Docket No. 20-035-04

OCS Exhibit No. 5.2D

Compilation of Discovery (Data Request) Responses Referenced in the

Direct Testimony of Ron Nelson (OCS 5D) on Behalf of

The Office of Consumer Services

September 15, 2020

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OCS Data Request 8.1

Refer to the direct testimony of Witness Meredith at page 4. Please provide PDFs or electronic links to all industry, trade, academic, and other publications the Company is aware of that supports the creation of the eight fixed and variable subcategories for production and transmission. For each publication, provide line citations indicating where the publication provides support for the approach.

Response to OCS Data Request 8.1

The Company is not aware of any publications that specifically prescribe the functionalization that the Company proposes in this general rate case (GRC).

OCS Data Request 8.3

Reference to the direct testimony of Witness Meredith. For each of the states that PacifiCorp operates within, does PacifiCorp propose, and has the respective commission approved, a classification and allocation approach for production and transmission that is consistent with that of the jurisdictional allocator (i.e., a 75/25 demand to energy split)? If yes, provide the proposals and orders that substantiate the Company's claim. If no, explain how the Company's proposals deviate and/or how the commission(s) adopted approach differs and provide the documents referenced.

Response to OCS Data Request 8.3

The Company objects to this request as requiring legal research or a legal conclusion and requesting information that is outside the scope of this proceeding. Therefore this request is not reasonably calculated to lead to admissible evidence. Without waiving the foregoing objection, the Company responds as follows:

The 75/25 demand and energy classification of production and transmission is also used by the Company in Wyoming and Idaho.

OCS Data Request 8.6

Please refer to the direct testimony of Witness Meredith, line 354-355, which states that the Company unbundles its rates in Oregon, Wyoming, and California.

(a) Please explain whether the Company breaks the Production and Transmission functions into the eight subcategories listed in lines 78-87 in Oregon, Wyoming, and California.

(b) Please explain whether RMP uses the same three categories (Delivery, Fixed Supply, Variable Supply) to unbundle its rates in Oregon, Wyoming, and California.

(c) If the response in (a) or (b) is negative, please explain why. Please explain the unbundling process in each of the states and its differences from the one used in this proceeding.

(d) Please explain whether the unbundling process as proposed in this proceeding (using the same unbundled categories including the same functional and sub-functional categories) has been proposed in any of PacifiCorp's applications for a revision of rates in any of the states it serves.

(e) Please explain whether the unbundling process as proposed in this proceeding (using the same unbundled categories including the same functional and sub-functional categories) has been approved in any of PacifiCorp's applications for a revision of rates in any of the states it serves. If so, provide the commission order(s). If not, provide the order that approved that states current unbundling approach.

Response to OCS Data Request 8.6

(a) The Company breaks Wyoming into very similar eight sub-categories for Production and Transmission This includes Production Demand energy cost adjustment mechanism (ECAM), Production Energy ECAM, Production Demand Non-ECAM, Production Energy Non-ECAM, Transmission Demand ECAM, Transmission Energy ECAM, Transmission Demand Non-ECAM, and Transmission Energy Non-ECAM. Oregon and California are not broken into similar categories.

(b) The Company does not unbundle its rates in Oregon, Wyoming, and California into the same three categories it has proposed for Utah.

(c) The Company is proposing the unbundled categories it has for Utah, because it believes those strike the right balance between providing greater information while avoiding complexity. Please refer to Attachment OCS 8.6 for the Company's pricing testimony and work papers in the most recently filed general rate cases (GRC) in Oregon, Wyoming, and California for descriptions and calculations of how the Company unbundles rates in those states.

(d) The unbundling process proposed in this GRC has not been proposed in any other of the jurisdictions in which the Company provides service to customers.

(e) Please refer to the Company’s response to subpart (d) above.

OCS Data Request 8.7

Refer to the direct testimony of Witness Meredith. Is the Company aware other electric utilities in the United States that utilize the form of proposed in this proceeding (i.e., fixed and variable supply rate components)? If so, provide the name of the utilities and commission orders that approved said unbundling.

Response to OCS Data Request 8.7

The Company is not aware of other electric utilities in the United States who uses the same mode of unbundling which the Company has proposed for Utah in this general rate case (GRC).

OCS Data Request 8.8

Refer to the direct testimony of Witness Meredith lines 361-370. Please provide a definition of what costs the Company considers to be “variable supply” costs. Include in your answer, but do not limit it to, the time frame considered when determining whether a cost is a fixed or variable supply cost. Additionally, provide any academic (e.g., economics) or industry literature that the Company is aware that supports its definition.

Response to OCS Data Request 8.8

Please refer to Exhibit RMP__(SRM-8) for a list of the costs included in what the Company considers to be “variable supply” costs. From an economist’s perspective, these are short-run costs. Note: what the Company considers to be variable supply costs is not the same as what it considers to be energy-related.

OCS Data Request 8.15

Refer to the direct testimony of Witness Meredith and proposed Schedule 35. What is the objective(s) of the pilot, how will the Company measure its performance, how will the Company determine success for the pilot, and what is the Company's plan for moving from the pilot to an optional tariff?

Response to OCS Data Request 8.15

The objective of the pilot program is to determine whether the program is cost-effective and has an adequate level of customer participation and satisfaction.

The Company will measure the pilot's performance by examining the following metrics:

(1) cost effectiveness of the program;
(2) customer participation; and
(3) participant satisfaction.

