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Attorneys for Intermountain Gas Company

BEFORE THE IDAHO PUBLIC UTILITES COMMISSION

IN THE MATTER OF THE APPLICATION OF	)	
INTERMOUNTAIN GAS COMPANY FOR	)	
THE AUTHORITY TO CHANGE ITS RATES	)	Case No. INT-G-16-02
AND CHARGES FOR NATURAL GAS	)	
SERVICE TO NATURAL GAS CUSTOMERS	)	
IN THE STATE OF IDAHO	)	
	)	

EXHIBIT 24

Intermountain Gas Company
Rate Design Analysis and Calculations

Line	(X)	Residential Service Rate Schedule RS (A)	General Service Rate Schedule GS-1 (B)	Large Volume Rate Schedule LV-1 (C)	Transport Service (Interruptible) Rate Schedule T-3 (D)	Transport Service (Firm) Rate Schedule T-4 (E)	Company Total (F)	Explanation (G)
1	**A. Proforma Normalized Calendar Month Revenues at Current Rates**							
2								
3	Company Total Distribution Base Revenues							
4	Distribution Revenues: Customer Charge	$14,184,240	$1,738,418	$0	$0	$0	$15,922,658	Company Records
5	Revenues: Volumetric Charge	$39,048,014	$17,792,045	$403,987	$727,673	$8,731,332	$66,703,050	Company Records
6	Revenues: Demand Charge					$451,781	$451,781	Company Records
7	Company Total Base Revenues	$53,232,253	$19,530,463	$403,987	$727,673	$9,183,113	$83,077,489	Σ Line 4 to Line 6
8	**B. Billing Determinants**							
9	Customer Bill Count							
10	Customers - Summer	2,469,370	256,991				2,726,361	
11	Customers - Winter	1,232,433	128,888				1,361,321	
12	Customers - Total	3,701,803	385,879				4,087,682	Company Records
13	Energy Consumption (Therms)							
14	Summer							
15	Distribution Quantity - Summer	75,158,465					75,158,465	Company Records
16	Distribution Quantity Block 1 - Summer		13,965,447	3,962,764	5,210,862	65,858,113	88,997,186	Company Records
17	Distribution Quantity Block 2 - Summer		17,972,029	0	2,000,000	54,169,505	74,141,534	Company Records
18	Distribution Quantity Block 3 - Summer		8,083,256	0	17,946,368	33,682,695	59,712,319	Company Records
19	Distribution Quantity Block 4 - Summer						0	Company Records
20	Distribution Quantity - Firm - Summer					10,383,817	10,383,817	Company Records
21	Distribution Quantity - Interruptible - Summer					2,898,285	2,898,285	Company Records
22	TOTAL Summer Distribution Consumption (Therms)	75,158,465	40,020,732	3,962,764	25,157,230	166,992,415	311,291,606	Company Records
23	Winter							
24	Distribution Quantity - Winter	137,628,595					137,628,595	Company Records
25	Distribution Quantity Block 1 - Winter		17,087,083	2,354,796	2,402,389	39,790,793	61,635,061	Company Records
26	Distribution Quantity Block 2 - Winter		33,412,251	0	1,000,000	34,747,263	69,159,514	Company Records
27	Distribution Quantity Block 3 - Winter		17,452,598	0	11,349,668	36,388,303	65,190,569	Company Records
28	Distribution Quantity Block 4 - Winter						0	
29	Distribution Quantity - Firm - Winter					5,271,535	5,271,535	Company Records
30	Distribution Quantity - Interruptible - Winter					1,222,523	1,222,523	Company Records
31	TOTAL Winter Distribution Consumption (Therms)	137,628,595	67,951,932	2,354,796	14,752,057	117,420,417	340,107,797	Company Records
32	Demand (Therms / day contract Demand)							
33	Billing Demand			432,960		18,236,364	18,669,324	Company Records
34	Rate Blocks: Upper Limit (Therms per Month)							
35	Block 1 - Summer		200	250,000	100,000	250,000		
36	Block 2 - Summer		2,000	750,000	150,000	750,000		
37	Block 3 - Summer		9,999,999	9,999,999	9,999,999	9,999,999		
38	Block 4 - Summer		9,999,999	9,999,999	9,999,999	9,999,999		
39	Block 1 - Winter		200	250,000	100,000	250,000		
40	Block 2 - Winter		2,000	750,000	150,000	750,000		
41	Block 3 - Winter		9,999,999	9,999,999	9,999,999	9,999,999		
42	Block 4 - Winter		9,999,999	9,999,999	9,999,999	9,999,999		

