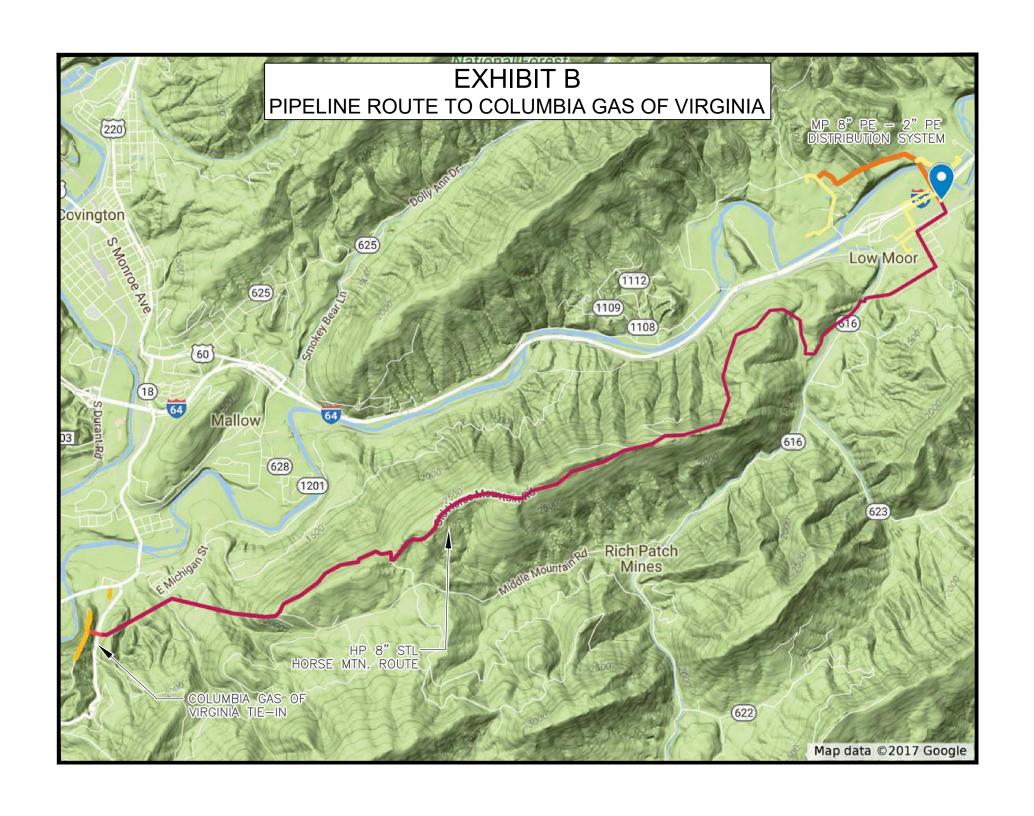
Exhibit A Alleghany County Low Moor Area Potential Natural Gas Users

	1	Annual Usag	e	
Potential Customer	Propane Usage Gallons	Fuel Oil Usage Gallons	Estimated Use DT	Comments
Adams Construction Company		387,000	53,795	
Alleghany County Gov. Complex	5,633		516	
Alleghany Schools Central Office		10,628	1,477	
Bacova	22,716		2,081	
Balchem	88,804		8,134	
Brian Center	12,817		1,174	
Lewis Gale - Alleghany			1,232	Assumes conversion of water heating to gas. All electric.
Mountain View/Clifton Middle		34,325	4,771	
WestRock Converting	80,076		7,335	
Williams/JenFab			9,600	
YMCA	22,843		2,092	
Totals	232,890	431,953	92,208	