The timing of when the Company would seek to make the pilot program permanent in the same or a revised form would depend upon participation levels and having sufficient time to analyze results. After the Company has evaluated the pilot, it would make a filing with the Public Service Commission of Utah (USPC) sharing the results of its analysis and would request to either make the pilot permanent as-is, make it permanent but with some changes, extend the pilot but with program changes, or disband the program altogether.

OCS Data Request 8.21

Reference cost of service Utah GRC 2020 work paper, Inputs tab. Provide a detailed explanation of the data and method used to determine the split between secondary and primary distribution for FERC accounts 364-368. Provide all associated work papers.

Response to OCS Data Request 8.21

Please refer to Attachment OCS 8.21 which shows the calculation of the primary and secondary voltage percentages that are applied to FERC Accounts 364, FERC Account 365, FERC Account 366, and FERC Account 367. These percentages are based upon a 10-year average of material issues from stores.

PacifiCorp 2019 Primary-Secondary Splits for Accounts 364-367
Based Upon Material Issues from Store for 2010 - 2019

%'s	FERC Description	Poles, Towers, Fixtures		Overhead Conductor		Underground Conduit		Underground Conductor	
	FERC Account	364		365		366		367	
State	Voltage Level	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
CA		98.72%	1.28%	29.61%	70.39%	47.81%	52.19%	58.29%	41.71%
ID		99.99%	0.01%	68.45%	31.55%	56.13%	43.87%	66.48%	33.52%
OR		98.91%	1.09%	54.05%	45.95%	52.80%	47.20%	54.38%	45.62%
UT		99.86%	0.14%	62.96%	37.04%	57.09%	42.91%	71.15%	28.85%
WA		99.74%	0.26%	68.91%	31.09%	50.18%	49.82%	50.03%	49.97%
WY		98.39%	1.61%	79.17%	20.83%	59.06%	40.94%	64.64%	35.36%
Total		99.37%	0.63%	63.98%	36.02%	56.23%	43.77%	66.36%	33.64%

$'s	FERC Description	Poles, Towers, Fixtures		Overhead Conductor		Underground Conduit		Underground Conductor	
	FERC Account	364		365		366		367	
State	Voltage Level	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
CA		$ 1,013,462.57	$ 13,128.40	$ 98,587.49	$ 234,411.66	$ 32,207.78	$ 35,157.63	$ 610,940.95	$ 437,164.48
ID		$ 3,725,967.13	$ 190.81	$ 678,355.71	$ 312,658.01	$ 126,701.35	$ 99,017.13	$ 4,296,257.59	$ 2,166,458.84
OR		$ 7,259,619.03	$ 79,771.33	$ 2,851,477.14	$ 2,424,245.10	$ 453,125.82	$ 405,021.45	$ 11,687,474.08	$ 9,806,135.71
UT		$ 13,118,063.83	$ 18,846.92	$ 5,543,486.25	$ 3,261,488.09	$ 778,199.17	$ 584,971.15	$ 53,834,752.15	$ 21,826,251.63
WA		$ 2,399,018.18	$ 6,227.36	$ 1,383,179.85	$ 623,907.78	$ 115,692.54	$ 114,885.43	$ 2,482,035.79	$ 2,479,290.23
WY		$ 5,517,696.96	$ 90,251.61	$ 3,049,174.71	$ 802,076.60	$ 781,871.82	$ 541,908.11	$ 6,167,860.28	$ 3,374,018.05
Total		$ 33,033,827.70	$ 208,416.43	$ 13,604,261.15	$ 7,658,787.24	$ 2,287,798.46	$ 1,780,960.88	$ 79,079,320.84	$ 40,089,318.94

