

TGP 2018 Customer Meeting

August 23, 2018



Agenda



- Welcome and Introductions
- Kinder Morgan Update
- **TGP Marketing Update**
- TGP Operations Update
- TGP Business Development Update
- Closing Remarks

Ernesto Ochoa- Vice President, Commercial Tom Martin- President, KM Gas Pipelines Jason Connelly- Director, Commercial Tom Dender- Vice President, Pipeline Management Paul Smith- Director, Business Development Ernesto Ochoa



Corporate Overview

August 23, 2018

Tom Martin, President – Gas Pipelines



One of the Largest Diversified Energy Infrastructure Companies in North America



Natural Gas Pipelines

- Largest natural gas transmission network in North America
- Own or operate ~70,000 miles of natural gas pipelines
- Connected to every important U.S. natural gas resource play

Products Pipelines

 Largest independent transporter of petroleum products in North America (~2.1 mmbbld)

\mathbf{CO}_2

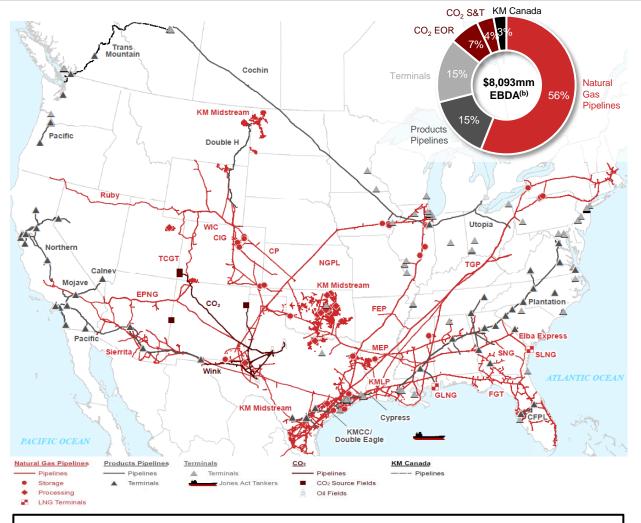
 Largest transporter of CO₂ in North America (~1.2 Bcf/d^(a))

Terminals

- Largest independent operator in North America (152 terminals, 16 Jones Act vessels)
- ~151 mmbbls of liquids capacity
- Handle ~59 mmtpa of dry bulk products^(a)

KM Canada (sale pending)

- Only oil sands pipeline serving West Coast
- Pending sale to Canadian government of Trans Mountain Pipeline System (including expansion project and Puget Sound Pipeline)



UNPARALLELED ASSET FOOTPRINT

(a) 2018 budget.

(b) 2018 budgeted Segment EBDA before Certain Items and including KM-share of Certain Equity Investee DD&A (non-GAAP measure).

Natural Gas Segment Outlook and Asset Overview KINDER MORGAN

Well-Positioned: Connecting Key Natural Gas Resources with Major Demand Centers

Long-Term Growth Drivers:

Exports

- LNG exports: liquefaction facilities and pipeline infrastructure
- Exports to Mexico
- Shale-driven expansions / extensions
 - Expansions / extensions off existing footprint
 - Greenfield projects

End-user / LDC demand growth

- Gulf Coast industrial growth
- Regional power gen. opportunities
- Enhanced access to LDC markets

Pipeline conversions

 Repurpose assets to achieve greater value

Gas storage

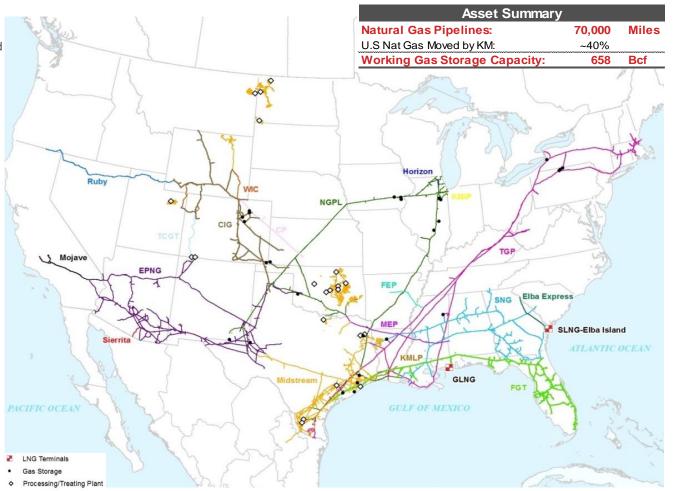
- Support LNG Liquefaction
- Backstop variable renewable generation and peak summer/winter demand
- Acquisitions

Project Backlog:

\$4.2 billion of identified growth projects over 2018-2022 time period^(a)

- LNG liquefaction (Elba Island)
- Transport projects supporting LNG exports
- Permian takeaway, including de-bottlenecking and new builds
- Bakken G&P expansions
- Power generation





\$6.3bn of Secured Capital Projects Underway

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Significant Opportunities Primarily Resulting from Expansive Natural Gas Footprint

Secured Capital Projects	Demand Pull / Supply Push	KMI Capital (\$ billion)	Estimated In-Service Date	Capacity
Natural Gas				
Elba liquefaction and related terminal facilities		\$ 1.2	Late 2018 / 2019	350 MDth/d
Expansions to supply LNG export (NGPL, TGP, KMLP, EEC)		0.7	Various	3.4 Bcf/d
Permian takeaway projects (GCX, EPNG, NGPL)		0.7	Late 2018 / 2019	4.0 Bcf/d
Bakken G&P expansions (Hiland Williston Basin)		0.5	H2 2018 / 2019	Various
Marcellus southbound capacity (TGP Broad Run expansion)		0.5	Q3 2018	200 MDth/d
Power generation supply projects (SNG, FGT)		0.2	Various	540 MDth/d
Other natural gas		0.4	Various	2.1 Bcf/d
Total Natural Gas		\$ 4.2	~66% of total at 5.3x l	EBITDA multiple
Other segments		2.1		
Total Backlog		\$ 6.3		

Other Highlights:

- Not currently in Natural Gas backlog: Permian Highway Pipeline (PHP), a proposed joint development for a second ~2.0 Bcf/d long-haul Permian gas pipeline
 - FID possible in Q3 2018 given positive market reception
 - Estimated to cost \$2 billion (8/8ths) for late 2020 in-service
- Other segments' backlog includes: \$1.4 billion for CO₂: EOR, \$0.4 billion for CO₂: Source & Transportation, \$0.2 billion for Terminals and \$0.1 billion for Products Pipelines
 - Primarily liquids-related opportunities

Positioned to Support Future of Natural Gas

Kinder Morgan Transports ~40% of All Natural Gas Consumed in the U.S.