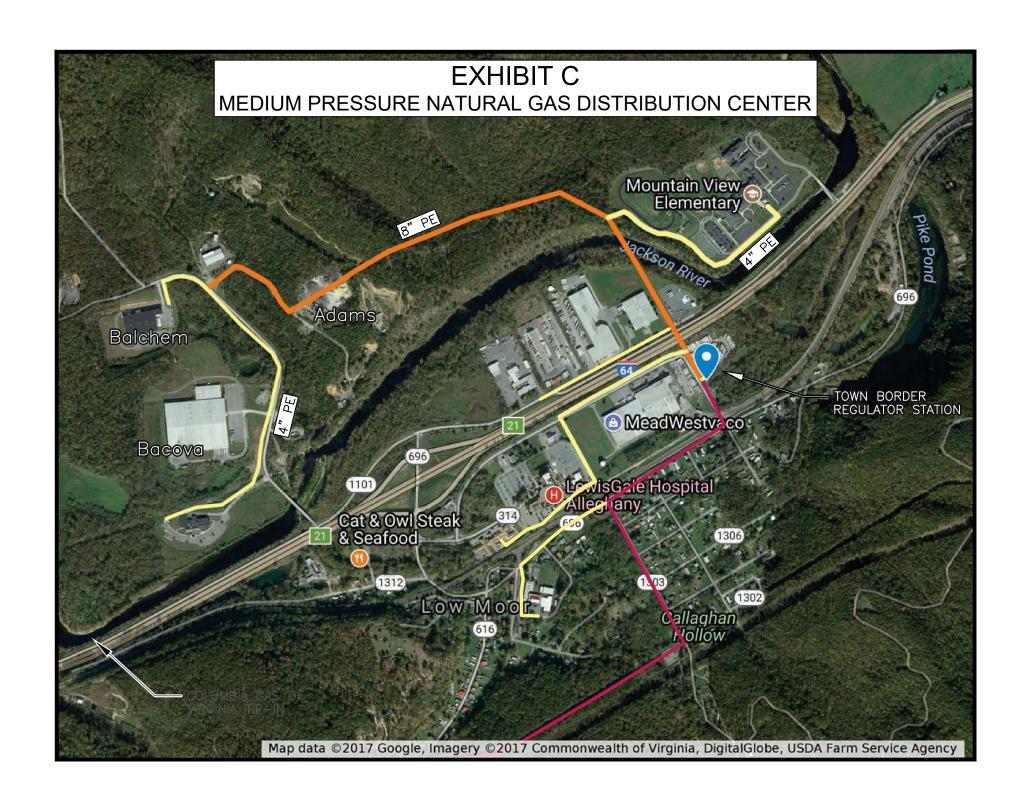


Exhibit D

Natural Gas Pipeline to serve Low Moor Construction Cost Estimate

ITEM	DESCRIPTION	UNITS	NUMBER OF UNITS	MA	ATERIALS	LABOR		UNIT PRICE		TOTAL PRICE	
	HP Steel to Westrock									1	
Columbia to S. Lipsey Lane	8" STL PIPE, X-52, .250 WALL	FT	43860	\$	19.00	\$	90.00	\$	109.00	\$	4,780,740
S. Lipsey Lane to Westrock	8" STL PIPE, X-52, .250 WALL	FT	3600	\$	19.00	\$	90.00	\$	109.00	\$	392,400
ROW Clearing and grading		AC	80			\$	20,000.00	\$	20,000.00	\$	1,600,000
Environmental Protection		FT	44760			\$	25.00	\$	25.00		1,119,000
Rock Excavation	80% of Route	CY	11200			\$	200.00	\$	200.00	\$	2,240,000
Rich Patch Road and RR	12" STL CASED ROAD CROSSINGS	FT	335	\$	50.00	\$	175.00	\$	225.00	\$	75,375
8" Valves	8" STL WxW VALVE w/ VALVE BOX (Kerote	EA	3	\$	5,372.00	\$	1,500.00	\$	6,872.00	\$	20,616
8" Tie in	Hot Tap	EA	1	\$	3,000.00	\$	10,000.00	\$	13,000.00	\$	13,000
Asphalt Cuts	ASPHALT CUT	FT	400			\$	50.00	\$	50.00	\$	20,000
Test Stations	TEST STATIONS	EA	50			\$	150.00	\$	150.00	\$	7,500
Cathodic Protection		FT	47460	\$	1.00	\$	1.00	\$	2.00	\$	94,920
Testing Segment only	Testing	EA	1			\$	150,000.00	\$	150,000.00	\$	150,000
SUBTOTAL							•		,	\$1	10.513.551
										Ė	
	Distribution Pressure System										
Westrock to Commerce Drive	8" HDPE Pipe, SDR 11	FT	6600	\$	12.50	\$	50.00	\$	62.50	\$	412,500
Commerce Drive	4" HDPE Pipe, SDR 11	FT	2904	\$	2.76	\$	30.00	\$	32.76	\$	95,135
Service to School	4" HDPE Pipe, SDR 11	FT	2270	\$	2.76	\$	30.00	\$	32.76	\$	74,378
Line to Hospital/Brian Ctr.	4" HDPE Pipe, SDR 11	FT	3500	\$	2.76	\$	30.00	\$	32.76	\$	114,653
