



PPL companies

Gas Distribution Operations

2017 Business Plan

September 2016

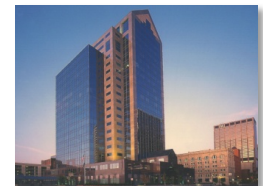


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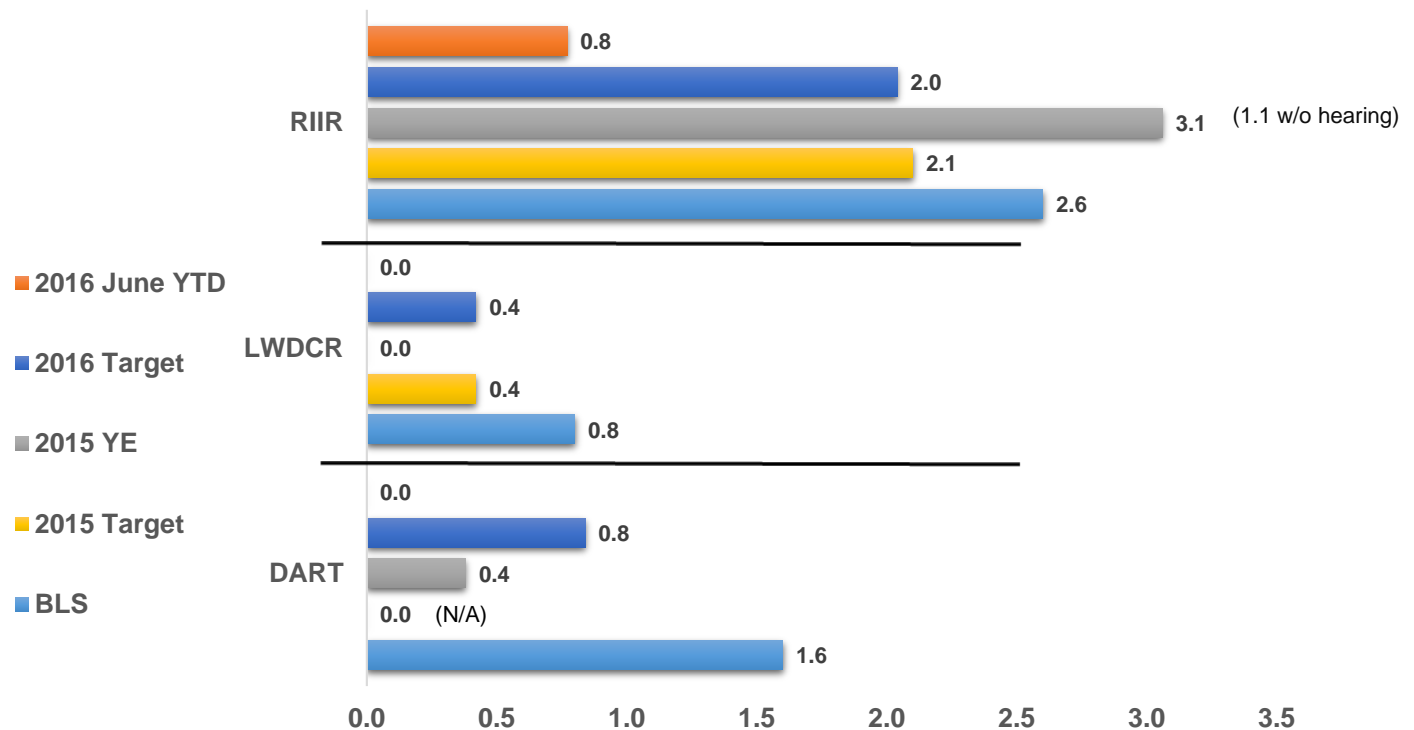
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- Major Assumptions
- Financial Performance
 - *Operating Expense – O&M for Combined Utility*
 - *Cost of Sales / Gross Margin Expense*
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Plan Highlights