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43	**C. CLASS REVENUE TARGETS**							
44	Cost Study Results							
45	Total Delivery Service Costs							
46	Total Customer-related Costs							Functional Revenue requirement at equal ROR
47	Total Capacity-related Costs							Functional Revenue requirement at equal ROR
48	Total Commodity-related Costs							Functional Revenue requirement at equal ROR
49	Rate Schedule Revenue Requirement at Equal ROR	$60,987,556	$23,997,224	$262,137	$199,632	$7,796,639	$93,243,187	Lines 46 to 48
50	Distribution Service Unit Costs							
51	Capacity ($/therm)	$0.0576	$0.0592	$0.0212	$0.0019	$0.0242		Unit Costs from ACOSS
52	Customer ($/month)	$13.16	$45.62	$0.00	$0.00	$0.00		Unit Costs from ACOSS
53	Commodity ($/therm)							Unit Costs from ACOSS
54	**Delivery Revenue Requirement**							
55	Total Revenue Requirement	$60,987,556	$23,997,224	$262,137	$199,632	$7,796,639	**93,243,187**	
56	% Increase (Revenue Requirement - Normalized revenues)	14.57%	22.87%	-35.11%	-72.57%	-15.10%	**12.24%**	Line 55 / Line 7 - 1
57	Development of Class Revenue Target							
58	Proforma Total Revenues (Base Revenues at Current Rates)							
59	Base Proforma Revenues	$53,232,253	$19,530,463	$403,987	$727,673	$9,183,113	$83,077,489	Line 7
60	Allocated Revenue Targets at Proposed ROR							
61	Capacity-related Revenue Requirement at Proposed ROR	$12,258,605	$6,394,052	$133,824	$77,326	$6,880,033	$25,743,841	Line 49
62	Customer-related Revenue Requirement at Proposed ROR	$48,728,951	$17,603,172	$128,312	$122,306	$916,605	$67,499,346	Line 50
63	Commodity-related Revenue Requirement at Proposed ROR							Line 51
64	Total Revenue Requirement at Equal ROR	$60,987,556	$23,997,224	$262,137	$199,632	$7,796,639	$93,243,187	Line 61 + Line 62
65	FINAL BASE REVENUE TARGET	$60,987,556	$23,997,224	$262,137	$199,632	$7,796,639	$93,243,187	Line 64
66	**D. RATE DESIGN**							
67	Current Customer charge - Summer	$2.50	$2.00					Company tariffs
68	Current Customer charge - Winter	$6.50	$9.50					Company tariffs
69	Unit Customer Cost	$13.61	$46.85	58.76%				ACOSS
70	**Proposed Customer Charge**	**$10.00**	**$35.00**					Company rate design decision
71	Proposed Customer charge as a % of unit costs	73.5%	74.7%					Line 70 / Line 69
72	Customer Charge Revenue, Proposed Customer Charge							
73	Customer Revenues	$37,018,030	$13,505,765				$50,523,795	Line 70 * Line 12
74	Demand-Related Charges							
75	Current Demand Charge			$0.00		$0.84253		Company Tariffs
76	Demand-Related Billing Units							
77	Billing Demand Contract Demand, Therms			432,960		18,236,364	18,669,324	Company Records
78	**Proposed Demand-Related Charges**							
79	Proposed Demand Charge			**$0.3000**		**$0.30000**		Company decision
80	Demand Revenues at Proposed Rates			$129,888		$5,470,909	$5,600,797	Line 79 x Line 77
81	Remaining Revenues	$23,969,526	$10,491,459	$132,249	$199,632	$2,325,730	$37,118,595	Line 65- Line 73 - Line 80