Service to Alleghany County Gov. Complex	4" HDPE Pipe, SDR 11	FT	1900	\$	2.76	\$	30.00	\$	32.76	\$	62,244
Service to Alleghany Co.Central School Office	2" HDPE Pipe, SDR 11	FT	1550	\$	0.87	\$	18.00	\$	18.87	\$	29,249
Service to YMCA	2" HDPE Pipe, SDR 11	FT	1170	\$	0.87	\$	18.00	\$	18.87	\$	22,078
ROW Clearing and grading	·	AC	6			\$	20,000.00	\$	20,000.00	\$	120,000
Environmental Protection		FT	8574			\$	25.00	\$	25.00	\$	214,339
Rock Excavation	50% of Route	CY	2900			\$	150.00	\$	150.00	\$	435,000
I 64 Bore	8" HDPE HDD adder	FT	425			\$	175.00	\$	175.00	\$	74,375
Jackson River Bore	8" HDPE HDD adder	FT	550			\$	175.00	\$	175.00	\$	96,250
4" Bores	Slick bores	FT	600			\$	60.00	\$	60.00	\$	36,000
8" Valves	8" PE Valve w/ box	EA	1	\$	900.00	\$	900.00	\$	1,800.00	\$	1,800
4" and 2" PE Valves	4" PE Valve w/ box	EA	8	\$	300.00	\$	750.00	\$	1,050.00	\$	8,400
Regulator Station	Dual Run Regulator Station	EA	1	\$	20,000.00	\$	30,000.00	\$	50,000.00	\$	50,000
Regulator Station	Sm Dual Run Regulator Station	EA	1	\$	5,000.00	\$	10,000.00	\$	15,000.00	\$	15,000
Heater for Regulator Station	Water bath indirect	EA	1	\$	30,000.00	\$	15,000.00	\$	45,000.00	\$	45,000
Meter Sets	9 commercial/sm. Ind Meter sets	EA	1			\$	150,000.00	\$	150,000.00	\$	150,000
Asphalt Cuts	ASPHALT CUT	FT	350			\$	50.00	\$	50.00	\$	17,500
Pipeline Markers	Pipeline Markers	EA	15			\$	100.00	\$	100.00	\$	1,500
Cathodic Protection		FT	0	\$	1.00	\$	1.00	\$	2.00	\$	-
Testing Segment only	Testing	EA	1			\$	15,000.00	\$	15,000.00	\$	15,000
SUBTOTAL										\$	2,090,401
					С	ON	STRUCTIO	N S	UBTOTAL	\$1	12,603,952

