Intermountain Gas Company

Capacity Enhancement Alternatives NPV by AOI 2023 – 2028



In the Community to Serve®

Exhibit No. 6

Intermountain Gas Company Canyon County AOI Net Present Value

Altern	ative #	Alternative Description	Details	O&M Cost Used for NPV	Net Present Value	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
				Distribution O&M per mile of pipe									
	N/A	Ustick Phase III	4.1 miles - 12 inch HP	added	\$12,157,986.07	\$ 12,800,000	\$ (11,787)	\$ (12,023)	\$ (12,264)	\$ (12,509)	\$ (12,759)	\$ (13,014)	\$ (13,274)
Y	ear 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
\$	(13,540)	\$ (13,811)	\$ (14,087)	\$ (14,369)	\$ (14,656)	\$ (14,949)	\$ (15,248)	\$ (15,553)	\$ (15,864)	\$ (16,181)	\$ (16,505)	\$ (16,835)	\$ (17,172)

Intermountain Gas Company State Street AOI Nat Present Value

Net	Present	Va	lue

Alternative #	Alternative Description	Details	O&M Cost Used for NPV	Net Present Value	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
			Transmission O&M per mile minus									
		uprate existing 2.2 miles - 12 inch HP	Distribution O&M per mile for									
		(12 inch becomes transmission) and 2	pipe that would go to									
N/A	State Street Phase II Uprate	miles of 4 inch HP	transmission main	(\$836,769.32)	\$ (902,000)	\$ 4,208	\$ 4,293	\$ 4,378	\$ 4,466	\$ 4,555	\$ 4,646	\$ 4,739
Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
\$ 4,834	\$ 4,931	\$ 5,029	\$ 5,130	\$ 5,233	\$ 5,337	\$ 5,444	\$ 5,553	\$ 5,664	\$ 5,777	\$ 5.893	\$ 6,011	\$ 6,131

Intermountain Gas Company Ada County AOI Net Present Value

Alternative #	Alternative Description	Details	O&M Cost Used for NPV	Net Present Value	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
			Distribution O&M per mile of									
N/A	12 inch South Boise Loop	3.73 miles - 12 inch HP	pipe added	(\$17,163,193.12)	\$ (17,900,000)	\$ (10,724)	\$ (10,938)	\$ (11,157)	\$ (11,380)	\$ (11,608)	\$ (11,840)	\$ (12,077)
	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
Year 8												

Intermountain Gas Company Sun Valley Lateral AOI Net Present Value

Net	t Prese	nt Value	

Alternative #	Alternative Description	Details	O&M Cost Used for NPV	Net Present Value	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
		Compressor										
N/A	Shoshone Compressor Station	Station	Compressor O&M cost per year	(\$7,372,495.64)	\$ (6,700,000)	\$ (164,255)	\$ (167,540)	\$ (170,891)	\$ (174,309)	\$ (177,795)	\$ (181,351)	\$ (184,978
Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20

Intermountain Gas Company Idaho Falls Lateral AOI Net Present Value

net	Pre	sent	value	

Alternative #	Alternative Description	Details	O&M Cost Used for NPV	Net Present Value	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
	Blackfoot Compressor	Compressor										
N/A	Station	Station	Compressor O&M cost per year	(\$20,630,410.25)	\$ (20,000,000)	\$ (257,621)	\$ (262,774)	\$ (268,029)	\$ (273,390)	\$ (278,857)	\$ (284,435)	\$ (290,123
							¥	N	×	N	×	
Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20

Intermountain Gas Company Transmission O&M Cost per Mile per Year

		From Acc	ounting Records	From	FERC Form 2	From	FERC Form 2		
Sub Account	Description		2022		2021		2020	3-Year A	verage
	Operation Expense:								
28520	Communication System Expenses		24,308.33	\$	30,703.63		33,366.62		
28560	Mains Expenses		1,793.54		1,805.21		2,088.74		
	Maintenance Expense:								
28630	Maintenance of Mains		125,200.04		26,172.53		12,617.11		
28631	Maintenance of Mains						142,328.11		
28660	Maintenance of Communication Equip		139,601.91		131,969.39		139,345.50		
	Total	\$	290,903.82	\$	190,650.76	\$	329,746.08		
	Total Miles of Transmission Line		284		279.49)	279.5	i	
	O&M Cost per Mile	\$	1,024.31	\$	682.14	\$	1,179.77	\$	962.07

Intermountain Gas Company Distribution Main O&M Cost per Mile per Year

		From FEF	RC Form 2	Fro	m FERC Form 2	Fron	n FERC Form 2		
Sub Accoun	Description		2022		2021		2020	3-Year	Average
	Distribution O&M Expenses	\$	25,445,520	\$	24,742,508	\$	21,886,836		
28920	Less: Maintenance of Services	\$	(3,084,202)	\$	(3,604,219)	\$	(2,669,868)		
28930	Less: Maintenance of Meters and Ho	\$	(1,350,994)	\$	(988,180)	\$	(864,005)		
	Total Distribution O&M Expenses	\$	21,010,324	\$	20,150,109	\$	18,352,963	_	
	Total Miles of Distribution Line		7,155.00		6,970.00		6,560.63		
	O&M Cost per Mile	\$	2,936.45	\$	2,890.98	\$	2,797.44	\$	2,874.96

Distribution Main - Miles	6,816.95	6,672.99	6,560.63
Distribution Main - Feet	35,993,509.46	35,233,380.88	34,640,215.45
Service Lines - Miles	6,217.76	6,109.16	5,985.18
Service Lines - Feet	32,829,755.26	32,256,385.40	31,601,800.99

