

SERVICE COMMISSION

2004 MAY 24 P 4: 10

RECEIVED

003086

May 19, 2004

Utah Public Service Commission Heber M. Wells Building, 4<sup>th</sup> Floor 160 East 300 South Salt Lake City, UT 84111

Attn: Julie Orchard

RE: PacifiCorp Major Event Report

Pursuant to Merger Condition 31, the Company is claiming major event exclusion for the snowstorm-related event which began on December 26, 2003 and continued through January 3, 2004.

The basis for exclusion is the number of customers affected and the damage that occurred to PacifiCorp's facilities in each event. Attached you will find details including costs incurred, restoration resources, number of customers off supply, customer minutes lost, and SAIDI, SAIFI, MAIFI figures.

PacifiCorp will exclude outage information for these events from its network performance reporting and from customer guarantee failure payments.

If you require further information regarding this report, please contact Heidemarie Caswell, Network Performance Manager at (503) 813-6216.

Singerely,

Hidwan Capwell for Bill Cummyham
Bill Cunningham, Director

Distribution Network Performance

Enclosure

C: Bob Maloney – Utah DPU
Abdinasir Abdulle – Utah DPU
Rea Peterson – Utah DPU
Judith Johnson – Utah DPU



### Report to: Utah Public Service Commission

### Electric Service Reliability - Major Event Report

Event Date(s): December 26, 2003 – January 3, 2004

**Date Submitted:** May 19, 2004

Affected Locations: American Fork, Layton, Ogden, SLC Metro,

Park City, Tooele, Jordan Valley

**Exclude from Performance Reports:** Yes

Report Prepared by: Diane DeNuccio

Report Approved by: Heidi Caswell

Event Description: Extreme winter storms bringing very cold temperatures, heavy snow, ice, rain and wind hit Northern Utah beginning late evening on Christmas, Thursday, December 25, 2003, and continuing through January 2, 2004. In a 48-hour period, total snowfall ranged from 10 to 60 inches in Northern Utah. By the end of the weekend, 3 feet of snow had piled up along the Wasatch Front. By December 30, over 6 feet of snow had fallen in Salt Lake City. The snow was particularly damaging because of its unusually high water content of 20%. (A typical Utah snowstorm carries moisture of only 2 or 3 percent.) Subsequently, the area was subjected to a windstorm (sustained winds at 43mph and peak gusts at 51 mph) that began on January 1 and ended on January 2. The heavy, wet snow and strong winds caused sagging and broken limbs from drought-weakened trees to contact power lines. Some areas experienced landslides or avalanches, a TRAX car derailed, airport service was severely impacted, numerous roads were closed and police reports recorded more than 1300 vehicle accidents. It was the worst storm to hit Utah in 75 years.

The storm interrupted service to approximately 312 circuits. The company also experienced outages and damage within both its transmission and distribution system, including substation and line equipment. Nearly 178,000 feet of conductor and 109 transformers were replaced. While pole damage was minimal (33 poles), 257 crossarms and 2563 insulators were replaced. Over 11,800 splices were used in the restoration. Of these, 7,297 were full tension/limited tension splices, which are typically used to splice primary and secondary conductor. There were 4,520 non-tension splices, which are typically used to connect service wire to the power source or the customer meter.

PacifiCorp is requesting designation of this storm and its consequences to be classified as a "Major Event" for exclusion from network performance reporting. This major event primarily exceeded the design limits and operational limits of the system (as evidenced by the quantity of operational resources required to effect restoration). It also resulted in sustained interruptions to more than 10% of customers in each of the 7 affected operating areas.

Total Customer Minutes Lost = 159,170,280

Total Sustained Incidents = 2,023

Total Sustained Customers Off = 265,148 (36% of state, percent of op areas in attached report)

Total Sustained Customer Interruptions = 318,974

Resources Utilized: Peak restoration personnel exceeded 1000 during the storm, including employees and contractors, in the field and both business centers.