Exhibit E

Cost estimate for 8" HP Distribution and 8" and 4" PE Distribution pipeline

	Qty.		Each		Extension
Preconstruction Phase					
Engineering Design and Permitting	1	\$	1,260,400	\$	1,260,400
Surveying and mapping	1	\$	350,000	\$	350,000
Right of Way (acres)	86	\$	5,000	\$	430,000
Legal and Regulatory	1	\$	100,000	\$	100,000
Construction Phase					
Columbia Meter Station	1	\$	100,000	\$	100,000
HP Cross Country Pipeline	1	\$	10,513,551	\$	10,513,551
Distribution System	1	\$	2,090,401	\$	2,090,401
Engineering Construction Management Services	1	\$	504,200	\$	504,200
Onsite Inspection services	1	\$	252,079	\$	252,079
Post construction Surveys & Regulatory Compliance	1	\$	62,500	\$	62,500
Total Capital Construction Costs				\$	15,663,131
Total Capital Coat + \$200k for Stort in amortized as on	20 1/00/20	ot 2 5	70/ interest acu	olo [©]	757 002/1007
Total Capital Cost + \$200k for Startup amortized over	30 years a	2.5	1% interest equ	ais \$	757,903/year

EXHIBIT F

ALLEGHANY COUNTY NATURAL GAS SYSTEM

INITIAL CAPITAL EXPENDITURES FOR GAS SYSTEM SPECIFIC OPERATIONS	Total
OFFICE EQUIPMENT	\$5,000
VEHICLES/ OFF ROAD EQUIPMENT	\$106,000
TOOLS	\$88,000
INITIAL MATERIAL INVENTORY	\$12,00 <u>0</u>
SUBTOTAL	\$211,000
STARTUP CONSULTING:	
ENGINEERING & FEASIBILITY	\$100,000
LEGAL	<u>\$100,000</u>
SUBTOTAL	\$200,000
TOTAL STARTUP CAPITAL	\$411,000

Exhibit G

Alleghany County Projected Annual Operating and Maintenance Costs

COST ITEM	QUANTITY	UNIT \$	TOTAL	NOTES
				Manager plus two
Personnel & Salaries				employees
General Manager/OP Mgr	1	\$85,000	\$85,000	
Sr. Service Tech	1	\$40,000	\$40,000	
Instrument Tech	1	\$35,000	\$35,000	
Operations Foreman	0	\$40,000	\$0	
-	3		\$160,000	
Payroll-Related Expenses			<u> </u>	Includes FICA, Workers
				Comp, medical, pension,
Payroll Expenses - Benefits	44.00%	of payroll	\$70,400	FUTA, SUTA
On and ON Ontone view				
General O&M Categories	45 000:/	¢0.50	600 500	
Automobile Expense 3 Vehicle	15,000 mi/yr	\$0.50	\$22,500	EVOLUDED COSTS:
Travel and Training Expense Office Utilities & Phone & Communicatio			\$3,000 \$42,000	EXCLUDED COSTS:
	ns		\$12,000	Bad debts (separate line
Office Supplies & Expenses Contractor - Repairs, Surveys, Services			\$1,000 \$25,000	in the cash flow analysis)
Materials & Supplies			\$25,000 \$5,000	
Miscellaneous			\$5,000 \$15,000	
Total			\$83,500	
Total			φ03,300	
Management Consulting				
Management/Engineer Consulting			\$48,000	
Accounting/Billing			\$3,000	
Advertising			\$1,000	
Community Contributions & Activities			\$0	Community Contributions
General System Liability Insurance			\$10,000	(separate line item in the
Legal			\$6,000	cash flow analysis)
Accounting/Audit			\$5,000	
Misc.			\$15,000	
Total			\$88,000	
		Total	\$401,900	

Requires revenue recovery of \$4.36/DT assuming 100% conversion of existing industrial requirements

Exhibit H

Alleghany County Natural Gas System Fuel Savings to Industrial/Commercial Facilities Natural Gas via Pipeline Scenario