U.S. DEMAND GROWTH OF ~40% DRIVEN BY LNG EXPORTS +12 BCF/D AND POWER +7 BCF/D

Sector	2017	2027E	Growth
LNG Exports	2	14	↑ 12
Power	25	32	↑ 7
Industrial	22	25	<u>↑</u> 4
Residential	12	14	<u>↑</u> 2
Net Mexico Exports	4	6	<u>↑</u> 2
Other	15	20	个 5
Total U.S. Natural Gas Demand	80	112	↑ 32

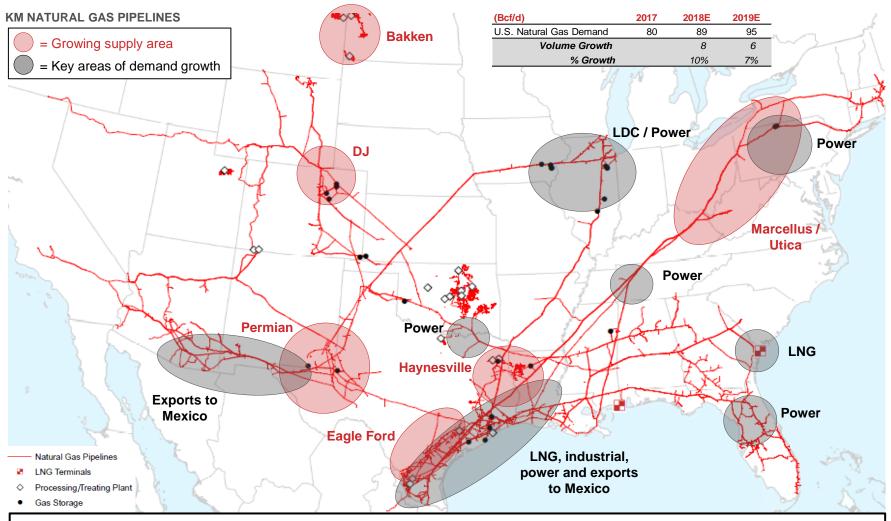
DEMAND (Bcf/d)

Source: WoodMackenzie, North America Gas Markets Long-Term Outlook, Spring 2018.

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Unmatched Natural Gas Network and Deliverability KINDER MORGAN

Strong Fundamentals Drive Value on Existing Assets and Create Investment Opportunities



NETWORK CONNECTS GROWING SUPPLY WITH KEY DEMAND CENTERS

Growth Driver: Buildout of U.S. LNG Exports

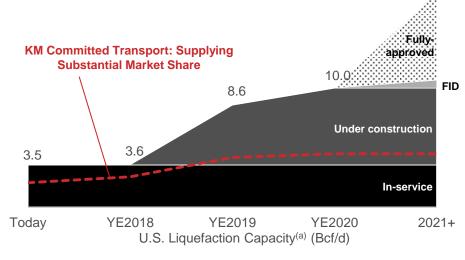
Multiple Liquefaction and Natural Gas Transport Opportunities Across KM Footprint

Global demand driving significant buildout of LNG export capabilities in the U.S.

- U.S. LNG exports reached over 3 Bcf/d in May 2018 vs. 0.5 Bcf/d in 2016 as incremental capacity came online
- 18.0 Bcf/d of fully-approved U.S. LNG export projects
- 10.6 Bcf/d of projects already FID, under construction or in-service

Multiple KM projects underway and opportunities ahead

- Secured nine LNG-related projects on five KM pipelines with 18-year average term on ~4.5 Bcf/d of capacity and ~\$900 million investment
- Elba Island LNG terminal and related export facilities under construction
- Gulf Coast Express (GCX) to provide significant Permian supply
- Additional infrastructure to meet next wave of LNG demand, including direct supply as well as upstream capacity for 3rd party deliveries



Intrastates Texas Tex

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KM Asset	Contracted Capacity (mDthd)	KM Capital (\$mm)	
TGP	1,200	\$304	
KMLP	600	\$126	
NGPL	1,635	\$241	
Intrastate	590	\$134	
EEC	436	\$100	
Total:	4,461	\$906	

KM SUPPLIES ~42% OF CURRENT U.S. LIQUEFACTION CAPACITY UNDER LONG-TERM COMMITMENTS^(b)

KM Network Reaches Multiple Export Facilities

(a) Source: EIA (released 6/18/2018) and company disclosures.

(b) Based on LNG export capacity currently operating, under construction or FID. Includes firm transport to: Sabine Pass, Corpus Christi, Elba Island, Cameron, and Freeport.

Project Highlight: Elba Island LNG Export Terminal KINDER MORGAN

Elba Liquefaction Company (ELC)^(a) / Southern LNG Company (SLNG)

Project Scope

- Liquefaction facilities (10 small-scale modular units)
- Ship loading facilities; boil-off gas compression
- Located on Elba Island near Savannah, Georgia

Project Statistics

- Liquefaction Capacity: 2.5 Mtpa or ~350 Mmcf/d
- Capital (100%):
 - ELC: ~\$1,390 million^(b) / \$745mm KM share
 - SLNG: ~\$430 million
- In-service: Q4 2018 through Q3 2019 (phased)
- Contract term: 20 years

Current Status

- FERC certificate issued June 2016
- DOE FTA and non-FTA authorizations received
- Shell has committed to entire capacity of facility, as well as Elba Express expansion
- Construction on-going
- First train contributes ~70% of revenue and is expected online in Q4 2018



 ⁽a) ELC is a 51/49 joint venture of Kinder Morgan and investment funds managed by EIG Global Energy Partners (EIG).
 (b) As of January 2018 Analyst Day; excludes non-KM capitalized interest cost.