**Restoration Problems:** The wide-reaching impact of the storms across multiple operating areas in Utah posed a significant drain on all available resources over the week-long storm. Contract crews were employed. Company crews and additional equipment were transported from Southern Utah, Oregon, Washington, Wyoming and Idaho to assist in round-the-clock restoration efforts. The protracted transit times that restoration crews experienced due to hazardous road conditions and major road closures contributed significantly to the duration of outages in this major event. Crew access was further hampered by the ongoing nature of the extreme weather, downed trees across roads and poor visibility as they worked day and night. Damage was extensive, including tap lines and home service lines in addition to main circuits. Many customers were off supply for several days and many customers suffered multiple outages as outages reoccurred on previously restored facilities throughout the weeklong storm. (Compounding the situation, temporary but severe problems with our outage management system prevented "outage roll-ups" which enable outage prioritization for efficient and effective restoration efforts. For a period of time, manual processes were resorted to while the system was down.)

PacifiCorp activated its Regional Emergency Action Center in Salt Lake City as well as its Power Delivery Emergency Action Center in Portland in order to better manage the event through logistics coordination and communications support. Activation of the Emergency Action Centers enabled more timely damage assessment, coordination of the restoration effort, and improved communication to the media, local government, Public Utility Commission and customers. This contributed to reducing the overall duration of the event, as well as managing customer understanding and expectations during a major event. Unfortunately, due to the overloaded outage call-in system, customers calling to report their outage experienced a much degraded level of customer service, which understandably resulted in customer frustration and complaints.

Estimated Major Event Cost: \$12,000,000

SAIDI, SAIFI, MAIFI Report: Attached

### Utah Major Event

		Cu	<b>Customer Analysis</b>	sis			Customer	<b>Customers Restored by Intervals</b>	Intervals		Majo	Major Event Only	nły
UT	Sustained Customers Off	% Sustained Customers Off	CML	Number of Sustained Interruptions	Average Customer Count	Sustained Customers Sustained Customers Sustained Customers Customers And<3 3 hours, LE CG1 CG1	> 5 Minutes and <3 Hours	Sustained Customers Restored (GE 3 hours, LE CG 1		% Sustained Customers Restored in Less Than 3 Hours PS 5	SAIDI	SAIFI	MAJFI
Event Total	318,974	43%	159,170,281	2,023	742.708	8,662	66.132	218.654	34.188	21%	214.31	0.43	0.01
									1				
AMERICAN FORK	595	1%	262	19	64,756	0	378	217	0	64%	0.009	0.00	0.000
JORDAN VALLEY	12,503	%/	12,503	202	185,813	1,680	9,533	2,922	48	%9/	0.067	0.067	0.00
LAYTON	755	1%	755	53	56,996		622	133	0	82%	0.013	0.013	0.000
OGDEN	9,554	10%	9,554	101	92,133	2,781	8,971	9/9	7	94%	0.104	0.104	0.030
PARK CITY	338	1%	338	16	24,292	0	93	245	0	28%	0.014	0.014	0.000
SLC METRO	294,360	145%	294,360	1,322	203,243	4,200	45,866	214,361	34,133	16%	1.448	1.448	0.021
TOOELE	869	%2	698	31	12,815	0	699	200	0	%22	0.068	0.068	0.000

	Custome	<b>Customer Interrupted by Date</b>	by Date	
	12/26/03 0:31 0:00	0:00	1/4/04 22:30 0:00	0:00
	Cuctoing	9/a		M. modern of
	Customers	Customers		Sustained
Date	JJ0	₽	CML	Interruptions
12/26/2003	233,591	73%	143,547,910	14
12/27/2003	0	%0	0	1
12/28/2003	0	%0	0	0
12/29/2003	190	%0	172,873	4
12/30/2003	8,718	3%	4,666,297	629
12/31/2003	2,964	1%	587,674	322
1/1/2004	45,752	14%	6,901,233	499
1/2/2004	25,107	%8	2,907,357	350
1/3/2004	1,497	%0	141,170	132
1/4/2004	1,155	%0	245,767	42

Restoring your power.	"If the power goes out, we will restore your electricity as soon as possible.	But if it's not back on within (see table) hours, barring damage done due to extreme weather, you can claim:	\$50 if you are a residential customer,	\$100 if you are a commercial or industrial customer, plus	\$25 for each additional 12-hour delay.	You must claim your credit by contacting us within 30 days of the interruption."	
ce 1	"If the power	But if it's not				You must cla	

	ice a power interruption	less than three hours."	
5 Restoring supply after a fault	We will esure that at least 80% of our customers who experience a power interruption	have their power supply restored in less than three hours.'	
ď	<u> </u>		

