

Utah Class Cost-of-Service under MSP: How to Treat MSP Rate Mitigation Cap

Presentation to
Utah Cost-of-Service Working Group

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Initial Recommendations to Audience

Choose One:

- Drink coffee now
- Feign cell phone call and hurry to hallway
- Initiate good daydream, but nod intermittently to reassure speaker

Why does this matter?

- Class cost of service is based on a specific set of jurisdictional costs
- The revised MSP protocol requires jurisdictional costs to be calculated under both Rolled-in and MSP methods
- Until 2014, the final allocation to Utah is (generally) the lower of MSP or “Rolled-in + 1.x%”
- Utah class cost-of-service under MSP is different than under Rolled-in
- Issue 1: What set of jurisdictional costs should be used for Utah class cost allocation?
- Issue 2: If “Rolled-in + 1.x%” is the basis for jurisdictional costs, how should these costs be incorporated into the class COS analysis?

2nd Recommendation to audience

- Go back two slides and re-evaluate your options

Issue 1: What set of jurisdictional costs should be used for Utah cost allocation?

- Options
 - Rolled-in
 - “Rolled in + 1.x%” = “Constrained” MSP
 - MSP (unconstrained)
- What variants did PacifiCorp present in the last rate case?
 - Rolled-in
 - Rolled-in + 1.5%
 - “Constrained” MSP revenue requirements paired with “unconstrained” MSP relative returns

Issue 1: What set of jurisdictional costs should be used for Utah cost allocation?

- **Proposal**

- If jurisdictional allocation is based on MSP, use MSP for Utah COS
 - Ensure that jurisdictional allocation of non-generation costs is the same between Rolled-in and MSP
- If jurisdictional allocation is based on “Rolled-in + 1.x%”, for Utah COS use either:
 - Rolled-in, or
 - “Constrained” MSP

Issue 2 (slightly restated): If “constrained MSP” is the basis for Utah jurisdictional costs, how should this information be incorporated in the class COS analysis?

- In presenting “constrained MSP” results in the last Utah rate case, how did PacifiCorp approach this question?
 - (A) Relative return indices for classes were based on “unconstrained” MSP results
 - (B) To meet “Rolled-in + 1.5%” jurisdictional cost constraint, target rate of return was reduced for each function (e.g., generation, distribution, transmission) in performing class cost allocation
(In other words, the MSP rate mitigation cap was treated as lowering the target return for all functions)
 - (C) Lower income tax consequence of MSP spread to all functions

Issue 2: If “constrained MSP” is the basis for Utah jurisdictional costs, how should this information be incorporated in the class COS analysis?

- Critique of PacifiCorp’s approach in last rate case

- (A) Relative return indices for classes based on “unconstrained” MSP results

Problem: “Unconstrained” MSP allocates more generation costs to Utah than “constrained” MSP – causing a higher cost allocation to “generation-heavy” classes than is justified by “constrained” MSP allocation to Utah

PacifiCorp Rolled-In COS Results

(Docket 04-035-42)

PacifiCorp
Cost Of Service By Rate Schedule
State of Utah
12 Months Ending March 2006
Rolled In
BaseCase Allocation Factors
8.73% = Target Return on Rate Base

