

# TENNESSEE GAS PIPELINE ANNUAL CUSTOMER MEETING

## OPENING REMARKS

ERNESTO OCHOA

VICE PRESIDENT – COMMERCIAL MARKETING

NASHVILLE, TENNESSEE

AUGUST 22, 2019

# BUSINESS UPDATE

## KINDER MORGAN

KIMBERLY WATSON  
PRESIDENT – NORTH REGION PIPELINES

NASHVILLE, TENNESSEE

AUGUST 22, 2019

# FORWARD-LOOKING STATEMENT/ NON- GAAP FINANCIAL MEASURES

This presentation contains forward-looking statements. These forward-looking statements are identified as any statement that does not relate strictly to historical or current facts. In particular, statements, express or implied, concerning future actions, conditions or events, future operating results or the ability to generate revenues, income or cash flow or to pay dividends are forward-looking statements. Forward-looking statements are not guarantees of performance. They involve risks, uncertainties and assumptions. Future actions, conditions or events and future results of operations of Kinder Morgan, Inc. may differ materially from those expressed in these forward-looking statements. Many of the factors that will determine these results are beyond Kinder Morgan's ability to control or predict. These statements are necessarily based upon various assumptions involving judgments with respect to the future, including, among others, the ability to achieve synergies and revenue growth; national, international, regional and local economic, competitive and regulatory conditions and developments; technological developments; capital and credit markets conditions; inflation rates; interest rates; the political and economic stability of oil producing nations; energy markets; weather conditions; environmental conditions; business and regulatory or legal decisions; the pace of deregulation of retail natural gas and electricity and certain agricultural products; the timing and success of business development efforts; terrorism; and other uncertainties. There is no assurance that any of the actions, events or results of the forward-looking statements will occur, or if any of them do, what impact they will have on our results of operations or financial condition. Because of these uncertainties, you are cautioned not to put undue reliance on any forward-looking statement. Please read "Risk Factors" and "Information Regarding Forward-Looking Statements" in our most recent Annual Report on Form 10-K and our subsequently filed Exchange Act reports, which are available through the SEC's EDGAR system at [www.sec.gov](http://www.sec.gov) and on our website at [www.kindermorgan.com](http://www.kindermorgan.com).

We use non-generally accepted accounting principles ("non-GAAP") financial measures in this presentation. Our reconciliation of non-GAAP financial measures to comparable GAAP measures can be found in the Appendix to our Analyst Day presentation, dated 1/28/2015, on our website at [www.kindermorgan.com](http://www.kindermorgan.com). These non-GAAP measures should not be considered an alternative to GAAP financial measures.

# KINDER MORGAN: LEADER IN NORTH AMERICAN ENERGY INFRASTRUCTURE

## Largest natural gas transmission network

- ~70,000 miles of natural gas pipelines
- 657 Bcfd of working storage capacity
- Connected to every important U.S. natural gas resource play and key demand centers
- Move ~40% of natural gas consumed in the U.S.