Growth Driver: Surging Permian Production

KM Providing Additional Takeaway Capacity for Associated Natural Gas Production

Existing footprint reaches across Texas with connectivity into all major demand markets

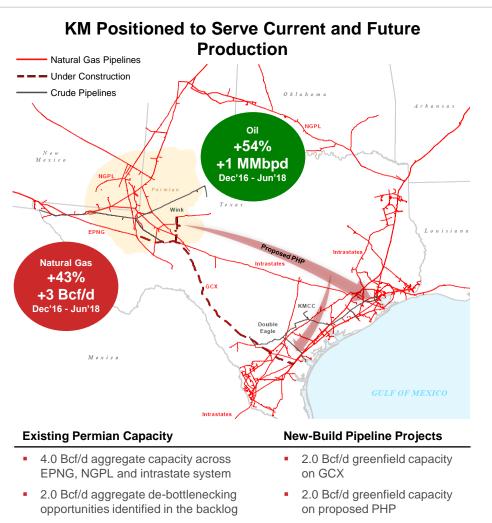
- Interconnected systems well-positioned to evacuate surging volume growth out of the Permian Basin
 - Speed to market
 - Competitive rates
 - Destination optionality
- Deliverability to Houston markets (power, petchem), substantial LNG export capacity and Mexico

Pursuing a combination of expansions on existing systems (de-bottlenecking EPNG and NGPL), as well as new long-haul pipelines (GCX and PHP)

- Secured by long-term, take-or-pay cash flows
- Partnered with market leaders to deliver competitive solutions

Potential to leverage existing crude assets into long-haul Permian oil pipeline project

- KM Crude and Condensate (KMCC) to facilitate deliverability into the Houston refining and export markets
 - Efficient solution given already congested pipeline corridors in the Houston Ship Channel
- Wink pipeline located in the heart of the Permian basin in proximity to virtually all area major takeaway pipelines
 - Potential to aggregate barrels at origination



KMI delivering substantial Permian takeaway capacity to Midcontinent, West, and Gulf Coast markets

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Project Highlight: Gulf Coast Express (GCX)



Permian Direct-to-Gulf Coast Project Satisfying Multiple Growth Drivers

Project Scope

- Mainline: 447.5 miles of 42" pipeline originating at the Waha Hub and terminating near Agua Dulce, Texas
- Midland lateral: 50 miles of 36" pipeline
- 214,280 HP of installed compression
- KM Texas Pipeline (KMTP) operator and constructor
- KM 50%, DCP 25%, and Targa 25% ownership interest

Project Statistics

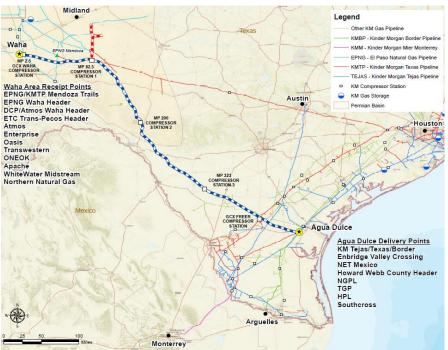
- Initial Capacity: 1.98 Bcf/d
- Capital (100%): \$1.75 billion
- In-Service: October 2019
- Minimum contract term: 10 years

Current Status

- Final investment decision to proceed made December 2017
- Capacity fully-subscribed under long-term, binding agreements
- Shipper Apache Corp. has option to purchase 15% equity stake in the project from KM
- Construction commenced and project remains on schedule

Project Drivers

- Producer push project to transport prolific growing natural gas supply from the Permian Basin to Agua Dulce
- Provides flexible access to growing markets:
 - Exports to Mexico and Gulf Coast LNG liquefaction terminals
 - Growing industrial demand
 - Multiple pipeline interconnects at Agua Dulce, incl. KMI Intrastate capacities of over 7 Bcf/d (pipeline) and 132 Bcf (storage)





TGP Bidroom Update

Including Pooling Changes New Storage Services

Jason Connelly Director, Marketing and Asset Optimization

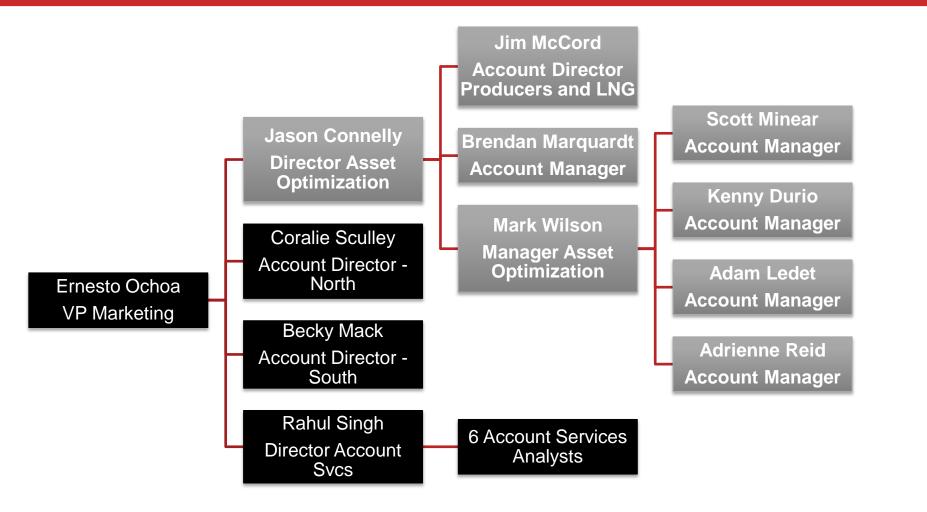




- What and Who of the TGP Bidroom
- Benefits of Park and Loan in Meeting Customer Needs
- Open Capacity Marketing
- Market Trends
- Strategic Initiatives

North Region Marketing Team





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Improving / Increasing level of service to customers using existing assets

- Customer Service
- Open Capacity Marketing
- IT Discounting
- Strategic Initiatives

- Customer Representation
- Park and Loan
- Open Seasons
- Market Intelligence and Forecasting



Interruptible Service

Balancing Services Utilizing Linepack and Operational Storage

Load Swings

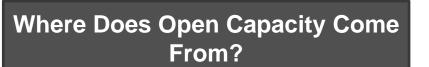
Call the Bidroom for

- Restriction Management
- Intraday Swings
- Weekend Balancing

Interesting Deal Structure:

2 day PAL service to allow power generator to swing on linepack, when operationally feasible

Open Capacity Marketing / Open Seasons



- Under-contracted segments
- ROFR Turnback
- Receipt / Delivery Point Changes
- Technology Improvements

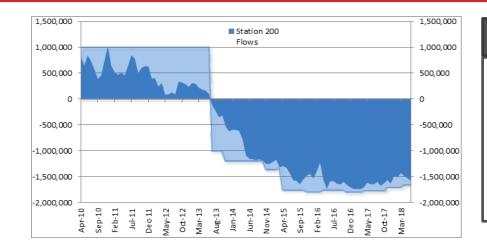
How Does the Bidroom Market Capacity?