DataYear	State	Total$	Pri$	Sec$	Pri%	Sec%	New Code $
2010	CA	$124,890.45	124,323.07	567.38	99.55%	0.45%	$0.00
2011	CA	$131,787.38	130,142.72	1,644.66	98.75%	1.25%	$0.00
2012	CA	$97,158.84	95,557.79	1,601.05	98.35%	1.65%	$0.00
2013	CA	$208,434.20	207,024.86	1,409.34	99.32%	0.68%	$0.00
2014	CA	$110,640.37	108,775.46	1,864.91	98.31%	1.69%	$0.00
2015	CA	$95,118.75	93,719.19	1,399.56	98.53%	1.47%	$0.00
2016	CA	$97,418.94	96,285.26	1,133.68	98.84%	1.16%	$0.00
2017	CA	$86,061.76	84,880.88	1,180.88	98.63%	1.37%	$0.00
2018	CA	$75,080.28	72,753.34	2,326.94	96.90%	3.10%	$0.00
2010	ID	$539,279.36	539,088.55	190.81	99.96%	0.04%	$0.00
2011	ID	$525,405.03	525,405.03	0.00	100.00%	0.00%	$0.00
2012	ID	$397,781.31	397,781.31	0.00	100.00%	0.00%	$0.00
2013	ID	$399,383.99	399,383.99	0.00	100.00%	0.00%	$0.00
2014	ID	$513,776.29	513,776.29	0.00	100.00%	0.00%	$0.00
2015	ID	$430,564.86	430,564.86	0.00	100.00%	0.00%	$0.00
2016	ID	$347,496.32	347,496.32	0.00	100.00%	0.00%	$0.00
2017	ID	$300,534.18	300,534.18	0.00	100.00%	0.00%	$0.00
2018	ID	$271,936.60	271,936.60	0.00	100.00%	0.00%	$0.00
2010	OR	$694,057.53	686,788.37	7,269.16	98.95%	1.05%	$0.00
2011	OR	$767,547.26	756,842.47	10,704.79	98.61%	1.39%	$0.00
2012	OR	$685,964.67	679,494.43	6,470.24	99.06%	0.94%	$0.00
2013	OR	$824,753.18	809,671.31	15,081.87	98.17%	1.83%	$0.00
2014	OR	$827,757.26	819,784.61	7,972.65	99.04%	0.96%	$0.00
2015	OR	$821,423.68	813,868.04	7,555.64	99.08%	0.92%	$0.00
2016	OR	$847,844.42	839,833.78	8,010.64	99.06%	0.94%	$0.00
2017	OR	$893,337.19	886,199.42	7,137.77	99.20%	0.80%	$0.00
2018	OR	$976,705.17	967,136.60	9,568.57	99.02%	0.98%	$0.00
2010	UT	$1,458,078.68	1,454,828.59	3,250.09	99.78%	0.22%	$0.00
2011	UT	$1,974,548.16	1,969,005.45	5,542.71	99.72%	0.28%	$0.00
2012	UT	$1,271,564.12	1,268,634.09	2,930.03	99.77%	0.23%	$0.00
2013	UT	$1,552,419.12	1,551,362.42	1,056.70	99.93%	0.07%	$0.00
2014	UT	$1,385,076.92	1,383,369.16	1,707.76	99.88%	0.12%	$0.00
2015	UT	$1,596,300.64	1,595,285.31	1,015.33	99.94%	0.06%	$0.00
2016	UT	$1,288,710.90	1,287,141.63	1,569.27	99.88%	0.12%	$0.00
2017	UT	$1,256,870.24	1,255,324.01	1,546.23	99.88%	0.12%	$0.00
2018	UT	$1,353,341.97	1,353,113.17	228.80	99.98%	0.02%	$0.00
2010	WA	$247,980.98	242,211.99	5,768.99	97.67%	2.33%	$0.00
2011	WA	$316,485.67	316,027.30	458.37	99.86%	0.14%	$0.00
2012	WA	$236,077.47	236,077.47	0.00	100.00%	0.00%	$0.00
2013	WA	$214,436.02	214,436.02	0.00	100.00%	0.00%	$0.00
2014	WA	$203,828.54	203,828.54	0.00	100.00%	0.00%	$0.00
2015	WA	$361,537.34	361,537.34	0.00	100.00%	0.00%	$0.00
2016	WA	$300,756.43	300,756.43	0.00	100.00%	0.00%	$0.00
2017	WA	$262,718.34	262,718.34	0.00	100.00%	0.00%	$0.00
2018	WA	$261,424.75	261,424.75	0.00	100.00%	0.00%	$0.00
2010	WY	$665,779.14	654,143.09	11,636.05	98.25%	1.75%	$0.00
2011	WY	$728,978.78	714,867.07	14,111.71	98.06%	1.94%	$0.00
2012	WY	$644,024.55	630,163.85	13,860.70	97.85%	2.15%	$0.00
2013	WY	$699,065.29	684,042.38	15,022.91	97.85%	2.15%	$0.00
2014	WY	$703,079.76	692,039.85	11,039.91	98.43%	1.57%	$0.00
2015	WY	$586,881.24	576,863.58	10,017.66	98.29%	1.71%	$0.00
2016	WY	$449,695.27	442,465.43	7,229.84	98.39%	1.61%	$0.00
2017	WY	$505,068.42	501,173.90	3,894.52	99.23%	0.77%	$0.00
2018	WY	$625,376.12	621,937.81	3,438.31	99.45%	0.55%	$0.00
		$37,602,345.20	37,336,599.05	265,746.15			