Delivered Cost of Natural gas.				Comments
Component	Φ	2.40	Φ/DT	
NYMEX	\$		\$/DT	12 month average of Futures Prices July 2017 -June 2018, in June 2017
Interstate Transportation	\$		\$/DT	Assumed 33% Load Factor, Transco Z5 Firm annual Deliveries
Columbia Transportation Marketer Fee	\$		\$/DT	Assumed current TS1 Rate, inclusive of monthly customer charge
	\$		\$/DT	-
Total Delivered Price	\$	5.74	\$/DT	
Alleghany County Natural Gas System				
Distribution Fee to Recover O&M	\$	4.36	\$/DT	Breakeven Recovery for Operations and Maintenance Cost w/ projected Sales/Costs
Net Earnings and Cash Flow				
for Debt Service	\$		\$/DT	\$15.86MM financed for 30 years at 2.5%
Total Distribution Fee	\$	12.58	\$/DT	
Total Rate to Customers	\$	18.32	\$/DT	If all capital cost funded via grant, Retail rate \$10.14/DT to break even
Savings to Industrial/Commercial Custo	omei	s usin	g Propane	
Assumed Propane Costs	\$	1.00	\$/gal.	Based on EIA Virginia Propane price data
converted to DT	\$	10.91	\$/DT	
Potential NG Rate	\$	18.32	\$/DT	
Savings	\$	(7.41)) \$/DT	NO SAVINGS
Savings to Industrial/Commercial Custo	omei		•	
Assumed Fuel Oil Costs	\$	1.85	\$/gal.	Based on EIA Virginia Oil price data
converted to DT	\$	13.30	\$/DT	
Potential NG Rate	\$	18.32	\$/DT	
Savings	\$	(5.02)) \$/DT	NO SAVINGS

Exhibit I Alleghany County Municipal Gas system Operational Subsidy Required

Net Annual Subsidy Reuqired	\$975,403	
Gross Sales Margin	\$184,400	Note 3
Revenue required from gross margin to break even	\$1,159,803	
Long Term Debt Service	\$757,903	Note 2
Annual Operating Costs	\$401,900	Note 1

Notes

- 1 See Exhibit G
- ² Assumes 100% of construction capital cost of \$15,663,131 plus \$200,000 in startup costs are financed at 2.5% interest for 30 years
- 3 Assumes retail rate margin of \$2.00/dt over the delivered commodity cost of natural gas supply times the annual decatherm sales volume

Exhibit J

Alleghany County Natural Gas System Fuel Savings to Industrial/Commercial Facilities Natural Gas via Trucked CNG Scenario

Delivered Cost of Natural gas.				
Component	Φ.	0.40	Φ/DT	Comments
NYMEX	\$		\$/DT \$/DT	12 month average of Futures Prices July 2017 -June 2018, in June 2017
Interstate Transportation	\$			Assumed 33% Load Factor, Transco Z5 Firm annual Deliveries
XNG Demand Charge	\$		\$/DT	From XNG Scenario 1 Estimate 100% Load Factor
XNG Transportation fees Marketer Fee	\$	2.00	¢/DT	From XNG Scenario 1 Estimate
Total Delivered Price	\$		\$/DT	_
Total Delivered Price	\$	8.69	\$/DT	
Alleghany County Natural Gas System				
Distribution Fee to Recover O&M	\$	4.36	\$/DT	Breakeven Recovery for Operations and Maintenance Cost w/ projected Sales/Costs
Net Earnings and Cash Flow for				
debt service	\$		\$/DT	\$200,000 financed for 30 years at 2.5%
Total Distribution Fee	\$	4.47	\$/DT	
Total Rate to Customers	\$	13.16	\$/DT	
Savings to Industrial/Commercial Cust	omer	s using	Propane	
Assumed Propane Costs	\$	_	\$/gal.	Based on EIA Virginia Propane price data
converted to DT	\$	10.91		3 1 1
Potential NG Rate	\$	13.16	\$/DT	
Savings	\$	(2.25)	\$/DT	NO SAVINGS
Savings to Industrial/Commercial Cust	omer	s using	Fuel Oil	
Assumed Fuel Oil Costs	\$	1.85	\$/gal.	Based on EIA Virginia Oil price data
converted to DT	\$	13.30		
Potential NG Rate	\$	13.16	\$/DT	
Savings	\$	0.14	\$/DT	INSUFFICIANT SAVINGS TO CONVERT