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- Capacity Request
- Generally Available Open Season
- Pre-Arranged Deals
- Customer Relationships

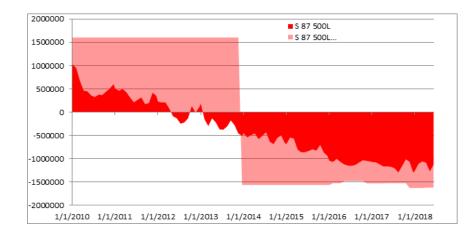
Note: Available capacity is posted by segment since mid-2017

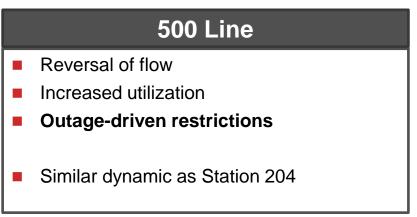
Trends: North to South Restricted Area Expanding KINDER MORGAN



Station 204 Restriction

- Supply growth drove reversal of flow
- Capacity increases -> Increased Utilization
- Outage-driven restrictions
- Sustained flow near/at capacity.



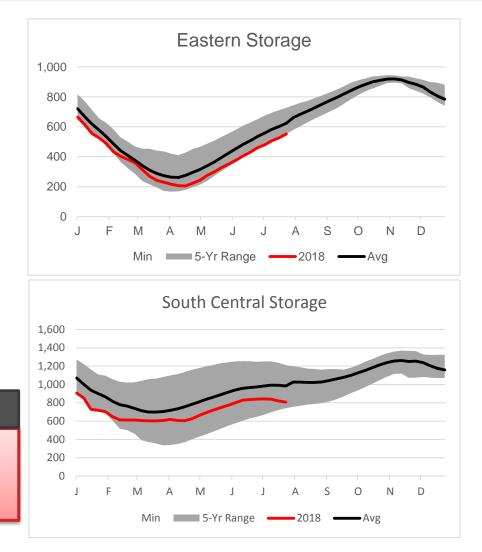


Trends: Storage – Short-Term Volatility Driver

- Low balance at start of season
- Strong power and LNG demand
- Driver of winter volatility
 - Lower firm balances
 - Shifted deliverability curve
 - Lack of gas to loan
 - Market sensitivity to outages
- Expect weather-driven cash volatility

Wild Card Factors

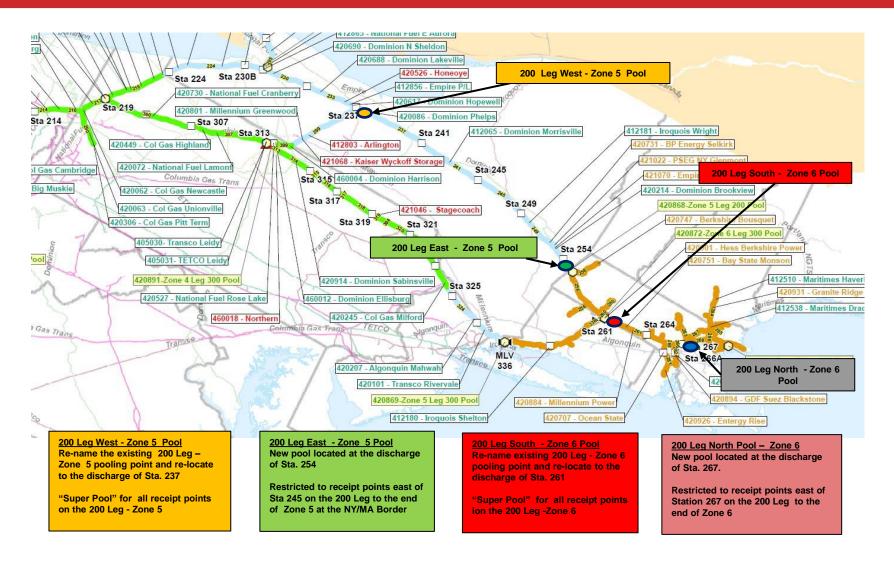
Demand fall off in Sept/Oct/early Nov Current position on the injection curve





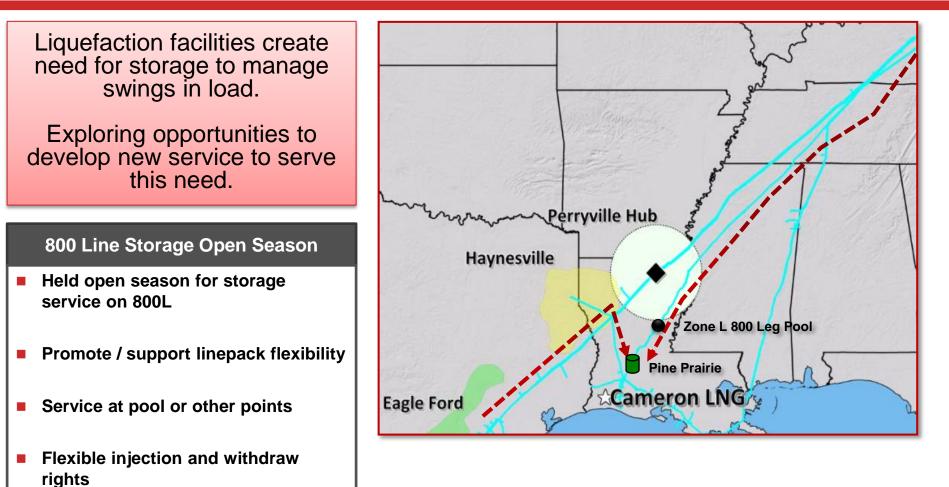
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Strategic Initiative: Zone 5 and 6 Pooling Changes KINDER MORGAN



Strategic Initiative: New Storage Service on 800L

Working with potential customers



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Please contact any of us with ideas, questions, or comments

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- Mark Wilson 713-420-7205
- Kenny Durio 713-420-5307
- Adrienne Reid 713-420-8413