5/19/2004

# Utah Major Event

	Event		12/26/03	12/26/03 through 01/04/04	01/04/04		Month	Dec-03				۲	YTD F	Fiscal Year 2004	r 2004			
IJ	Major	Major Events Included	pepni	Major E	Major Events Excl	luded	Major E	Major Events Included	papnı	Major Ev	Major Events Excluded	papn	Major E	Major Events Included	papr	Major Events Excluded	ents Exc	papn
	SAIDI	SAIF	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAJE	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI
AMERICAN FORK	2.28	0.01	0.00	0.26	00.0	0.00	6.87	60:0	0.00	4.94	0.09	0.00	140.11	1.74	0.30	105.62	1.32	0.18
JORDAN VALLEY	12.53	20.0	0.01	0.00	00.0	0.00	18.06	0.16	0.05	12.98	0.15	0.05	140.55	1.45	0.24	109.14	1.29	0.21
LAYTON	2.27	0.01	00.0	0.00	00.0	0.00	1.87	0.01	0.00	1.73	0.01	0.00	267.91	2.39	0.59	177.79	1.94	0.58
OGDEN	9:94	0.10	0.03	0.00	00.0	0.00	23.23	0.16	0.03	20.09	0.14	0.00	332.20	2.81	0.22	254.19	2.31	0.17
PARK CITY	4.20	10.0	00.0	0.00	0.00	0.00	23.71	0.21	0.00	20.91	0.20	0.00	230.19	1.98	0.23	210.99	1.87	0.23
SLC METRO	764.94	1.45	0.02	0.16	0.00	0.00	747.52	1.35	0.01	21.63	0.17	0.01	941.22	3.07	0.34	134.77	1.49	0.18
TOOELE	10.08	0.07	0.00	0.00	0.00	0.00	29.02	0.11	0.00	28.32	0.10	0.00	285.49	2.90	0.00	284.79	2.89	0.00
Utah	214.31	0.43	0.01	0.00	0.00	0.00	216.58	0.46	0.02	16.00	0.13	0.02	419.98	2.33	0.28	160.78	1.67	0.21
PacifiCorp							98.93	0.21	0.01	7.31	90.0	0.01	191.83	1.07	0.13	73.44	9.76	0.10

## Utah Major Event

													İ					
	Event	1.	2/26/03	through	12/26/03 through 01/04/04		Month	Jan-04					YTD F	Fiscal Year 2004	r 2004			
TU	Major E	Major Events Included	nded	Major	Major Events Exclu	papric	Major	Major Events Included	luded	Major Es	Major Events Excluded	Jaded	Major E	Major Events Included	papri	Major Ev	Major Events Excluded	papr
	SAIDI	SAIFI	MAIF	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFI	MAIFI	SAIDI	SAIFE	MAJEI	SAIDE	SAIFI	MAJFI
AMERICAN FORK	2.29	0.01	00'0	0.26	00:0	00'0	3.30	0.02	00.0	3.20	0.02	0.00	143.42	1.76	0:30	108.82	1.35	0.18
JORDAN VALLEY	12.53	20.0	0.01	0.00	00:0	00.0	18.07	0.15	0.03	10.61	0.10	0.02	158.61	1.60	0.27	119.75	1.39	0.24
LAYTON	2.27	0.01	0.00	0.00	00:00	00.0	6.42	0.03	0.00	4.29	0.02	0.00	274.33	2.42	0.59	182.08	1.95	0.59
OGDEN	9.34	0.10	0.03	0.00	00.0	00.0	11.52	0.15	0.03	4.72	0.07	0.03	343.72	2.96	0.25	258.91	2.38	0.20
PARK CITY	4.20	0.01	0.00	0.00	00:0	0.00	2.03	0.01	0.0	0.63	0.01	0.00	232.22	2.00	0.23	211.63	1.87	0.23
SLC METRO	764.94	1.45	0.02	0.16	00.00	00.0	44.63	0.36	0.04	5.75	0.09	0.03	985.85	3.42	0.39	140.52	1.58	0.21
TOOELE	10.08	0.07	0.00	0.00	0.00	0.00	10.18	0.07	0.00	0.80	0.01	0.00	295.66	2.97	0.00	285.58	2.90	0.00
Utah	214.31	0.43	0.01	0.00	00:00	0.00	20.49	0.17	0.02	6.76	0.07	0.02	0.02 440.47	2.51	0.31	167.54	1.74	0.23
PacifiCorp		H					9.36	0.08	0.01	3.09	0.03	0.01	201.19	1.14	0.14	76.53	08.0	0.10