A	B	C	D	E	F	G	H	I	J	K	L	M	
Line No.	Schedule No.	Description	Annual Revenue	Return on Rate Base	Rate of Return Index	Total Cost of Service	Generation Cost of Service	Transmission Cost of Service	Distribution Cost of Service	Retail Cost of Service	Misc Cost of Service	Increase (Decrease) to = ROR	Percentage Change from Current Revenues
1	1	Residential	440,028,733	8.08%	1.17	461,679,091	223,609,390	29,101,710	167,551,929	38,628,239	2,787,823	21,650,358	4.92%
2	6	General Service - Large	321,430,640	6.50%	0.94	353,036,713	221,975,113	30,242,435	96,414,636	1,936,995	2,467,534	31,606,073	9.83%
3	8	General Service - Over 1 MW	90,729,497	6.86%	0.99	98,221,970	65,718,870	8,475,798	23,202,439	105,767	719,096	7,492,473	8.26%
4	7,11,12,13	Street & Area Lighting	10,847,300	2.03%	0.29	12,890,773	1,907,384	161,956	10,417,650	361,517	42,267	2,043,473	18.84%
5	9	General Service - High Voltage	136,758,294	6.79%	0.98	146,628,090	126,096,672	17,260,708	1,138,089	849,336	1,283,284	9,869,796	7.22%
6	10	Irrigation	9,352,282	3.31%	0.48	11,287,616	7,067,045	896,566	3,084,815	163,533	75,658	1,935,334	20.69%
7	12	Traffic Signals	739,505	7.44%	1.08	783,035	392,252	47,248	217,444	121,264	4,827	43,530	5.89%
8	12	Outdoor Lighting	725,216	59.86%	8.66	353,127	236,992	18,817	76,677	16,877	3,764	(372,089)	-51.31%
9	21	Electric Furnace	241,825	10.57%	1.53	237,970	151,961	23,545	27,400	33,294	1,770	(3,855)	-1.59%
10	23	General Service - Small	80,869,735	7.50%	1.09	86,349,690	46,939,642	6,368,018	29,284,940	3,201,473	555,617	5,479,955	6.78%
11	25	Mobile Home Parks	658,771	7.67%	1.11	701,783	413,532	53,693	230,511	(692)	4,739	43,012	6.53%
12	SpC	Customer A	7,755,432	4.66%	0.67	8,734,533	7,645,632	940,138	63,102	9,422	76,240	979,101	12.62%
13	SpC	Customer B	13,349,697	-6.63%	(0.96)	19,669,887	17,542,223	1,876,696	100,943	(11,374)	161,399	6,320,190	47.34%
14	SpC	Customer C	17,601,092	-0.46%	(0.07)	22,814,664	19,861,490	2,644,725	105,808	12,156	190,484	5,213,572	29.62%
15		Total Utah Jurisdiction	1,131,088,019	6.91%	1.00	1,223,388,943	739,558,198	98,112,054	331,916,383	45,427,805	8,374,502	92,300,924	8.16%

Corrections:

1. Schedule 8 revenues adjusted to full amount.
2. Account 908S functionalized to Retail (CUST).

UAE Reconstruction of PacifiCorp Unconstrained MSP COS Results (Docket 04-035-42)

PacifiCorp
Cost Of Service By Rate Schedule
State of Utah
12 Months Ending March 2006
MSP

MSP Allocation Factors
8.73% = Target Return on Rate Base

Line No.	A Schedule No.	B Description	C Annual Revenue	D Return on Rate Base	E Rate of Return Index	F Total Cost of Service	G Generation Cost of Service	H Transmission Cost of Service	I Distribution Cost of Service	J Retail Cost of Service	K Misc Cost of Service	L Increase (Decrease) to = ROR	M Percentage Change from Current Revenues
1	1	Residential	440,028,733	7.61%	1.21	471,990,385	233,432,479	29,497,380	167,857,943	38,670,772	2,531,811	31,961,652	7.26%
2	6	General Service - Large	321,430,640	5.86%	0.93	362,652,230	232,326,793	30,652,316	96,590,015	1,937,560	1,145,547	41,221,590	12.82%
3	8	General Service - Over 1 MW	90,729,497	6.19%	0.98	100,843,982	68,567,753	8,592,413	23,243,696	105,198	334,923	10,114,485	11.15%
4	7,11,12,13	Street & Area Lighting	10,847,300	2.21%	0.35	12,946,837	1,941,224	164,213	10,425,800	362,300	53,301	2,099,537	19.36%
5	9	General Service - High Voltage	136,758,294	5.68%	0.90	151,441,511	131,391,029	17,496,120	1,142,208	850,077	562,077	14,683,217	10.74%
6	10	Irrigation	9,352,282	2.72%	0.43	11,551,916	7,350,307	908,627	3,090,323	163,880	38,779	2,199,634	23.52%
7	12	Traffic Signals	739,505	7.01%	1.11	797,712	404,623	47,906	217,825	121,407	5,951	58,207	7.87%
8	12	Outdoor Lighting	725,216	59.01%	9.38	359,547	243,513	19,114	76,835	16,898	3,188	(365,669)	-50.42%
9	21	Electric Furnace	241,825	10.20%	1.62	242,144	156,715	23,861	27,447	33,349	772	319	0.13%
10	23	General Service - Small	80,869,735	6.96%	1.11	88,497,701	49,128,574	6,454,047	29,337,863	3,203,340	373,876	7,627,966	9.43%
11	25	Mobile Home Parks	658,771	7.11%	1.13	720,117	433,096	54,427	230,973	(719)	2,340	61,346	9.31%
12	SpC	Customer A	7,755,432	3.55%	0.56	9,017,322	7,958,388	953,303	63,354	9,460	32,817	1,261,890	16.27%
13	SpC	Customer B	13,349,697	-7.21%	(1.15)	20,094,787	18,032,667	1,904,205	101,826	(13,491)	69,580	6,745,090	50.53%
14	SpC	Customer C	17,601,092	-1.58%	(0.25)	23,578,247	20,703,505	2,681,083	106,412	12,239	75,007	5,977,155	33.96%
15		Total Utah Jurisdiction	1,131,088,019	6.29%	1.00	1,254,734,437	772,070,666	99,449,014	332,512,520	45,472,269	5,229,968	123,646,418	10.93%