## Largest independent transporter of refined products

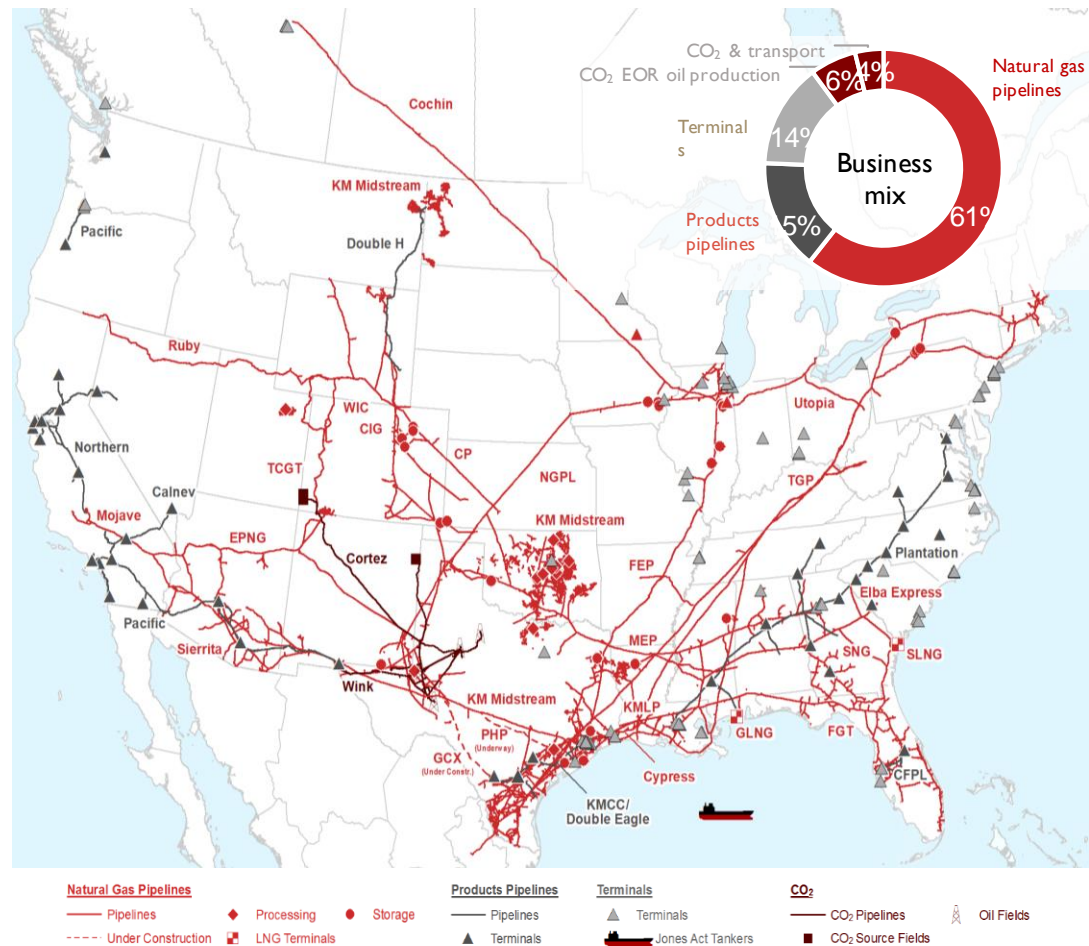
- Transport ~1.7 mmbbl/d of refined products
- ~6,900 miles of refined products pipelines
- ~5,800 miles of other liquids pipelines (crude and natural gas liquids)

## Largest independent terminal operator

- 157 terminals
- 16 Jones Act vessels

## Largest transporter of CO<sub>2</sub>

- Transport ~1.2 Bcfd of CO<sub>2</sub>



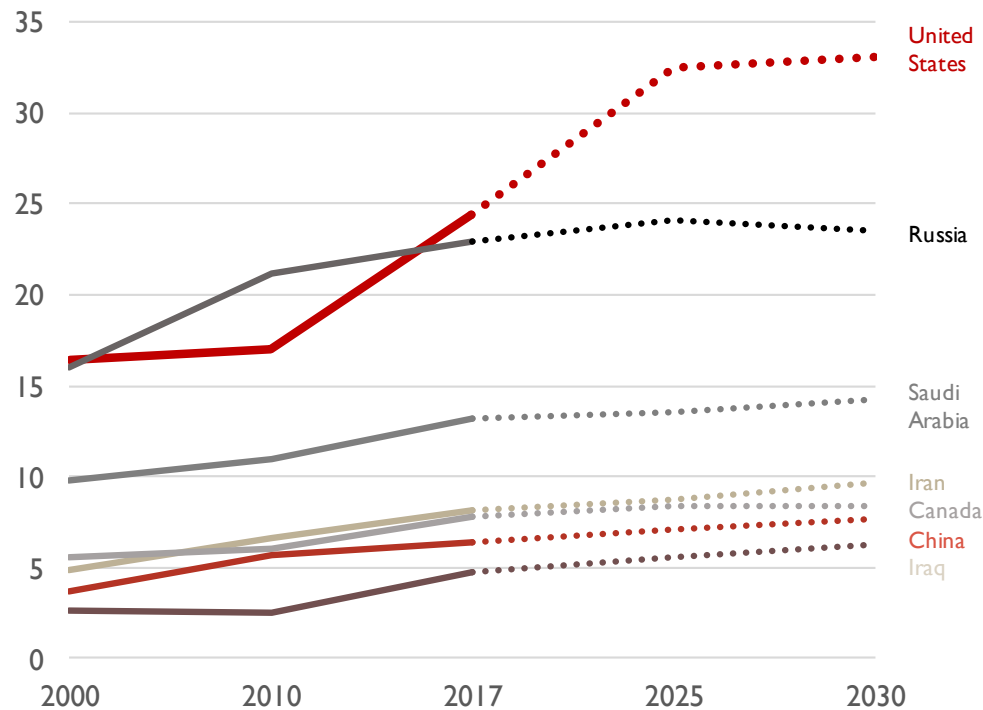
Note: Mileage and volumes are company-wide per 2019 budget. Business mix based on 2019 budgeted Segment EBDA before Certain Items plus JV DD&A.

