

**BEFORE THE WASHINGTON
UTILITIES & TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

NORTHWEST NATURAL GAS COMPANY,

Respondent.

DOCKET UG-181053

SCOTT J. RUBIN ON BEHALF OF PUBLIC COUNSEL

EXHIBIT SJR-10

Northwest Natural Gas Company's Response to WUTC Staff Data Request 202

(Cost of Adding a New Customer)

JULY 3, 2019



Rates & Regulatory Affairs
UG-181053
2018 WA General Rate Revision
Data Request Response

DR Request: May 21, 2019
Date of Response: May 30, 2019
Responder: Kyle T. Walker
Telephone: (503) 226-4211 ext. 5858
Email: kyle.walker@nwnatural.com
Witness: Kyle Walker

Request No.: UG-181053 WUTC DR 202

Does the Company have any internal cost estimates for serving new residential or commercial customers, including capital expenditures and annualized expenses? If so, please provide the cost estimate and any relevant analyses. The cost estimate can include but is not limited to general budget guidelines, recent business case analyses associated with serving a particular new development, or cost information based on historical records. To the extent that the Company analyzed the future revenue associated with such new customers, please provide revenue projection, as well.

Response:

Please see "UG-181053 WUTC DR 202 Attachment 1.xlsx" for the Company's most up to date analysis related to new residential meter sets in Washington. This analysis focuses on the capital expenditures needed to add new residential customers onto our system. The final costs are net of customer contributions received. Our current internal analysis combines industrial and commercial new customers. Under the Company's initial filing and the Partial Multi-Party Settlement Agreement on Decoupling, industrial customers are not subject to Decoupling. Therefore, for the purpose of this data request relating to Decoupling, we have removed those figures from the analysis.

See "UG-181053 WUTC DR 202 Attachment 2.xlsx" for the cost of service for a new residential customer which includes the average capital investment from 2018 found in Attachment 1. The cost of service for a newly added residential customer in year one is \$518¹.

Last, see "UG-181053 WUTC DR 202 Attachment 3.xlsx" for a per customer revenue projection for newly added customers. The revenue per year amounts to \$225.93 and \$411.55 for rate schedule 1 and 2, respectively, per newly added residential customer.

¹ This analysis uses the capital structure and cost of capital from the all-party settlement in UG-181053

Number of Meter Sets - Washington

	2013	2014	2015	2016	2017	2018
Total Residential Meter Sets (Washington Only)	1,803	1,527	1,869	2,141	2,485	2,658

Number of Orders - Washington

	2013	2014	2015	2016	2017	2018
Washington SM01	67	90	118	128	160	177
Washington SM01	14	11	14	8	30	20
Washington SM02	1,252	1,296	1,527	1,885	2,181	2,355
Washington SM03	87	19	26	22	33	43
Washington SM02	142	131	138	154	176	144
Washington SM03	9	9	82	3	15	9
Total SM01	81	101	132	136	190	197
Total SM02	1,394	1,427	1,665	2,039	2,357	2,499
Total SM03	96	28	108	25	48	52
Addsets Meter Sets - (Total SM02+SM03)	313	72	96	77	80	107

Total Cost of Service Line, Meter, Permit, Indirect Materials (Including Add Sets Only) - Washington

	2013	2014	2015	2016	2017	2018
Washington SM01	\$599,910	\$703,536	\$1,083,402	\$1,539,033	\$1,756,561	\$2,337,803
Washington SM01	\$116,522	\$163,181	\$228,429	\$209,634	\$638,111	\$1,203,996
Washington SM02	\$1,362,392	\$1,529,851	\$1,762,505	\$2,228,036	\$2,619,402	\$2,856,288
Washington SM03	\$171,610	\$35,237	\$40,046	\$28,623	\$66,046	\$70,364
Washington SM02	\$373,446	\$353,405	\$398,991	\$390,985	\$513,658	\$535,323
Washington SM03	\$25,813	\$19,312	\$139,681	\$7,216	\$40,081	\$53,041
Total SM01	\$716,432	\$866,717	\$1,311,831	\$1,748,667	\$2,394,672	\$3,541,799
Total SM02	\$1,735,838	\$1,883,256	\$2,161,496	\$2,619,021	\$3,133,060	\$3,391,611
Total SM03	\$197,424	\$54,549	\$179,727	\$35,839	\$106,128	\$123,405
Total Addset Costs	\$70,738	\$16,272	\$21,696	\$17,402	\$18,080	\$24,182