Pipeline Operations Update

August 2018

Tom Dender, Vice-President Pipeline Management





System wide flows and throughput

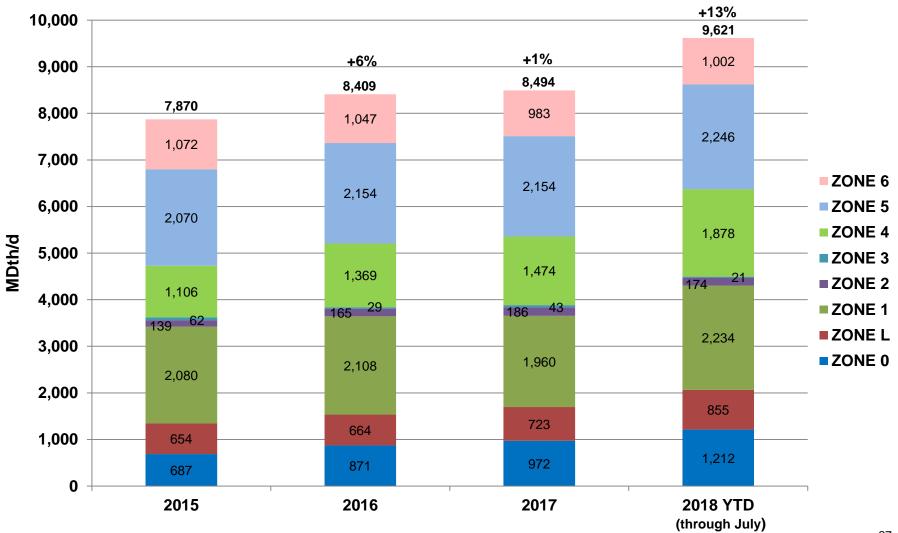
- Winter update
- Summer update
- Operations outlook

KINDER **TGP System Map** ~11,750 miles of pipe \succ 200 Line 267 Active supply/delivery meters ~700 >Storage capacity ~109 bcf 245 321 \triangleright Colden Hebron-Ellisburg-Harriso Direct connected power ~24,650 mw \succ Rivervale 300 Line Mahwah 219 200 Line 204 **Bear Creek** 500 Line 800 Line 100 Line 26



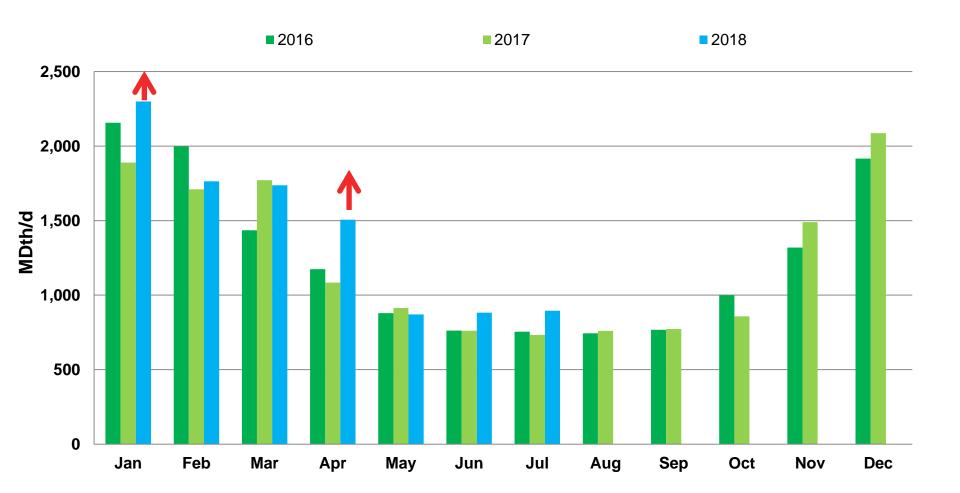
TGP System Wide Throughput

Deliveries by Zone



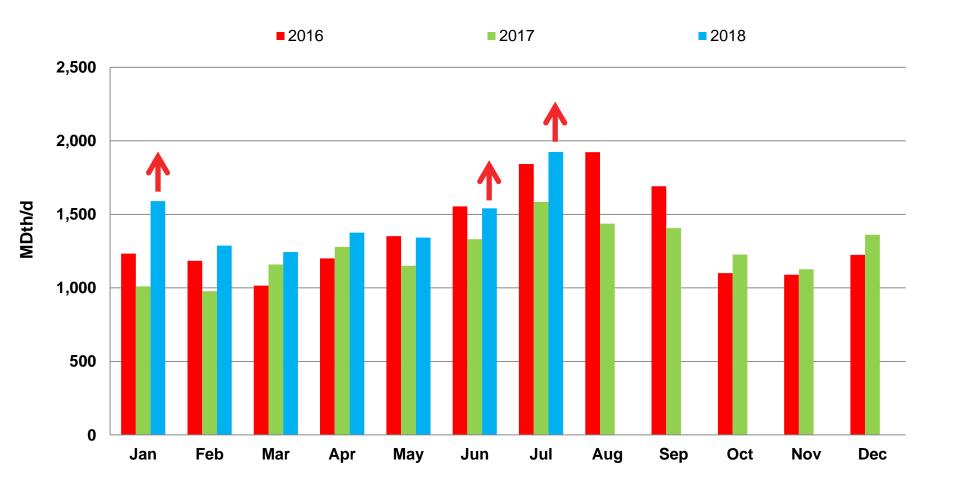
System Wide LDC Demand





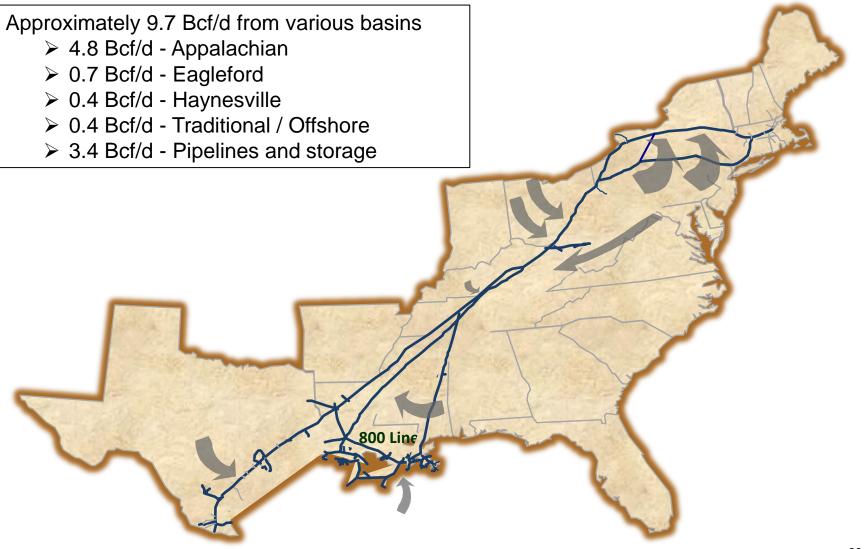
System Wide Power Demand





TGP Gas Receipts







Overview

- Strong Winter Demand
 - 9 out of the Top-10 All-time System Peak Delivery Days occurred in January
- System-wide throughput increased 6% compared to previous winter
- Storage Inventories down from 2016/2017