DataYear	State	Total$	Pri$	Sec$	Pri%	Sec%	New Code $
2010	CA	$43,072.67	9,485.27	33,587.40	22.02%	77.98%	$0.00
2011	CA	$42,365.27	14,652.84	27,712.43	34.59%	65.41%	$0.00
2012	CA	$33,939.05	17,677.16	16,261.89	52.09%	47.91%	$0.00
2013	CA	$54,350.07	28,079.08	26,270.99	51.66%	48.34%	$0.00
2014	CA	$23,870.08	13,585.31	10,284.77	56.91%	43.09%	$0.00
2015	CA	$27,895.83	10,098.23	17,797.60	36.20%	63.80%	$0.00
2016	CA	$28,341.73	5,302.24	23,039.49	18.71%	81.29%	$0.00
2017	CA	$26,050.80	5,966.11	20,084.69	22.90%	77.10%	$0.00
2018	CA	$28,564.87	8,889.36	19,675.51	31.12%	68.88%	$0.00
2019	CA	$24,548.78	-15,148.11	39,696.89	-61.71%	161.71%	$0.00
2010	ID	$110,728.25	68,775.46	41,952.79	62.11%	37.89%	$0.00
2011	ID	$85,238.06	45,938.08	39,299.98	53.89%	46.11%	$0.00
2012	ID	$91,070.97	63,695.33	27,375.64	69.94%	30.06%	$0.00
2013	ID	$52,477.88	19,522.73	32,955.15	37.20%	62.80%	$0.00
2014	ID	$69,776.74	50,407.42	19,369.32	72.24%	27.76%	$0.00
2015	ID	$86,839.37	56,241.54	30,597.83	64.77%	35.23%	$0.00
2016	ID	$121,569.02	94,681.94	26,887.08	77.88%	22.12%	$0.00
2017	ID	$96,849.22	78,254.18	18,595.04	80.80%	19.20%	$0.00
2018	ID	$155,524.52	111,702.23	43,822.29	71.82%	28.18%	$0.00
2019	ID	$120,939.69	89,136.80	31,802.89	73.70%	26.30%	$0.00
2010	OR	$464,099.29	250,113.97	213,985.32	53.89%	46.11%	$0.00
2011	OR	$501,462.30	262,699.05	238,763.25	52.39%	47.61%	$0.00
2012	OR	$405,555.42	175,171.83	230,383.59	43.19%	56.81%	$0.00
2013	OR	$444,798.15	211,320.32	233,477.83	47.51%	52.49%	$0.00
2014	OR	$473,716.63	248,807.48	224,909.15	52.52%	47.48%	$0.00
2015	OR	$560,620.72	283,596.57	277,024.15	50.59%	49.41%	$0.00
2016	OR	$708,425.19	436,311.90	272,113.29	61.59%	38.41%	$0.00
2017	OR	$539,104.23	309,546.21	229,558.02	57.42%	42.58%	$0.00
2018	OR	$537,126.30	297,285.21	239,841.09	55.35%	44.65%	$0.00
2019	OR	$640,814.01	376,624.60	264,189.41	58.77%	41.23%	$0.00
2010	UT	$886,701.20	423,661.50	463,039.70	47.78%	52.22%	$0.00
2011	UT	$1,284,838.41	749,901.29	534,937.12	58.37%	41.63%	$0.00
2012	UT	$542,443.61	286,615.46	255,828.15	52.84%	47.16%	$0.00
2013	UT	$569,275.64	298,176.17	271,099.47	52.38%	47.62%	$0.00
2014	UT	$607,074.31	352,361.60	254,712.71	58.04%	41.96%	$0.00
2015	UT	$1,114,940.34	805,254.85	309,685.49	72.22%	27.78%	$0.00
2016	UT	$915,262.14	651,882.05	263,380.09	71.22%	28.78%	$0.00
2017	UT	$1,063,334.14	759,520.15	303,813.99	71.43%	28.57%	$0.00
2018	UT	$1,014,508.52	710,192.21	304,316.31	70.00%	30.00%	$0.00
2019	UT	$806,596.03	505,920.97	300,675.06	62.72%	37.28%	$0.00
2010	WA	$83,594.24	32,694.59	50,899.65	39.11%	60.89%	$0.00
2011	WA	$152,521.92	87,678.97	64,842.95	57.49%	42.51%	$0.00
2012	WA	$67,018.91	22,394.62	44,624.29	33.42%	66.58%	$0.00
2013	WA	$181,457.41	114,181.44	67,275.97	62.92%	37.08%	$0.00
2014	WA	$275,345.88	222,888.19	52,457.69	80.95%	19.05%	$0.00
2015	WA	$391,274.11	324,125.60	67,148.51	82.84%	17.16%	$0.00
2016	WA	$223,390.33	166,548.53	56,841.80	74.55%	25.45%	$0.00
2017	WA	$182,293.28	133,520.53	48,772.75	73.24%	26.76%	$0.00
2018	WA	$279,232.69	169,228.14	110,004.55	60.60%	39.40%	$0.00
2019	WA	$170,958.86	109,919.24	61,039.62	64.30%	35.70%	$0.00
2010	WY	$391,967.46	300,196.48	91,770.98	76.59%	23.41%	$0.00
2011	WY	$278,149.74	182,032.59	96,117.15	65.44%	34.56%	$0.00
2012	WY	$305,246.11	224,148.62	81,097.49	73.43%	26.57%	$0.00
2013	WY	$366,510.14	270,153.27	96,356.87	73.71%	26.29%	$0.00
2014	WY	$401,400.17	314,770.38	86,629.79	78.42%	21.58%	$0.00
2015	WY	$409,484.86	324,983.68	84,501.18	79.36%	20.64%	$0.00
2016	WY	$204,031.77	147,409.23	56,622.54	72.25%	27.75%	$0.00
2017	WY	$280,089.68	215,186.19	64,903.49	76.83%	23.17%	$0.00
2018	WY	$424,350.42	361,605.43	62,744.99	85.21%	14.79%	$0.00
2019	WY	$790,020.96	708,688.84	81,332.12	89.71%	10.29%	$0.00
		$21,174,798.52	13,356,618.32	7,818,094.72			