Rate of Return Index Comparison

PacifiCorp Rolled-In vs. Unconstrained MSP COS Results

(Docket 04-035-42)

PacifiCorp
Cost Of Service By Rate Schedule
State of Utah
12 Months Ending March 2006
Rolled In vs MSP
8.73% = Target Return on Rate Base

					Rolled In COS	MSP Unconstrained COS
A	B	D	E			
Line No.	Schedule No.	Description	Return on Rate Base	Rate of Return Index	Return on Rate Base	Rate of Return Index
1	1	Residential	8.08%	1.17	7.61%	1.21
2	6	General Service - Large	6.50%	0.94	5.86%	0.93
3	8	General Service - Over 1 MW	6.86%	0.99	6.19%	0.98
4	7,11,12,13	Street & Area Lighting	2.03%	0.29	2.21%	0.35
5	9	General Service - High Voltage	6.79%	0.98	5.68%	0.90
6	10	Irrigation	3.31%	0.48	2.72%	0.43
7	12	Traffic Signals	7.44%	1.08	7.01%	1.11
8	12	Outdoor Lighting	59.86%	8.66	59.01%	9.38
9	21	Electric Furnace	10.57%	1.53	10.20%	1.62
10	23	General Service - Small	7.50%	1.09	6.96%	1.11
11	25	Mobile Home Parks	7.67%	1.11	7.11%	1.13
12	SpC	Customer A	4.66%	0.67	3.55%	0.56
13	SpC	Customer B	-6.63%	(0.96)	-7.21%	(1.15)
14	SpC	Customer C	-0.46%	(0.07)	-1.58%	(0.25)
15		Total Utah Jurisdiction	6.91%	1.00	6.29%	1.00

Issue 2: If “constrained MSP” is the basis for Utah jurisdictional costs, how should this information be incorporated in the class COS analysis?

- Critique of PacifiCorp’s approach in last rate case (cont’d)

- (B) To meet “Rolled-in + 1.5%” jurisdictional cost constraint, target rate of return was reduced for each function (e.g., generation, distribution, transmission) in performing class allocation

Problem: Reducing target rate of return for each function causes changes in jurisdictional allocations for functions (such as distribution) that should be otherwise unaffected by MSP.

- For example, this approach lowered the distribution cost allocated to Utah under constrained MSP relative to Rolled-in – even though MSP did not affect distribution costs

PacifiCorp Rolled-In vs Constrained MSP Results

(Docket 04-035-42)

PacifiCorp
Cost Of Service By Rate Schedule
State of Utah
12 Months Ending March 2006
Rolled In

BaseCase Allocation Factors
8.73% = Target Return on Rate Base

Line No.	Schedule No.	Description	Annual Revenue	Return on Rate Base	Rate of Return Index	Total Cost of Service	Generation Cost of Service	Transmission Cost of Service	Distribution Cost of Service	Retail Cost of Service	Misc Cost of Service	Increase (Decrease) to = ROR	Percentage Change from Current Revenues
15		Total Utah Jurisdiction	1,131,088,019	6.91%	1.00	1,223,388,943	739,558,198	98,112,054	331,916,383	43,610,885	10,191,423	92,300,924	8.16%

PacifiCorp
Cost Of Service By Rate Schedule
State of Utah
12 Months Ending March 2006
MSP

MSP Allocation Factors
8.48% = Target Return on Rate Base

Line No.	Schedule No.	Description	Annual Revenue	Return on Rate Base	Rate of Return Index	Total Cost of Service	Generation Cost of Service	Transmission Cost of Service	Distribution Cost of Service	Retail Cost of Service	Misc Cost of Service	Increase (Decrease) to = ROR	Percentage Change from Current Revenues
15		Total Utah Jurisdiction	1,131,088,019	6.29%	1.00	1,242,110,503	766,971,894	96,944,639	327,608,027	45,388,170	5,197,774	111,022,484	9.82%

Issue 2: If “constrained MSP” is the basis for Utah jurisdictional costs, how should this information be incorporated in the class COS analysis?