Demand

- System Wide Peak Day was ~11.6 Bcf/d on January 2, 2018
- Power Plant Peak Day was ~2.4 Bcf/d on January 17, 2018
- Exports to Mexico flat compared to Winter 2016/2017
- Supply
 - Supply continued to be strong from Marcellus and Utica Shales
 - Less supply coming from Dracut/Distrigas



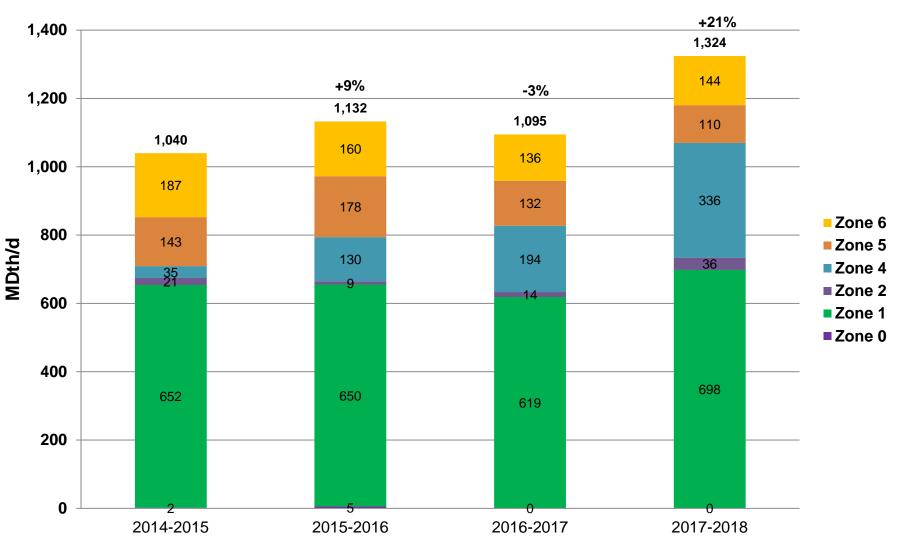
	<u>2015-2016</u>	<u>2016-2017</u>	<u>2017-2018</u>	<u>Change</u>
LDC	1,659	1,724	1,880	+9%
Power	1,132	1,095	1,324	+21
Pipeline Interconnects	4,938	5,170	5,372	+4%
Mexico	696	844	857	+1%
Other	365	300	304	+1%
TOTAL	8,790	9,133	9,737	+6

Volumes are MDth/d

Winter System Wide Power Demand



Deliveries by Zone





Overview

- System-wide throughput increased 17% compared to previous summer
- Challenging Maintenance Season

Demand

- Strong Demand across system, especially in Zone 1 and Zone 4 (Power Loads)
- Significant increase in LDC, Power and Pipeline Interconnect Loads compared to 2017 Summer



	<u>2016</u>	<u>2017</u>	<u>2018*</u>	<u>Change</u>
LDC	868	840	1,036	+23%
Power	1,524	1,345	1,547	+15%
Pipeline Interconnects	4,638	4,678	5,613	+20%
Mexico	757	793	880	+11%
Other	273	433	419	-3%
TOTAL	8,060	8,089	9,495	+17%

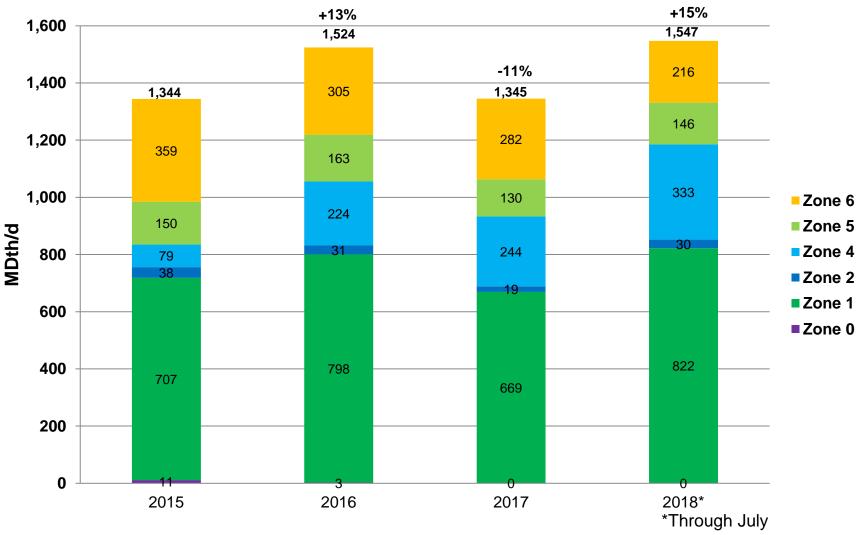
Volumes are MDth/d

*Through July

Summer System Wide Power Demand



Deliveries by Zone



Operational Expectations



Continued high utilization system- wide

- Increasing peak day deliveries
- Strong Marcellus and Utica supplies
- New LNG and Mexico markets
- Strong power plant demand

Continued maintenance, integrity and expansion related activities

- System-wide activity
- Limited operational flexibility

Continued restrictions

- Throughput
- Maintenance, Integrity, Expansion related work
- PHMSA requirements
- Continued safe and reliable deliveries to firm shippers

System Wide Deliveries

Rank	Gas Day	MDth/d	Bcf/d
1	1/2/2018	12,045	11,637
2	1/4/2018	11,753	11,357
3	1/1/2018	11,572	11,180
4	1/6/2018	11,537	11,155
5	1/17/2018	11,515	11,119
6	1/5/2018	11,500	11,118
7	1/16/2018	11,379	10,992
8	1/13/2018	11,335	10,945
9	1/30/2018	11,309	10,924
10	12/15/2016	11,284	10,870

Power Plants

Rank	Gas Day	MDth/d	Bcf/d
1	1/17/2018	2,480	2,383
2	8/11/2016	2,402	2,304
3	8/12/2016	2,300	2,210
4	1/16/2018	2,282	2,197
5	7/16/2018	2,265	2,180

Station 106 – Winchester, KY



Broad Run Expansion Project





Station 836A – Delhi, LA



Cameron LNG Project





Station 3A – Sinton, TX

Lone Star Expansion





Gas Control

24 hour and emergency 800-231-2800

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Business Development Update "Catch a Wave"

August 23, 2018

Paul Smith, Director Business Development





Overview

Progressing on Project Backlog

- Adding 1.2 Bcf/d to connect two new LNG projects
 - o Cameron (Mitsui, Mitsubishi) Jan 2019
 - Corpus Christi (Cheniere) Jan 2019
- Adding 200,000 Dth/d to move Marcellus gas south
 - Broad Run Expansion (Antero) Sep 2018