Intermountain Gas Company Compressor Station Operations and Maintenance Estimate

Description	Frequency (Yrs)	Unit Price	Annualized Cost	Notes
Annual Service Overhaul	1	\$15,000	\$15,000	materials, labor and travel 15K Jerome 25K Shoshone
Misc Repair	2	\$2,500	\$1,250	example: Bettis actuator failure in 2016/2017, starting system repair 2020,
Every 8000 hr Maintenance	10	\$60,000	\$6,000	est cost and frequency
Oil Change	2	\$1,200	\$600	est cost and frequency
Emissions Test	3	\$6,000	\$2,000	3 year requirement
Misc Maintenance	1	\$5,000	\$5,000	land, fence, paint, electricity *added 2900 budgeted amount electricity*
Weekly Check (winter)	1	\$8,960	\$8,960	1 Operators for 4 hrs a week for 4 months
Monthly Startup (Fall, winter, Spring)	1	\$20,160	\$20,160	2 Operators for 8 hrs a month for 9 months
Monthly Check (non-winter)	1	\$3,360	\$3,360	1 Operator for 8 hrs a month for 3 months
Peak Shaving Operators	1	\$11,200	\$11,200	2 Operators for 8 hrs a day for 5 days a year
Peak Shaving Operators STBY	1	\$20,520	\$20,520	1 Operators for 18 hours per week per CWE (2022-23 was 76 days) 50/50 Jerome and SS
Test Run - NG Fuel	1	\$822	\$822	6 hr/month for 9 months at 50 th/hr and \$0.50/th (WACOG cost of gas 2023) *updated with budgeted amounts fy'21*
Peak Shaving - NG Fuel	1	\$1,827	\$1,827	5 days at 24 hrs/day and 50 th/hr at \$0.50/th (WACOG cost of gas 2023)

Estimated Total Annual Costs:

\$96,700

Description	Frequency (Yrs)	Unit Price	Annualized Cost	Notes
Annual Service Overhaul	1	\$25,000	\$25,000	materials, labor and travel
Misc Repair	2	\$10,000	\$5,000	example: Bettis actuator failure in 2016/2017, starting system repair 2020,
Every 8000 hr Maintenance	10	\$60,000	\$6,000	est cost and frequency
Oil Change	2	\$6,000	\$3,000	est cost and frequency
Emissions Test	3	\$6,000	\$2,000	3 year requirement
Misc Maintenance	1	\$5,000	\$5,000	land, fence, paint, electricity *added 3000 budgeted amount electricity*
Weekly Check (winter)	1	\$17,920	\$17,920	1 Operators for 8 hrs a week for 4 months
Monthly Startup (Fall, winter, Spring)	1	\$20,160	\$20,160	2 Operators for 8 hrs a month for 9 months
Monthly Check (non-winter)	1	\$3,360	\$3,360	1 Operator for 8 hrs a month for 3 months
Peak Shaving Operators	1	\$33,600	\$33,600	2 Operators for 8 hrs a day for 15 days a year
Peak Shaving Operators STBY	1	\$20,520	\$20,520	1 Operators for 18 hours per week per CWE (2022-23 was 76 days) 50/50 Jerome and SS
Test Run - NG Fuel	1	\$2,960	\$2,960	6 hr/month for 9 months at 180 th/hr and \$0.50/th (WACOG cost of gas 2023) *updated with budgeted amounts fy'21*
Peak Shaving - NG Fuel	1	\$19,735	\$19,735	15 days at 24 hrs/day and 180 th/hr at \$0.50/th (WACOG cost of gas 2023)

Estimated Total Annual Costs: \$164,255

*Assumed Operator salary is \$140/hr loaded

Description	Frequency (Yrs)	Unit Price	Annualized Cost	Notes
nual Service Overhaul	1	\$40,000	\$40,000	materials, labor and travel 20K each engine
isc Repair	2	\$50,000	\$25,000	example: Valve repairs, or computer tuning, or safety device
ery 8000 hr Maintenance	10	\$60,000	\$6,000	est cost and frequency
I Change every 2,000 hours	5	\$6,000	\$1,200	est cost and frequency
nissions Test	3	\$10,000	\$3,333	3 year requirement unless extension is granted
isc Maintenance	1	\$8,000	\$8,000	land, fence, paint, electricity *added 3500 budgeted amount electricity*
eekly Check (winter)	1	\$35,840	\$35,840	2 Operators for 8 hrs a week for 4 months
onthly Startup (Fall, winter, Spring)	1	\$20,160	\$20,160	2 Operators for 8 hrs a month for 9 months
onthly Check (non-winter)	1	\$3,360	\$3,360	1 Operator for 8 hrs a month for 3 months
ak Shaving Operators	1	\$31,360	\$31,360	2 Operators for 8 hrs a day for 14 days a yearassuming the compressor will run every year
ak Shaving Operators STBY	1	\$45,360	\$45,360	1 Operators for 18 hours per week per peak shaving times of Dec - Feb
st Run - NG Fuel	1	\$17,542	\$17,542	6 hr/month for 9 months at 200 th/hr and \$0.50/th (WACOG cost of gas 2023)*updated with budgeted amounts fy'21*
ak Shaving - NG Fuel	1	\$20,466	\$20,466	14 days at 24 hrs/day and 200 th/hr at \$0.50/th (WACOG cost of gas 2023)

*Assumed Operator salary is \$140/hr loaded

Idaho Estimated Total Annual Costs for 4 Compressors

\$518,576