DataYear	State	Total$	Pri$	Sec$	Pri%	Sec%	New Code $
2010	CA	$6,364.19	4,015.26	2,348.94	63.09%	36.91%	$0.00
2011	CA	$5,751.71	451.22	5,300.50	7.84%	92.16%	$0.00
2012	CA	$8,310.86	4,436.19	3,874.68	53.38%	46.62%	$0.00
2013	CA	$12,705.56	6,306.42	6,399.15	49.64%	50.36%	$0.00
2014	CA	$8,168.99	4,006.38	4,162.62	49.04%	50.96%	$0.00
2015	CA	$4,611.72	2,304.76	2,306.97	49.98%	50.02%	$0.00
2016	CA	$7,193.58	3,558.18	3,635.40	49.46%	50.54%	$0.00
2017	CA	$930.74	465.37	465.37	50.00%	50.00%	$0.00
2018	CA	$9,995.59	4,997.80	4,997.80	50.00%	50.00%	$0.00
2019	CA	$3,332.46	1,666.23	1,666.23	50.00%	50.00%	$0.00
2010	ID	$41,192.94	34,255.58	6,937.36	83.16%	16.84%	$0.00
2011	ID	$19,700.19	11,004.39	8,695.80	55.86%	44.14%	$0.00
2012	ID	$21,380.25	10,602.94	10,777.32	49.59%	50.41%	$0.00
2013	ID	$26,303.11	13,162.05	13,141.07	50.04%	49.96%	$0.00
2014	ID	$19,522.92	9,660.20	9,862.72	49.48%	50.52%	$0.00
2015	ID	$19,941.48	9,794.53	10,146.96	49.12%	50.88%	$0.00
2016	ID	$17,351.34	8,460.89	8,890.44	48.76%	51.24%	$0.00
2017	ID	$25,486.47	12,593.52	12,892.96	49.41%	50.59%	$0.00
2018	ID	$21,486.80	10,652.56	10,834.24	49.58%	50.42%	$0.00
2019	ID	$13,352.98	6,514.71	6,838.27	48.79%	51.21%	$0.00
2010	OR	$49,262.07	25,174.93	24,087.15	51.10%	48.90%	$0.00
2011	OR	$70,916.67	39,415.52	31,501.15	55.58%	44.42%	$0.00
2012	OR	$74,439.37	37,782.72	36,656.66	50.76%	49.24%	$0.00
2013	OR	$138,267.24	92,863.61	45,403.63	67.16%	32.84%	$0.00
2014	OR	$95,193.56	47,318.51	47,875.05	49.71%	50.29%	$0.00
2015	OR	$71,583.45	34,277.85	37,305.59	47.89%	52.11%	$0.00
2016	OR	$75,004.21	36,770.72	38,233.49	49.02%	50.98%	$0.00
2017	OR	$97,731.47	48,297.49	49,433.98	49.42%	50.58%	$0.00
2018	OR	$104,299.58	51,501.67	52,797.92	49.38%	50.62%	$0.00
2019	OR	$81,449.64	39,722.81	41,726.84	48.77%	51.23%	$0.00
2010	UT	$197,920.73	144,336.84	53,583.89	72.93%	27.07%	$0.00
2011	UT	$227,425.55	178,024.54	49,401.01	78.28%	21.72%	$0.00
2012	UT	$80,639.04	26,990.58	53,648.46	33.47%	66.53%	$0.00
2013	UT	$154,832.44	78,089.73	76,742.71	50.43%	49.57%	$0.00
2014	UT	$108,040.26	54,084.61	53,955.66	50.06%	49.94%	$0.00
2015	UT	$127,770.29	63,733.58	64,036.71	49.88%	50.12%	$0.00
2016	UT	$128,330.09	64,059.10	64,270.99	49.92%	50.08%	$0.00
2017	UT	$117,954.70	58,981.24	58,973.45	50.00%	50.00%	$0.00
2018	UT	$121,541.40	60,692.85	60,848.56	49.94%	50.06%	$0.00
2019	UT	$98,715.81	49,206.10	49,509.71	49.85%	50.15%	$0.00
2010	WA	$19,445.38	10,555.55	8,889.83	54.28%	45.72%	$0.00
2011	WA	$21,945.04	11,560.52	10,384.53	52.68%	47.32%	$0.00
2012	WA	$16,366.82	8,026.79	8,340.03	49.04%	50.96%	$0.00
2013	WA	$32,951.55	16,455.92	16,495.64	49.94%	50.06%	$0.00
2014	WA	$22,134.75	10,728.58	11,406.17	48.47%	51.53%	$0.00
2015	WA	$25,687.14	12,706.23	12,980.91	49.47%	50.53%	$0.00
2016	WA	$24,605.42	12,210.34	12,395.09	49.62%	50.38%	$0.00
2017	WA	$14,548.04	7,143.69	7,404.36	49.10%	50.90%	$0.00
2018	WA	$21,810.09	10,850.30	10,959.80	49.75%	50.25%	$0.00
2019	WA	$31,083.73	15,454.64	15,629.09	49.72%	50.28%	$0.00
2010	WY	$68,882.97	36,255.02	32,627.96	52.63%	47.37%	$0.00
2011	WY	$159,944.30	97,891.55	62,052.76	61.20%	38.80%	$0.00
2012	WY	$112,393.49	54,186.47	58,207.02	48.21%	51.79%	$0.00
2013	WY	$173,642.48	100,343.87	73,298.61	57.79%	42.21%	$0.00
2014	WY	$152,224.94	94,636.67	57,588.27	62.17%	37.83%	$0.00
2015	WY	$99,859.95	55,147.33	44,712.62	55.22%	44.78%	$0.00
2016	WY	$150,793.67	86,702.75	64,090.92	57.50%	42.50%	$0.00
2017	WY	$133,525.39	74,823.97	58,701.42	56.04%	43.96%	$0.00
2018	WY	$153,022.39	109,997.60	43,024.79	71.88%	28.12%	$0.00
2019	WY	$119,490.35	71,886.60	47,603.75	60.16%	39.84%	$0.00
		$4,116,856.64	2,358,125.71	1,758,652.69			

