	-	-	-	0.18	0.001	193	0.08	0.000	206	7.04	0.035	203	2.19	0.025	86
UT	TOOELE	0.57	0.003	190	0.00	0.000	188	0.77	0.006	132	0.20	0.003	70	4.32	0.037	117	3.75	0.034	110
UT	TREMONTON	0.30	0.002	129	-	-	-	0.33	0.003	128	0.03	0.000	118	1.38	0.012	119	1.05	0.009	117
UT	VERNAL	0.08	0.000	212	-	-	-	0.09	0.000	211	0.00	0.000	198	0.93	0.006	169	0.85	0.005	165

*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
1/10/2022

CERTIFICATE OF SERVICE

Docket No. 22-035-04

I hereby certify that on January 25, 2022, a true and correct copy of the foregoing was served by electronic mail to the following:

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