- Funding levels within the proposed plan were established with the following priorities in mind:
 - Employee, contractor and public safety
 - Regulatory compliance
 - Enhanced customer service
 - Gas system reliability
 - Asset replacement to ensure reliable and safe service
 - System enhancements to meet customer needs
 - Technology to increase efficiencies and enhance customer experience
 - Capital investments for gas riser and service line ownership

Plan Highlights

Safety Performance - Gas



Plan Highlights

- Safety and Wellness
 - *Continuously strive to improve employee safety performance*
 - *Improve gas system safety thru effective: Distribution Integrity, Transmission Integrity, Public Awareness, Damage Prevention and Gas Control Room Management programs*
 - *Maintain strong safety partnerships with business partners*
 - *Enhanced public safety thru customer communications, asset replacement*
 - *Continuation of motor vehicle safety initiatives*
 - *Identify, share, and capitalize on industry best practices*
 - *Mock drills, leak detection training, and emergency response improvements*
 - *Promote wellness initiatives as an aspect of safety to ensure employees are in optimal physical condition to prevent work related illnesses and injuries*

Plan Highlights

- Customer Experience
 - *Meet customer expectations for new service requests*
 - *Promptly address customer service issues*
 - *Identify customer service improvement opportunities*
 - *Invest in aging infrastructure to ensure reliable and safe service*
 - *Promote professional and positive corporate image to customers*
 - *Restore customer service outages quickly and efficiently*
 - *Meet customer capacity needs*
 - *Implement technology to enhance customer service*
 - *Proactively communicate with customers*

Plan Highlights

- Reliability, Infrastructure and Regulatory Compliance
 - *Investments in infrastructure to meet customer needs*
 - *Investment in aging infrastructure to improve safety, reliability and performance*
 - *Effectively manage gas distribution and transmission integrity management regulatory programs*
 - *Provide reliable gas supplies thru investments in:*
 - Gas regulation/measurement facilities
 - Gas transmission system
 - Gas compressor stations
 - Gas storage fields
 - Distribution infrastructure upgrades

Plan Highlights

- Workforce Development
 - *Headcount plan that addresses high number of expected retirements*
 - *Identification of pre-hires for critical job positions*
 - *Knowledge transfer to new employees*
 - *Support of employee continuing education initiatives*
 - *Job aid development to reinforce On-the-Job Training and promote consistent work practices across operational groups*
 - *Internal and external training opportunities*
 - *Mobile computing technologies supporting training*
 - *Participation in trade school internship program*

Plan Highlights

- OPEX
 - *On target in 2016 to achieve 8&4 approved forecast.*
 - *Compounded Annual Growth Rate (CAGR) from 2016-2021 is 3.2%.*
 - *Major Initiatives:*
 - Regulatory Compliance
 - Implement key headcount additions
 - In-line inspection of pipelines
 - *Major Financial Risks:*
 - Regulatory Uncertainty including MAOP validation and gas storage integrity requirements
 - Line locating costs due to fiber projects and general construction increases
- Cost of Sales
 - *On target in 2016 to achieve 8&4 approved forecast.*
 - *Compounded Annual Growth Rate (CAGR) from 2016-2021 is 3.7%.*
 - *Major Initiatives:*
 - Gas Main & Riser Replacement Programs
 - *Major Financial Risks:*
 - Regulatory Uncertainty including MAOP validation requirements