DataYear	State	Total$	Pri$	Sec$	Pri%	Sec%	New Code $
2010	CA	$61,096.95	31,560.11	29,536.84	51.66%	48.34%	$0.00
2011	CA	$183,587.82	136,814.66	46,773.16	74.52%	25.48%	$0.00
2012	CA	$61,612.42	13,540.85	48,071.57	21.98%	78.02%	$0.00
2013	CA	$82,253.54	43,528.29	38,725.25	52.92%	47.08%	$0.00
2014	CA	$69,564.22	53,890.32	15,673.90	77.47%	22.53%	$0.00
2015	CA	$132,615.62	79,454.07	53,161.55	59.91%	40.09%	$0.00
2016	CA	$92,877.68	55,461.92	37,415.76	59.72%	40.28%	$0.00
2017	CA	$102,976.39	58,912.90	44,063.49	57.21%	42.79%	$0.00
2018	CA	$135,055.13	82,468.02	52,587.11	61.06%	38.94%	$0.00
2019	CA	$126,465.66	55,309.81	71,155.85	43.74%	56.26%	$0.00
2010	ID	$407,937.60	267,400.99	140,536.61	65.55%	34.45%	$0.00
2011	ID	$381,493.84	253,320.05	128,173.79	66.40%	33.60%	$0.00
2012	ID	$467,039.30	304,956.04	162,083.26	65.30%	34.70%	$0.00
2013	ID	$554,549.81	376,905.21	177,644.60	67.97%	32.03%	$0.00
2014	ID	$564,253.63	353,005.17	211,248.46	62.56%	37.44%	$0.00
2015	ID	$598,779.65	351,326.75	247,452.90	58.67%	41.33%	$0.00
2016	ID	$597,993.81	360,389.65	237,604.16	60.27%	39.73%	$0.00
2017	ID	$704,575.86	464,752.55	239,823.31	65.96%	34.04%	$0.00
2018	ID	$987,135.10	657,266.24	329,868.86	66.58%	33.42%	$0.00
2019	ID	$1,198,957.83	906,934.94	292,022.89	75.64%	24.36%	$0.00
2010	OR	$1,357,936.01	763,359.60	594,576.41	56.21%	43.79%	$0.00
2011	OR	$1,463,897.97	799,325.71	664,572.26	54.60%	45.40%	$0.00
2012	OR	$1,779,711.30	1,015,314.90	764,396.40	57.05%	42.95%	$0.00
2013	OR	$1,859,923.32	1,117,315.43	742,607.89	60.07%	39.93%	$0.00
2014	OR	$1,636,849.80	730,136.95	906,712.85	44.61%	55.39%	$0.00
2015	OR	$1,978,581.83	1,033,860.00	944,721.83	52.25%	47.75%	$0.00
2016	OR	$2,270,029.36	1,232,366.83	1,037,662.53	54.29%	45.71%	$0.00
2017	OR	$2,880,881.37	1,539,219.93	1,341,661.44	53.43%	46.57%	$0.00
2018	OR	$3,048,168.90	1,618,744.64	1,429,424.26	53.11%	46.89%	$0.00
2019	OR	$3,217,629.93	1,837,830.09	1,379,799.84	57.12%	42.88%	$0.00
2010	UT	$5,391,359.31	4,000,199.56	1,391,159.75	74.20%	25.80%	$0.00
2011	UT	$5,562,927.27	4,086,009.13	1,476,918.14	73.45%	26.55%	$0.00
2012	UT	$5,022,387.93	3,378,597.58	1,643,790.35	67.27%	32.73%	$0.00
2013	UT	$5,231,755.09	3,342,183.82	1,889,571.27	63.88%	36.12%	$0.00
2014	UT	$6,859,010.19	4,629,922.69	2,229,087.50	67.50%	32.50%	$0.00
2015	UT	$6,137,294.05	3,730,039.94	2,407,254.11	60.78%	39.22%	$0.00
2016	UT	$6,923,238.84	4,668,608.10	2,254,630.74	67.43%	32.57%	$0.00
2017	UT	$9,209,149.01	6,650,269.73	2,558,879.28	72.21%	27.79%	$0.00
2018	UT	$13,356,237.51	10,373,481.61	2,982,755.90	77.67%	22.33%	$0.00
2019	UT	$11,967,644.58	8,975,439.99	2,992,204.59	75.00%	25.00%	$0.00
2010	WA	$433,563.35	188,462.76	245,100.59	43.47%	56.53%	$0.00
2011	WA	$367,199.11	148,053.61	219,145.50	40.32%	59.68%	$0.00
2012	WA	$275,284.07	146,926.35	128,357.72	53.37%	46.63%	$0.00
2013	WA	$416,405.51	196,457.20	219,948.31	47.18%	52.82%	$0.00
2014	WA	$490,259.16	266,410.56	223,848.60	54.34%	45.66%	$0.00
2015	WA	$617,996.46	351,616.73	266,379.73	56.90%	43.10%	$0.00
2016	WA	$507,032.43	264,392.17	242,640.26	52.15%	47.85%	$0.00
2017	WA	$406,071.39	171,192.56	234,878.83	42.16%	57.84%	$0.00
2018	WA	$703,677.30	347,405.70	356,271.60	49.37%	50.63%	$0.00
2019	WA	$743,837.24	401,118.15	342,719.09	53.93%	46.07%	$0.00
2010	WY	$883,222.39	543,136.66	340,085.73	61.49%	38.51%	$0.00
2011	WY	$1,160,098.72	787,305.63	372,793.09	67.87%	32.13%	$0.00
2012	WY	$1,059,013.82	622,272.19	436,741.63	58.76%	41.24%	$0.00
2013	WY	$1,060,674.02	667,615.59	393,058.43	62.94%	37.06%	$0.00
2014	WY	$1,261,944.68	828,393.27	433,551.41	65.64%	34.36%	$0.00
2015	WY	$879,475.81	492,133.21	387,342.60	55.96%	44.04%	$0.00
2016	WY	$794,254.44	512,056.99	282,197.45	64.47%	35.53%	$0.00
2017	WY	$717,636.98	511,000.38	206,636.60	71.21%	28.79%	$0.00
2018	WY	$918,180.30	659,110.85	259,069.45	71.78%	28.22%	$0.00
2019	WY	$807,377.17	544,835.51	262,541.66	67.48%	32.52%	$0.00
		$112,098,236.56	73,754,552.73	38,336,404.70			