TGP Development Drivers

- 1. Shale production
- 2. LNG and Mexico exports
- 3. Power generation
- 4. Supply security and diversity



Lone Star - Sta. 3A Construction

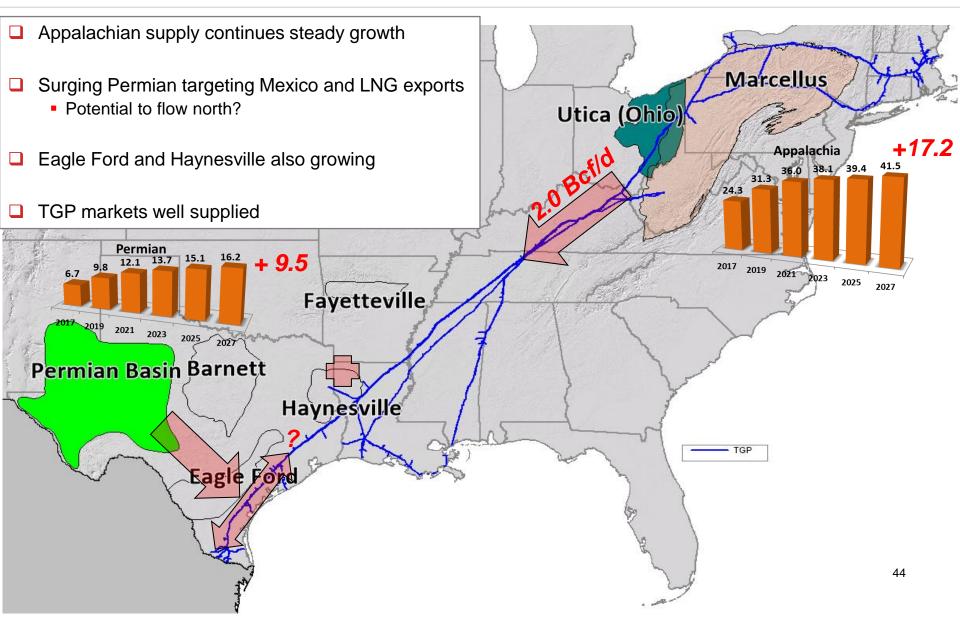


Broad Run Expansion - Sta. 563 Construction



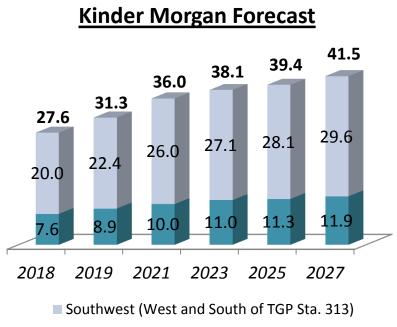
Driver #1 – Shale Production

Continued supply growth expected on both ends of TGP





Appalachian Production ~14 Bcf/d of growth projected thru 2027

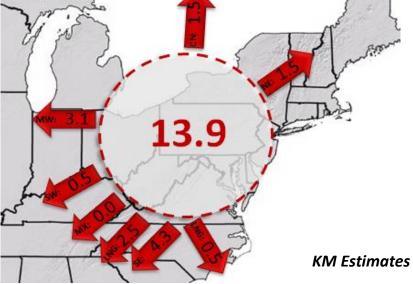


Northeast (East of TGP Sta. 313)

Growth thru 2027: 13.9 Bcf/d

- Southwest: 9.6 Bcf/d
- Northeast: 4.3 Bcf/d
- Tempered expectations due to Permian, Eagle Ford and resurgent Haynesville

Takeaway by Corridor (2018-27)

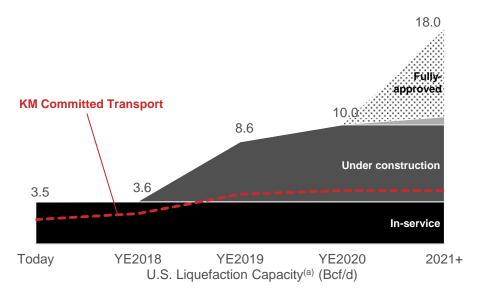


- Need for additional capacity in both regions
- Significant volumes targeting LNG and Southeast
- Projects to NY and New England remain challenging



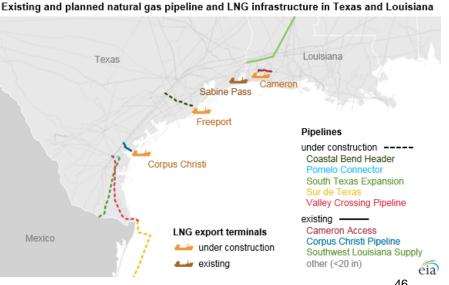
Driver #2 – LNG Exports

U.S. LNG exports quadrupled in 2017



- U.S. LNG export capacity reaches 3.6 Bcf/d in 2018
 - Deliveries to 25 countries
 - More than half to Mexico, South Korea, and China
- Four more projects coming online in the next 2 years: Elba Island, Cameron, Freeport & Corpus Christi
 - U.S. LNG export capacity grows to 9.6 Bcf/d
 - U.S. becomes world's third-largest LNG exporter

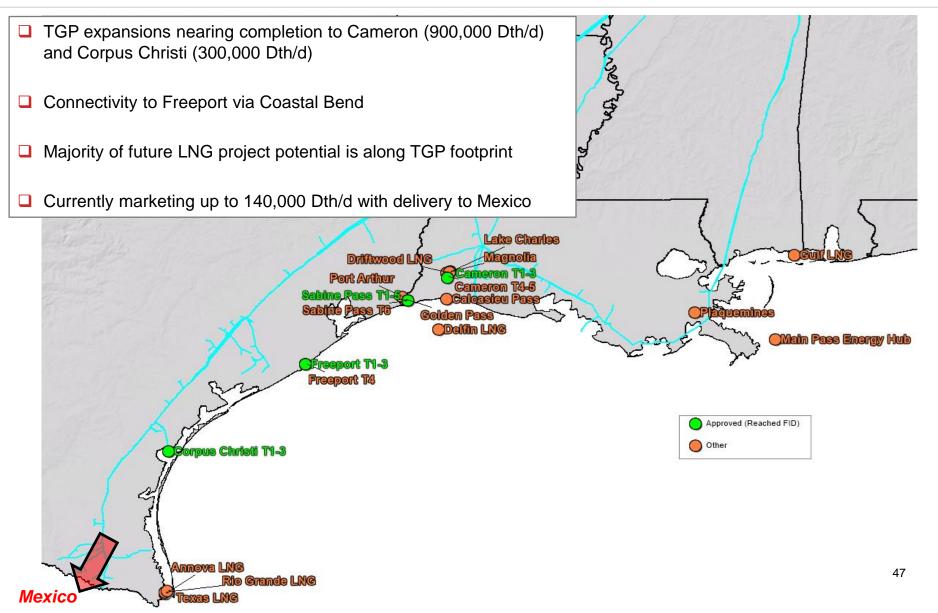
Natural gas pipeline capacity into the South Central United States (2000-2018) billion cubic feet per day expected 20 from Southeast from Mexico 15 Southeast from Midwest Mountain 10 South Central 5 from Mountain eia 2008 2010 2012 2014 2016 2018 2000 2002 2004 2006