Meter Add Set Costs \$226

Total Customer Contribution - Washington

	2013	2014	2015	2016	2017	2018
Washington SM01	\$0	\$0	\$0	\$0	\$0	\$0
Washington SM01	\$0	\$0	\$0	\$0	\$0	\$0
Washington SM02	\$1,343	\$9,696	\$7,228	\$16,259	\$14,037	\$25,212
Washington SM03	\$11,492	\$1,355	\$1,380	\$0	\$5,378	\$21,049
Washington SM02	\$51,558	\$51,241	\$78,904	\$93,007	\$110,961	\$130,051
Washington SM03	\$16,192	\$4,061	\$5,042	\$2,434	\$2,830	\$0
Total SM01	\$0	\$0	\$0	\$0	\$0	\$0
Total SM02	\$52,901	\$60,937	\$86,132	\$109,266	\$124,998	\$155,263
Total SM03	\$27,684	\$5,416	\$6,422	\$2,434	\$8,208	\$21,049

Total Cost Net of Contribution - Washington

	2013	2014	2015	2016	2017	2018
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Washington SM02	\$1,361,049	\$1,520,155	\$1,755,277	\$2,211,777	\$2,605,365	\$2,831,076
Washington SM03	\$160,118	\$33,882	\$38,666	\$28,623	\$60,668	\$49,315
Washington SM02	\$321,888	\$302,164	\$320,087	\$297,978	\$402,697	\$405,272
Washington SM03	\$9,621	\$15,251	\$134,639	\$4,782	\$37,251	\$53,041
Total SM01	\$716,432	\$866,717	\$1,311,831	\$1,748,667	\$2,394,672	\$3,541,799
Total SM02	\$1,682,937	\$1,822,319	\$2,075,364	\$2,509,755	\$3,008,062	\$3,236,348
Total SM03	\$169,740	\$49,133	\$173,305	\$33,405	\$97,920	\$102,356
Total	\$2,569,108	\$2,738,169	\$3,560,501	\$4,291,826	\$5,500,653	\$6,880,502
Addsets	\$70,738	\$16,272	\$21,696	\$17,402	\$18,080	\$24,182
Total Costs (Washington)	\$2,639,846	\$2,754,441	\$3,582,197	\$4,309,228	\$5,518,733	\$6,904,684
Total Meter Sets - Washington	1,803	1,527	1,869	2,141	2,485	2,658
Total Construction Cost/Customer	\$1,464	\$1,804	\$1,917	\$2,013	\$2,221	\$2,598
Overhead Rate Est.	38%	38%	38%	38%	38%	38%
Total Cost per New Meter Set	\$2,021	\$2,489	\$2,645	\$2,778	\$3,065	\$3,585

[1] May include counts and costs from commercial or industrial new meter sets

NW Natural
 Determination of Cost of Service

Input Capital Costs and Rates			
Cost of Capital	% of Capital	Cost	Weighted Cost
Debt	50.00%	5.066%	2.533%
Short Term Debt	1.00%	2.186%	0.022%
Common Equity	49.00%	9.400%	4.606%
	<u>100.00%</u>		<u>7.161%</u>
State Tax Rate			0.00%
Federal Tax Rate			21.00%
Revenue Sensitive Rate (held to franchise rate/reg com fee)			4.05%
Depreciation Rate			2.60%
Property Tax Rate			1.50%
Incremental O&M		\$	54.55
Inflation Rate			2.50%
Bonus Tax Depreciation toggled (1 = yes, 2 = no)			2
Investment		\$	3,585

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1 Depreciation	93	93	93	93	93	93	93	93	93	93
2 O&M	55	56	57	59	60	62	63	65	66	68
3 Property Taxes	53	52	50	49	47	46	45	43	42	40
Taxes on Equity Return										
4 State	0	0	0	0	0	0	0	0	0	0
5 Federal	43	42	41	39	38	36	35	33	32	31
6 Total Taxes	43	42	41	39	38	36	35	33	32	31
Return on Rate Base										
7 Debt	90	87	83	80	77	74	72	69	66	63
8 Short Term Debt	1	1	1	1	1	1	1	1	1	1
9 Common Equity	163	157	152	146	141	135	130	125	120	115
10 Total Return	253	245	236	227	219	210	202	195	187	179
11 Subtotal Cost of Service	497	488	477	467	457	448	438	429	421	412
12 Revenue Sensitive Items	21	21	20	20	19	19	19	18	18	17
13 Total Cost of Service	\$518	\$508	\$497	\$487	\$476	\$466	\$457	\$447	\$438	\$429
14 Annual Cost of Service as % of Investment	14.46%	14.18%	13.87%	13.57%	13.29%	13.01%	12.74%	12.48%	12.23%	11.97%
Rate Base - net of deprec. & def. tax	\$3,534	\$3,419	\$3,293	\$3,171	\$3,053	\$2,938	\$2,826	\$2,717	\$2,609	\$2,502

UG-181053 WUTC DR 202 Attachment 3
New Residential Customer Revenue per Settlement in UG 181053

	<u>RS 1</u>	<u>RS 2</u>
Monthly Charge	\$5.50	\$8.00
Base Rate	\$0.69687	\$0.46520
Annual UPC	229.5	678.3
Total Annual Marg	\$225.93	\$411.55

Number of Meter Sets - Washington

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UG-181053 WUTC DR 202 Attachment 3

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