OCS Data Request 11.1

Plant Additions – AMI Project. Refer to Exhibit RMP__(SRM-3) at pages 223 (Page 8.5.26) and 225 (Page 8.5.28). Also refer to the response to OCS DR 5.16. The attachment provided in response to OCS DR 5.16 shows a total of $77.9M of capital costs for the Utah AMI project, with $27.4M of that amount spent in 2022. Exhibit RMP__(SRM-3) at Pages 8.5.26 and 8.5.28 shows a total of $77M being placed in service for the project during 2020 and 2021 ($31.4M on Page 8.5.26 and $45.6M on Page 8.5.28).

(a) The data response shows capital costs of $17,800,000 in 2017 to 2019. What amount was actually placed into service for the AMI project as of the end of the base year (i.e., December 31, 2019). Please provide the amount by FERC account.

(b) Please explain the discrepancy of the in-service dates between the response to the data request, which shows $27.4M of capital in 2022, and what is reflected Exhibit RMP__(SRM-3), which shows $77M placed into service during 2020 and 2021.

(c) Please provide the amounts actually placed in service, to date, for the Utah AMI project, by month placed into service.

(d) Please provide the current best estimate of the remaining amounts to be placed in service for the project through project completion, by month.

Response to OCS Data Request 11.1

(a) The $17,800,000 from 2017 to 2019 reflects a cash flow basis not plant in service. The in-service amounts are listed in Attachment OCS 11.1.

(b) The Utah Advanced Metering Infrastructure (AMI) project was delayed till the end on 2022 due to cybersecurity concerns, vendor recommended technology changes and COVID-19 pandemic related issues. Current forecasts project $27.4 million in capital expenditures and plant placed in service for 2022. For the Company's current forecast, please refer to the Company's response to subpart (d) below.

(c) Please refer to Attachment OCS 11.1

(d) Please refer to Attachment OCS 11.1

OCS Data Request 16.15

Reference the Company’s response to OCS data request 8.12(a). Explain in detail (i.e., provide the performance metrics or indicators) how the Company plans to determine “how well the Company can rely upon such a program for its capacity needs.”

Response to OCS Data Request 16.15

The Company does not have definitive metrics at this time, but hopes to develop those as it gains experience with the pilot.

OCS Data Request 16.17

Reference the Company’s response to OCS data request 8.15. Please answer the following:

(a) How will cost effectiveness be measured? Provide the spreadsheets or formulas the Company has planned to use.

(b) What is the Company’s goal for customer participation?

(c) How is the Company going to measure participant satisfaction?

Response to OCS Data Request 16.17

(a) Please refer to the Company’s response to OCS Data Request 8.15.

(b) The Company does not have a specific goal for participation.

(c) The Company will measure satisfaction based upon its communications with customers.

OCS Data Request 16.18

Reference the Company's response to OCS data request 8.18. Provide the merit order of the curtailment blocks that are interrupted and a description of each curtailment block. Explain where Schedule 35 is within the merit order.

Response to OCS Data Request 16.18

The load curtailment blocks described in the Company's response to OCS Data Request 8.18 are megawatt (MW) transmission-scale blocks of pre-filtered, Supervisory Control and Data Acquisition (SCADA) controllable load. Each block is pre-identified to have the least amount of impact possible to critical customers, such as hospitals, schools, police and fire stations, etc. Once these load blocks are defined they are grouped by geographic area. This way the operators can target load in areas that specifically need emergency system reliability actions. When faced with a situation where load shed is required, the operator will look at the appropriate geographic list, and select the load to drop from that list based on the MW levels required to relieve the system emergency. The merit order is determined by what pre-defined load blocks will make the greatest impact on relieving the emergency.

Priority would be to use the Schedule 35 option prior to using the load curtailment blocks, if the Schedule 35 solution was appropriate for the emergency event. Schedule 35 is for shorter duration immediate curtailments to help with short term events such as a major generation trip and frequency response, where system-wide balancing or load relief is needed. The load curtailment blocks described in the Company's response to OCS Data Request 8.18 are identified geographically and specifically by transmission circuit, so can be more precise in a situation that requires load shed in a limited area and for longer periods of time. Rolling brown-outs would utilize these load curtailment blocks for example.

For Rocky Mountain Power (RMP), the main curtailment blocks are broken up in the following geographic areas:

- Idaho/Wyoming Transmission:
    - Identifies transmission substations in the Idaho and Wyoming RMP service territories. Total load in this block would be 674 MW, split out into smaller 5-40 MW portions.
- Northern Utah Transmission:
    - Identifies transmission substations in the Northern Utah RMP service territory, comprising of the Ogden to Lewiston area. Total load in this block is 693 MW, split out into smaller 20-80 MW portions.