Plan Highlights

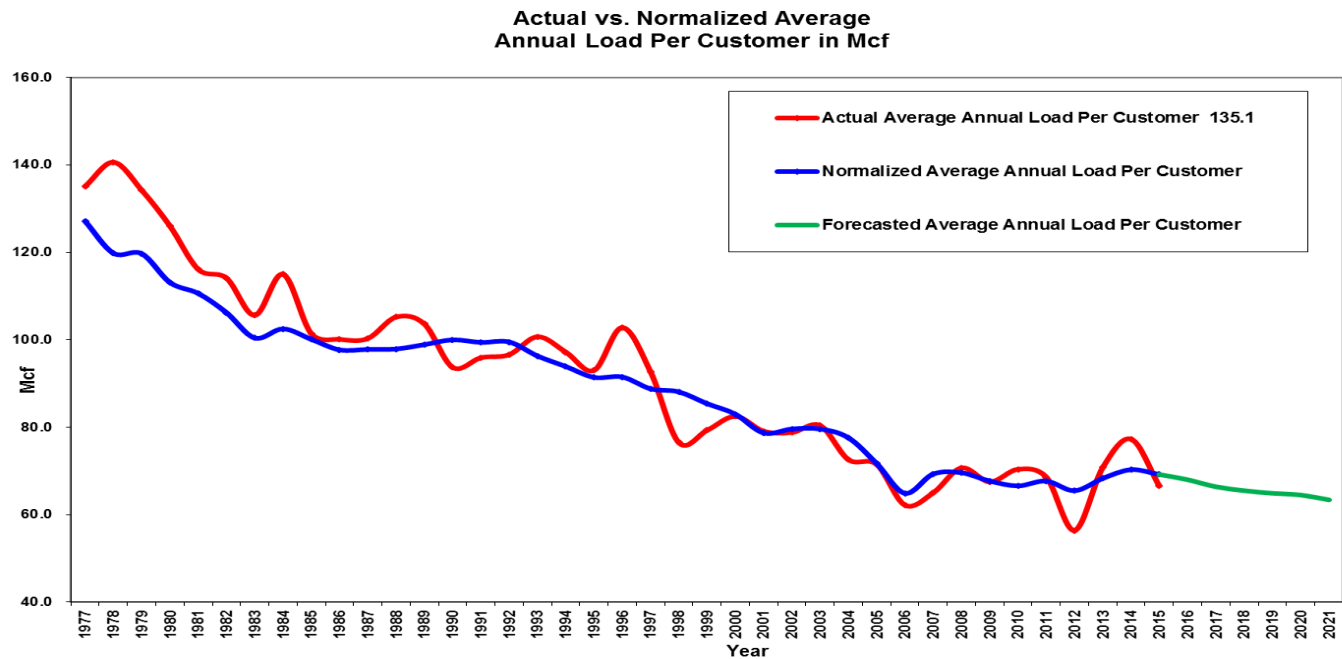
- Capital

- *On target in 2016 to achieve 8&4 approved forecast.*

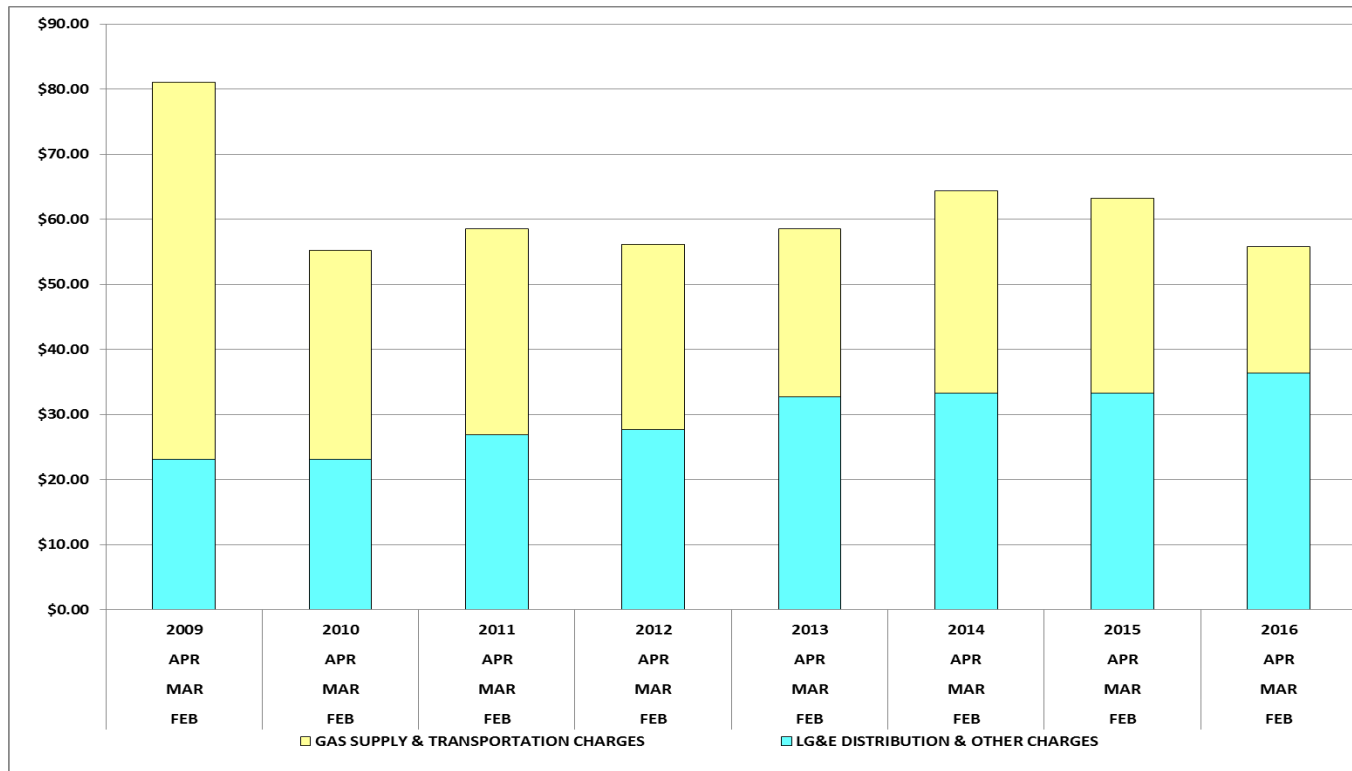
- *Major Capital Initiatives:*

- Reliability / Asset Replacement
 - Gas Leak Mitigation
 - Customer Service Ownership and Service Riser Replacement Programs
 - Steel Service Line Replacement Program
 - Transmission Line Replacement Project
 - Compressor Station and System Enhancements
 - Storage Well Replacement Program
 - Transmission/Distribution Integrity Management Programs
 - Distribution System Reinforcements

Residential Gas Use per Customer



Typical Monthly Residential Gas Bill by Component (6 Mcf/month)



Gas Delivered by Class in Bcf

Class	2016	2017	2018	2019	2020	2021
Residential	20.094	19.650	19.438	19.279	19.227	18.946
Commercial	10.360	10.224	10.166	10.068	9.963	9.790
Industrial	1.616	1.695	1.739	1.789	1.845	1.903
Transportation	13.764	12.997	13.045	13.107	13.160	13.122
Total	45.834	44.566	44.388	44.243	44.195	43.761

Major Assumptions

Major Assumptions

- *Require operators to validate MAOPs of gas transmission pipelines.*
- *Expand pipeline integrity requirements beyond high consequence areas.*
- *Expand operator qualification requirements to construction activities.*
- *Require continuous improvement for distribution system integrity.*