- Critique of PacifiCorp’s approach in last rate case (cont’d)
 - (C) Lower income tax consequence of MSP spread to all functions

Problem: The lower income tax consequence of MSP should be allocated only to generation, as that is the only jurisdictional cost that is increased under MSP

Issue 2: If “constrained MSP” is the basis for Utah jurisdictional costs, how should this information be incorporated in the class COS analysis?

Proposal:

- If “constrained MSP” is the basis for Utah class COS, the MSP rate mitigation cap should be treated as lowering the generation expense allocated to Utah relative to “unconstrained” MSP. Target returns for, and allocation of, non-generation function costs (and income taxes) to Utah remain equal between Rolled-in and MSP.
- Class cost responsibility (and relative returns) is then calculated based on the “constrained MSP” costs allocated to Utah, with the functionalized costs determined as stated above.

UAE Recommended Constrained MSP Results

(Docket 04-035-42)

PacifiCorp
Cost Of Service By Rate Schedule
State of Utah
12 Months Ending March 2006
MSP

MSP Allocation Factors
8.73% = Target Return on Rate Base

A	B	C	D	E	F	G	H	I	J	K	L	M	
Line No.	Schedule No.	Description	Annual Revenue	Return on Rate Base	Rate of Return Index	Total Cost of Service	Generation Cost of Service	Transmission Cost of Service	Distribution Cost of Service	Retail Cost of Service	Misc Cost of Service	Increase (Decrease) to = ROR	Percentage Change from Current Revenues
1	1	Residential	440,028,733	7.73%	1.18	468,046,287	229,997,556	29,096,671	167,534,437	38,629,608	2,788,016	28,017,554	6.51%
2	6	General Service - Large	321,430,640	6.13%	0.94	358,730,028	227,681,892	30,236,464	96,407,105	1,936,908	2,467,659	37,299,388	11.59%
3	8	General Service - Over 1 MW	90,729,497	6.50%	0.99	99,746,912	67,246,325	8,474,600	23,201,167	105,734	719,086	9,017,415	9.87%
4	7,11,12,13	Street & Area Lighting	10,847,300	1.99%	0.30	12,916,877	1,935,215	161,985	10,415,863	361,542	42,273	2,069,577	19.51%
5	9	General Service - High Voltage	136,758,294	6.28%	0.96	149,467,980	128,935,449	17,258,355	1,141,579	849,415	1,283,183	12,709,686	8.96%
6	10	Irrigation	9,352,282	2.97%	0.45	11,433,709	7,214,096	896,151	3,084,233	163,526	75,703	2,081,427	22.27%
7	12	Traffic Signals	739,505	7.18%	1.10	791,318	400,554	47,244	217,424	121,269	4,827	51,813	7.08%
8	12	Outdoor Lighting	725,216	59.21%	9.06	356,899	240,756	18,825	76,678	16,878	3,764	(368,317)	-50.79%
9	21	Electric Furnace	241,825	10.65%	1.63	239,183	153,171	23,542	27,404	33,296	1,770	(2,642)	-1.26%
10	23	General Service - Small	80,869,735	7.14%	1.09	87,656,277	48,250,417	6,366,736	29,282,000	3,201,463	555,661	6,786,542	8.47%
11	25	Mobile Home Parks	658,771	7.30%	1.12	713,010	424,787	53,685	230,492	(693)	4,739	54,239	8.31%
12	SpC	Customer A	7,755,432	4.17%	0.64	8,899,908	7,810,878	940,047	63,323	9,427	76,233	1,144,476	14.39%
13	SpC	Customer B	13,349,697	-6.58%	(1.01)	19,856,852	17,728,173	1,876,993	101,817	(11,458)	161,328	6,507,155	48.26%
14	SpC	Customer C	17,601,092	-0.96%	(0.15)	23,261,940	20,308,513	2,644,387	106,407		190,463	5,660,848	31.74%
15		Total Utah Jurisdiction	1,131,088,019	6.54%	1.00	1,242,117,181	758,327,780	98,095,684	331,889,927	45,429,085	8,374,704	111,029,162	9.82%

Corrections:

1. Schedule 8 revenues adjusted to full amount.
2. Account 454S functionalized to Production (P).
3. State and Federal taxes for T, D, R & M constrained to rolled-in amounts; balance of tax change to P.
4. T, D, R & M return on rate base constrained to roll-in amount; G return on rate base adjusted to necessary level to produce overall return.
5. Generation expense constrained to produce capped MSP revenue increase.