# U.S. IS LARGEST OIL AND GAS PRODUCER IN THE WORLD

Reaching demand markets abroad expected to drive higher utilization of existing infrastructure and expansion opportunities

## OIL AND NATURAL GAS PRODUCTION

Million barrels of oil equivalent per day



## Unmatched growth in U.S. oil and gas production

- ~33% expected growth in U.S. oil and natural gas production by 2025
- U.S. to deliver over 50% of expected global supply increase through 2025
- U.S. to produce nearly 1 out of every 5 barrels of oil and 1 out of every 4 cubic meters of natural gas in the world by 2025

## U.S. advantaged to serve as the preferred trade partner to growing demand markets

- Competitive marketplace driving innovation
- Robust infrastructure network
- Reliable rule of law with enforceable contracts
- Relatively stable regulatory environment

Energy security is key to ensure affordable, reliable resources reach growing demand markets

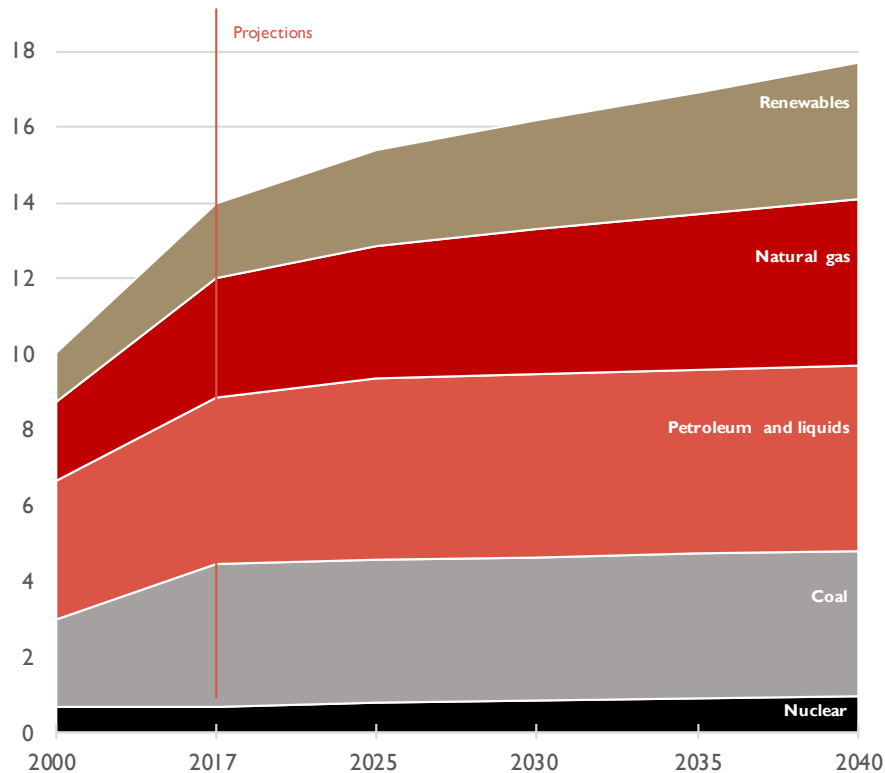
Source: International Energy Agency World Energy Outlook 2018, New Policies Scenario.