- *Require development of gas storage integrity programs.*

- *Forecasted Design Day for 2017 is expected to increase to 679,000 Mcf/day from 674,000 Mcf/day estimated in the prior BP. During the current 5-year planning period, the forecasted Design Day is expected to gradually decrease to 671,000 Mcf/day.*
- *Gas storage operating risk is addressed through staffing plan and reliability enhancement projects.*
- *Main replacement and gas riser projects will address infrastructure vulnerable to cold weather issues.*

2015-2021 Annual O&M Expenses (\$000)

Item	2015 Actual	2016 Forecast	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
O&M Expenses Only:							
Labor	17,219	17,590	18,826	19,560	19,496	19,983	20,483
Non Labor							
Inline Inspections	494	503	476	1,167	1,516	456	548
Outside Services - Resident	4,191	6,640	7,065	7,283	7,849	7,966	8,086
Outside Services - Other	4,774	1,298	1,147	967	1,116	1,334	1,348
Sub-Total Outside Services ¹	8,965	7,937	8,212	8,250	8,965	9,300	9,433
Materials	3,591	3,176	3,732	4,044	3,938	3,997	4,057
Transportation and Equipment	2,046	2,045	1,901	1,963	1,994	2,023	2,054
Other Non Labor	1,700	1,742	1,839	1,883	1,933	1,962	1,990
Total Non Labor	16,796	15,403	16,160	17,307	18,345	17,738	18,082
Total O&M Expense	34,015	32,993	34,986	36,867	37,841	37,722	38,565

1) The Resident contractor expenditure type wasn't fully implemented until 2016.