Future LNG and Mexico Exports

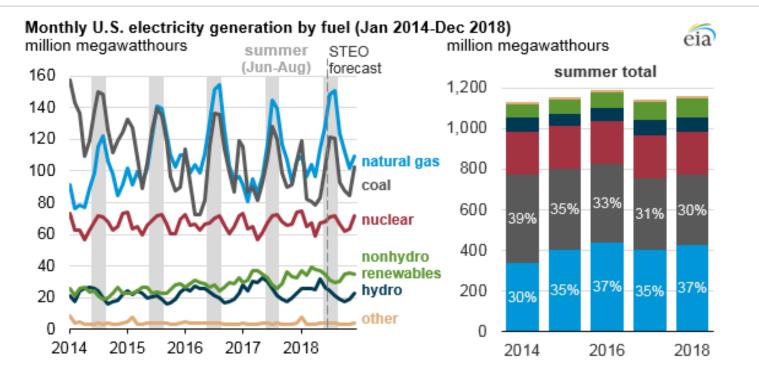
The next "wave" of projects





Driver #3 – Power Generation

Gas-fired generation still on the rise



Natural gas share of summer power-gen near all-time high

- Natural gas share ~ 37%
- Coal share ~ 30%
- Continues multi-year trend of lower coal-fired electricity
- Over the three-year period from 2015 to 2017, the cost of natural gas delivered to power-gen averaged \$3.16

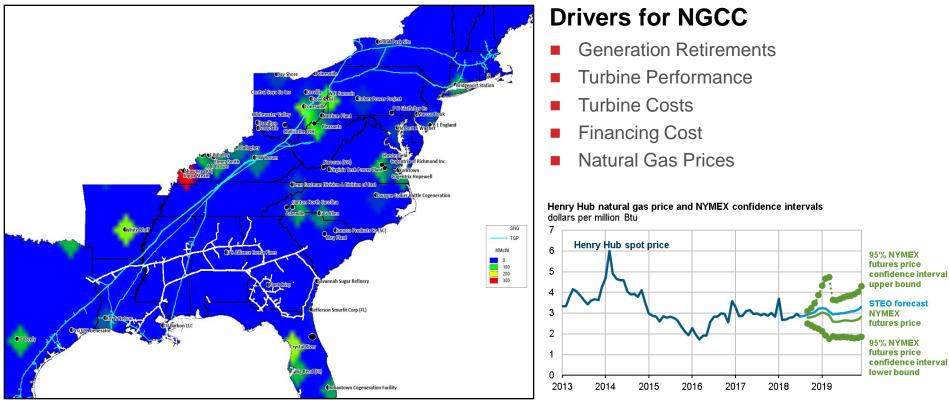
TGP has seen tremendous growth in power-generation

- Delivered ~ 1.55 Bcf/d summer (15% increase)
- Delivered ~ 1.32 Bcf/d winter (21% increase)
- Direct connected power ~24,650 MW
- Continued focus on connecting new load
- Portfolio renewals and ensuring supply access

Retirements and the growth of Combined Cycle

Many plant retirements have completed or delayed, but other factors are favorable

Announced and Potential Retirements (as of Aug-2018)



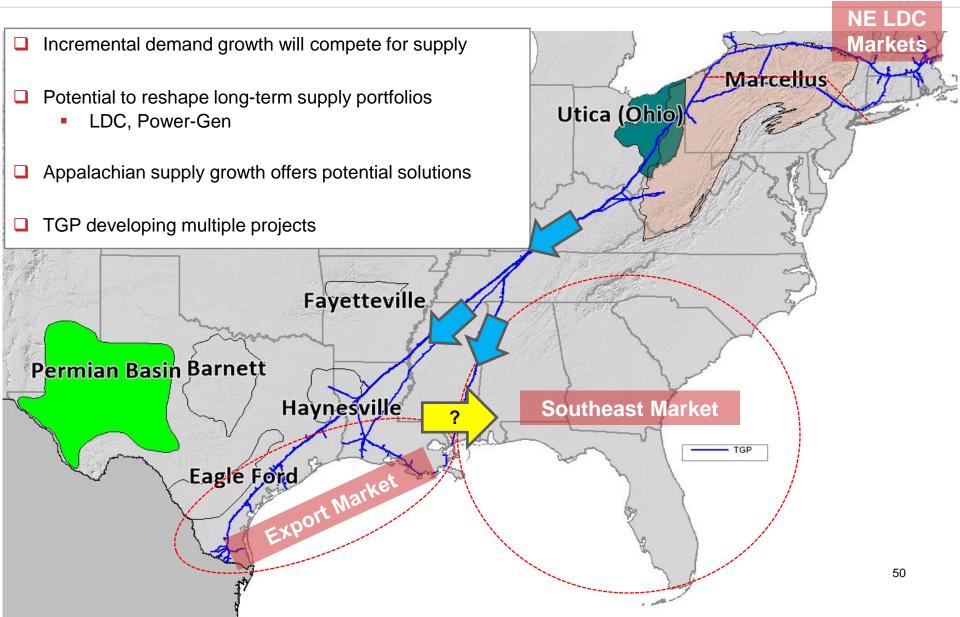
Source: Velocity Suite; KM Analysis; EIA STEO 2018

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Driver #4 – Supply Security and Diversity



Managing substantial shifts in supply and demand





Summary

□ Strong supply and demand on TGP with all-time high throughput

- Approaching 12 Bcf/d peak and 10 Bcf/d average
- □ Improving / Increasing level of service to customers using existing assets
- Nearing completion of significant project backlog
- U Well positioned for another "wave" of development projects, driven by:
 - Shale production
 - LNG and Mexico exports
 - Power generation
 - Supply security and diversity



Business Development Team

KINDER	KINDER	KINDER
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TGP 2018 Customer Meeting

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