- Southern Utah Transmission:

  - Identifies transmission substations in the Southern Utah RMP service territory, comprising of the St George/Cedar City area. Total load in this block is 375 MW, split out into smaller 15-110 MW portions.

- Idaho:

  - Identifies sub transmission circuits in the Idaho RMP service territory. Total load in this block is 83 MW, split out into smaller 2-8 MW portions.

- Goshen Area:

  - Identifies sub transmission circuits specifically served from the Goshen substation and in the Idaho Falls/Rexburg section of the RMP service territory. Total load in this block is 172 MW, split out into smaller 1-20 MW portions.

- Northern Utah 1:

  - Identifies sub transmission circuits in the Northern Utah portion of the RMP service territory. Specifically this breaks down the area fed between the Syracuse and Terminal substations (between city of Syracuse and SLC Airport). Total load in this block is 97 MW, split out into smaller 1-8 MW portions.

- Northern Utah 2:

  - Identifies sub transmission circuits in the Northern Utah portion of the RMP service territory. Specifically this breaks down the area fed between the Syracuse and Ben Lomond substations (between city of Syracuse and Plain City). Total load in this block is 122 MW, split out into smaller 1-8 MW portions.

- Salt Lake Valley 1, 2 and 3:

  - Splits the Salt Lake Valley into three load blocks, based on which main substations serves this load:

    - SLV 1: 40 MW (1-10 MW portions)
    - SLV 2: 142 MW (1-10 MW portions)
    - SLV 3: 212 MW (1-10 MW portions)

- Utah Valley 1:

  - Identifies sub transmission circuits in the Orem area of the RMP service territory. Total load in this block is 62 MW, split out into smaller 1-7 MW portions.

- Utah Valley 2:
  - Identifies sub transmission circuits in the Orem area of the RMP service territory. Total load in this block is 50 MW, split out into smaller 1-11 MW portions.

OCS Data Request 16.21

Reference the Company's response to OCS data request 8.21. Explain the costs used within the spreadsheet. Include in your answer, but do not limit it to, whether the costs are a subset of similar total costs. If so, provide the approach used to sample the data.

Response to OCS Data Request 16.21

The costs included within the spreadsheet are material issues from store. The Company only included materials which could be clearly identified as being related to FERC Account 364 through FERC Account 367.

OCS Data Request 18.4

Refer to the Direct Testimony of Witness Mansfield at 24. Explain why the Company will be installing 175,000 AMI meters, which customers will be getting AMI meters, and why.

Response to OCS Data Request 18.4

The meters, along with the access points (a pole mounted device), make up the mesh network. The replacement of approximately 175,000 existing Automated Meter Readers (AMR) with Advanced Metering Infrastructure (AMI) meters will enable the Company to build out the mesh network. AMI meters will be installed on all Schedule 136 customers to eliminate manually meter reading at these sites.The remaining meters will be installed at strategic locations that allow the Company to build out the mesh network. The specific locations of these meters are not determined at this time because meter counts, meter locations and meter rate schedules will change prior to AMI meter installations, which alters the optimized mesh network solution.

OCS Data Request 18.14

Refer to the Direct Testimony of Witness Mansfield lines 530-537. Explain the functionality of the Company's meter data management system as it varies by customer type and meter. Explain whether implementing advanced rate designs, such as critical peak pricing, will be possible for all customer classes using the current and upgraded MDMS.

Response to OCS Data Request 18.14

The Meter Data Management System (MDMS) will provide for the creation of billing determinants for residential and small commercial customers with advanced metering infrastructure (AMI) and automated meter reading (AMR) meters as well as creation of the daily usages for display on the customer website. For large customers with load profile metering, the system will provide for the storage and delivery of billing determinants. For all customers, the system will store all meter reads, load profile data and meter events.

The MDMS will be able to provide billing determinants for advanced rate designs for customers with AMI, AMR or load profile meters. However, the existing customer service system (CSS) does not have the ability to accept these determinants and will require a major overhaul or replacement before advanced rates can be appropriately calculated and billed.

OCS Data Request 18.16

Refer to the Direct Testimony of Witness Mansfield lines 636-649. For each of the objectives listed, provide the following:

(a) The approach for measuring the Company's success (i.e., what performance metrics will the Company use to evaluate its success);

(b) The performance target the Company has set for itself (e.g., the date by which the Company will conduct an equipment sizing analysis that saves $X or a discrete improvement in SAIDI and SAIFI);

(c) The reporting the Company is proposing to demonstrate a successful implementation of AMI and ongoing utilization and performance of AMI; and

(d) Explain what happens if the Company fails to achieve the objective.

Response to OCS Data Request 18.16

While an advanced metering infrastructure (AMI) system provides the foundation upon which smart grid functionalities can be built, only items related to meter reading functions and customer data access were included in the current project. Please refer to the Company's response to OCS Data Request 18.8.

Success metrics have been established in three areas:

- Average daily meter reading (>98% after project completion),
- Meter installations (100% of planned installs), and
- Realization of cost reductions (16 FTE positions will be eliminated per the business case).

Weekly reports will be designed closer to project implementation as we understand and become familiar with the full extent of the performance metrics available from the system to demonstrate successful implementation.

If full metric attainment is not achieved upon project completion (e.g. >98% daily reads), further analysis and reinforcement of the AMI network will be necessary in identified specific locations.

Program development, target dates and metrics for other smart grid functions have not been fully explored and are pending project completion.