O&M Annual Expense Reconciliation (\$000)

	<u>2017 Plan</u>	<u>2018 Plan</u>	<u>2019 Plan</u>	<u>2020 Plan</u>	<u>2021 Plan</u>
Plan Expectation	34,056	35,791	35,702	36,579	37,310
Drivers:					
Headcount Changes	941	1,093	1,012	943	959
Compliance Programs			291		
Doe Run Storage Field Shale Gas Recovery Operations			425		
Other	<u>(11)</u>	<u>(17)</u>	<u>411</u>	<u>200</u>	<u>296</u>
Current Plan	<u>34,986</u>	<u>36,867</u>	<u>37,841</u>	<u>37,722</u>	<u>38,565</u>

2015-2021 Margin Expenses / Cost of Sales (\$000)

Item	2015 Actual	2016 Forecast	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
Margin Expenses							
Mechanism Recoverable:							
Gas Tracker	2,564	1,038	1,379	1,350	1,387	1,412	1,437
Gas Losses	1,690	1,607	1,542	1,663	1,683	1,708	1,734
Total	<u>4,254</u>	<u>2,645</u>	<u>2,921</u>	<u>3,013</u>	<u>3,070</u>	<u>3,120</u>	<u>3,171</u>

	<u>2017</u> <u>Plan</u>	<u>2018</u> <u>Plan</u>	<u>2019</u> <u>Plan</u>	<u>2020</u> <u>Plan</u>	<u>2021</u> <u>Plan</u>
<u>Mechanism Recoverable</u>					
Plan Expectation	8,193	18,257	19,832	13,409	13,466
Drivers					
MAOP - Pressure Testing	(5,000)	(15,000)	(16,500)	(10,000)	(10,000)
Gas Tracker - Revised Estimates	3	(54)	(55)	(69)	(70)
Gas Losses - Lower Estimate	<u>(275)</u>	<u>(190)</u>	<u>(207)</u>	<u>(220)</u>	<u>(225)</u>
Current Plan	<u>2,921</u>	<u>3,013</u>	<u>3,070</u>	<u>3,120</u>	<u>3,171</u>

2015-2021 Headcount Totals & Changes

Department	2015 Year End	2016 Forecast	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
VP Gas Distribution Operations	2	2	2	2	2	2	2
Gas Regulatory	33	35	39	39	38	37	37
Gas Management & Supply	6	6	6	6	6	6	6
Gas Operations, Construction & Engineering	111	118	123	123	120	120	120
Gas Control & Storage	104	114	110	110	107	106	106
Interns	1	4	4	4	4	4	4
TOTAL	257	279	284	284	277	275	275
From 2016 Business Plan		278	276	276	270	268	
Change from 2016 Business Plan		1	8	8	7	7	

Year to Year Increases (Decreases)	2016	2017	2018	2019	2020	2021
1.) Maintenance /Operational	22	(4)	(2)	(6)	(2)	
2.) Compliance – NERC, FERC, CIP, etc.		9	2	(1)		
3.) EPA/Environmental						
4.) Administrative/Corporate						
TOTAL	22	5	0	(7)	(2)	0

Contractor Offsets By Year: (New hire reducing contractor use)		1				
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Resident Contractors By Year:	2016 FC	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
	388	387	287	287	287	287

Contractor Change from 2016 Plan	7	6	6	6	6	
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Plan Risks

Appendix

Operational Performance

Key Performance Indicators

KPI	2015 Year End	2016 Forecast ¹	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
Safety - Employee Incident Rate	3.06	2.90	1.98	1.95	1.91	1.88	1.84
Safety - Contractors Incident Rate	1.64	2.57	1.98	1.95	1.91	1.88	1.84
DART - Employees	0.38	0.00	0.83	0.83	0.81	0.80	0.79
Gas Response Priority 1 Calls (minutes)	39.00	34.80	41.25	41.00	40.75	40.50	40.00
New Business Cycle Time (Calendar Days) ²	7.70	6.90	9.00	9.00	9.00	9.00	9.00

1) 2016 Forecast is YTD through August.