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82	Volumetric Revenue Target	$23,969,526	$10,491,459	$132,249	$199,632	$2,325,730	$37,118,595	Line 81
				49.5%				
83	Current Volumetric Charge ($/Therm) - Summer	$0.31617						Company Tariffs
84	Current Volumetric Charge ($/Therm) - Winter	$0.20361						Company Tariffs
85	Current Volumetric Charge ($/Therm) - Summer	$0.19539						Company Tariffs
86	Current Volumetric Charge ($/Therm) - Winter	$0.16176						Company Tariffs
87	Current Volumetric Charge ($/Therm) - Summer Block 1		$0.21690	$0.06395	$0.05499	$0.05922		Company Tariffs
88	Current Volumetric Charge ($/Therm) - Summer Block 2		$0.19517	$0.02546	$0.02239	$0.02073		Company Tariffs
89	Current Volumetric Charge ($/Therm) - Summer Block 3		$0.17415	$0.00600	$0.00826	$0.00600		Company Tariffs
90	Current Volumetric Charge ($/Therm) - Winter Block 1		$0.16605	$0.06395	$0.05499	$0.05922		Company Tariffs
91	Current Volumetric Charge ($/Therm) - Winter Block 2		$0.14485	$0.02546	$0.02239	$0.02073		Company Tariffs
92	Current Volumetric Charge ($/Therm) - Winter Block 3		$0.12439	$0.00600	$0.00826	$0.00600		Company Tariffs
93	Current Volumetric Charges (per Therm) Commodity Rate					$0.00185		Company Tariffs
94	Current Volumetric Charges (per Therm) Overrun					$0.04444		Company Tariffs
95	Proposed Rate Blocks: Upper Limit (Therms per Month)							
96	Annual							
97	Distribution Quantity							
98	Distribution Quantity Block 1		200	250000	100000	250000		Yellow: Company rate design decision
99	Distribution Quantity Block 2		2000	750000	150000	750000		All other: Company records
100	Distribution Quantity Block 3		10000	999999999	999999999	999999999		
101	Distribution Quantity Block 4		999999999	999999999	999999999	999999999		
102	Proposed Volumetric Billing Units (Therms)							
103	Annual							
104	Distribution Quantity	212,787,060					212,787,060	Orange: calculated based on Company decision
105	Distribution Quantity Block 1		31,052,530	6,317,560	7,613,251	115,948,332	160,931,673	All other: Company records
106	Distribution Quantity Block 2		51,384,280		3,000,000	96,712,653	151,096,933	
107	Distribution Quantity Block 3		21,640,519		29,296,036	71,751,847	122,688,402	
108	Distribution Quantity Block 4		3,895,335				3,895,335	
109	TOTAL Annual Distribution Consumption (Therms)	212,787,060	107,972,664	6,317,560	39,909,287	284,412,832	651,399,403	Σ Lines 65 to 69

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110	**Proposed Volumetric Charges**							
111	Revenues at Current rates	$39,048,014	$17,792,045	$403,987	$727,673	$8,731,332	$66,703,050	Line 5
112	Volumetric revenue target	$23,969,526	$10,491,459	$132,249	$199,632	$2,325,730	$37,118,595	Line 82
113	% change in Volumetric Rates	-38.62%	-41.03%	-67.26%	-72.57%	-73.36%		Line 112 / Line 111
114	**Proposed Volumetric Charges per therm**							
115	Proposed Volumetric Charge	$0.11265						Line 82 / Line 109
116	Proposed Volumetric Charge Block 1		$0.11076	$0.02093	$0.01509	$0.01473		
117	Proposed Volumetric Charge Block 2		$0.09662	$0.00833	$0.00614	$0.00520		
118	Proposed Volumetric Charge Block 3		$0.08297	$0.00196	$0.00227	$0.00160		
119	Proposed Volumetric Charge Block 4		$0.07500					Company rate design decision
120	**Base Rates Revenue Proof**							
121	**Proposed Customer Charge Revenues**							
122	Total Customer Charge Revenues	$37,018,030	$13,505,765				$50,523,795	Line 70 x Line 12
123	**Proposed Demand-Related Revenues**							
124	Total Demand Charge Revenues			$129,888		$5,470,909	$5,600,797	Line 79 x Line 33
125	**Proposed Volumetric Revenues**							
126	Proposed Volumetric Charge	$23,970,462					$23,970,462	Line 115 x Line 104
127	Proposed Volumetric Charge Block 1		$3,439,378	$132,227	$114,884	$1,707,919	$5,394,408	Line 116 x Line 105
128	Proposed Volumetric Charge Block 2		$4,964,749	$0	$18,420	$503,115	$5,486,284	Line 117 x Line 106
129	Proposed Volumetric Charge Block 3		$1,795,514	$0	$66,502	$114,803	$1,976,819	Line 118 x Line 107
130	Proposed Volumetric Charge Block 4		$292,150	$0	$0	$0	$292,150	Line 119 x Line 108
131	Total Volumetric Revenues	$23,970,462	$10,491,791	$132,227	$199,806	$2,325,837	$37,120,123	Σ Lines 126 to 130
132	**Total Proposed Revenues**	$60,988,492	$23,997,556	$262,115	$199,806	$7,796,746	$93,244,715	Σ Lines 122, 124, 131
133		$937	$332	-$22	$174	$107	$1,528	