2) Measures from the time a service request is approved by a locator from the Design department to the time the service is installed.

2015-2021 Walk Forward for O&M Expenses (\$000)

2015 Actual	34,015	2018 Plan	36,867
Labor Changes	371	Labor Changes	(64)
Pipeline Inline Inspections	9	Pipeline Inline Inspections	349
Net Other Changes	<u>(1,402)</u>	Budget Stretch	107
		Net Other Changes	<u>582</u>
2016 FC	32,993	2019 Plan	37,841
Labor Changes	1,236	Labor Changes	487
Pipeline Inline Inspections	(27)	Pipeline Inline Inspections	(1,060)
Net Other Changes	<u>784</u>	Budget Stretch	204
		Net Other Changes	<u>250</u>
2017 Plan	34,986	2020 Plan	37,722
Labor Changes	734	Labor Changes	500
Pipeline Inline Inspections	691	Pipeline Inline Inspections	92
Budget Stretch	(311)	Net Other Changes	<u>251</u>
Net Other Changes	<u>767</u>		
2018 Plan	36,867	2021 Plan	38,565

(Decreases)/Increases

2015-2021 Walk Forward for GMEXP / Cost of Sales (\$000)

2015 Actual	4,254
Gas Tracker	(1,526)
Gas Losses	<u>(83)</u>
2016 FC	2,645
Gas Tracker	341
Gas Losses	<u>(65)</u>
2017 Plan	2,921
Gas Tracker	(29)
Gas Losses	<u>121</u>
2018 Plan	3,013
Gas Tracker	37
Gas Losses	<u>20</u>
2019 Plan	3,070
Gas Tracker	25
Gas Losses	<u>25</u>
2020 Plan	3,120
Gas Tracker	25
Gas Losses	<u>26</u>
2021 Plan	<u>3,171</u>

(Decreases)/Increases

2016-2021 Headcount Progression Year To Year

	<u>Company Employees</u>	<u>Resident Contractors</u>
2016 Headcount (As of August 2016)	267	388
Gas Regulatory	0	0
Gas Operations, Construction, & Engineering	2	0
Gas Control & Storage	10	0
2016 Headcount FC - Year End	279	388
Gas Regulatory	4	0
Gas Operations, Construction, & Engineering	5	(1)
Gas Control & Storage	(4)	0
2017 Headcount Plan	284	387
Gas Regulatory	0	0
Gas Operations, Construction, & Engineering	0	(100)
Gas Control & Storage	0	0
2018 Headcount Plan	284	287
Gas Regulatory	(1)	0
Gas Operations, Construction, & Engineering	(3)	0
Gas Control & Storage	(3)	0
2019 Headcount Plan	277	287
Gas Regulatory	(1)	0
Gas Operations, Construction, & Engineering	0	0
Gas Control & Storage	(1)	0
2020 Headcount Plan	275	287
Gas Regulatory	0	0
Gas Operations, Construction, & Engineering	0	0
Gas Control & Storage	0	0
2021 Headcount Plan	275	287

2015-2021 Other Balance Sheet Costs (\$000)

Item	2015 Actual	2016 Forecast	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
Local Engineering							
Labor	2,293	2,398	2,786	2,880	2,966	3,040	3,116
Non labor	174	133	153	158	161	163	166
Total	<u>2,467</u>	<u>2,531</u>	<u>2,939</u>	<u>3,037</u>	<u>3,127</u>	<u>3,203</u>	<u>3,282</u>