# GLOBAL ENERGY DEMAND EXPECTED TO GROW FOR DECADES TO COME

More than 650 million people still expected to lack access to electricity in 2030

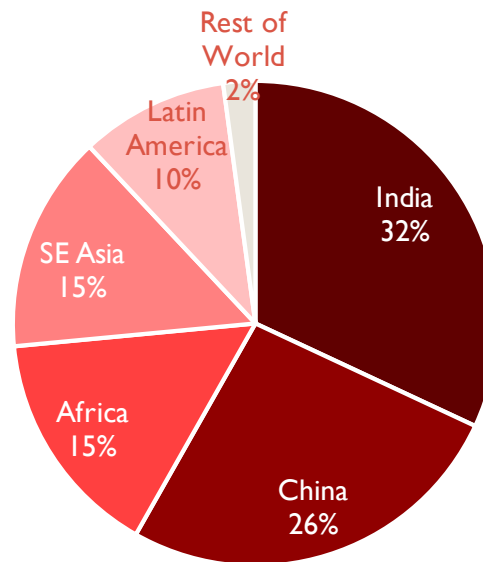
## STEADY GROWTH IN GLOBAL ENERGY DEMAND

Billion tons of oil equivalent



## DEMAND GROWTH DRIVEN BY DEVELOPING ECONOMIES

% of projected incremental demand from 2017 to 2040



India's demand expected to more than double

China projected to become biggest oil consumer and largest importer of oil and natural gas

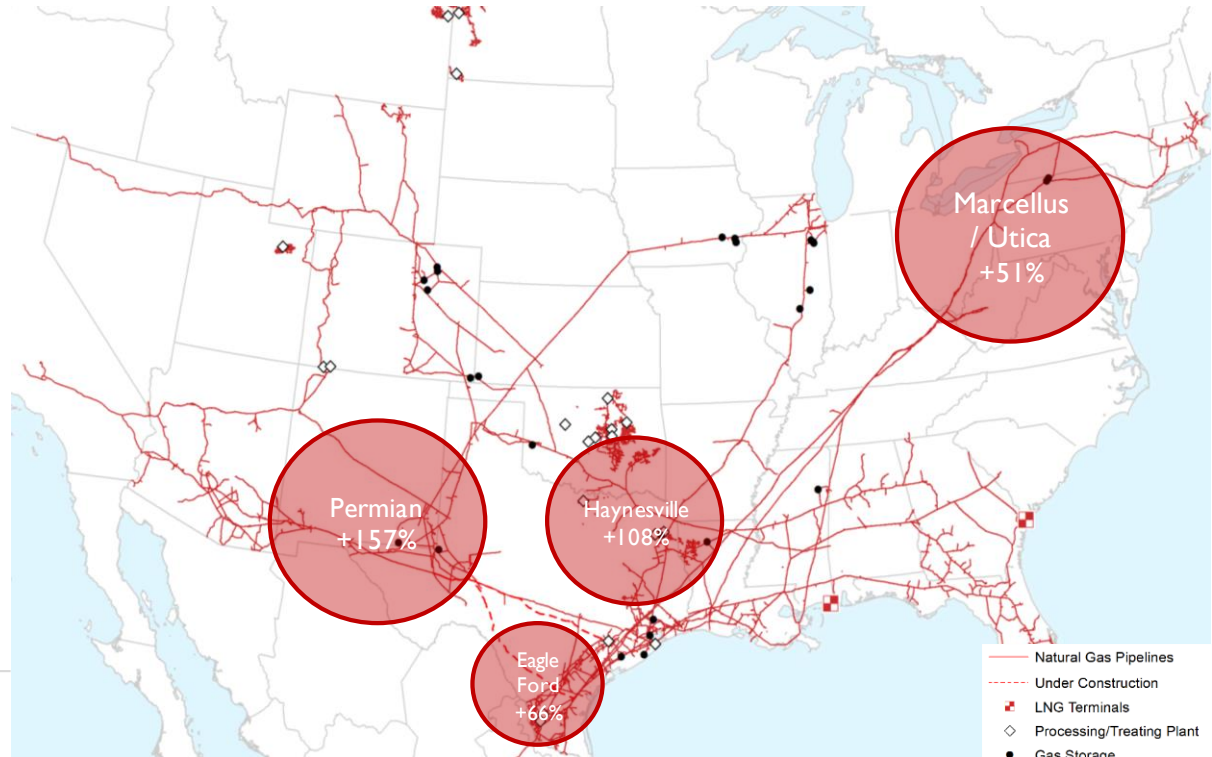
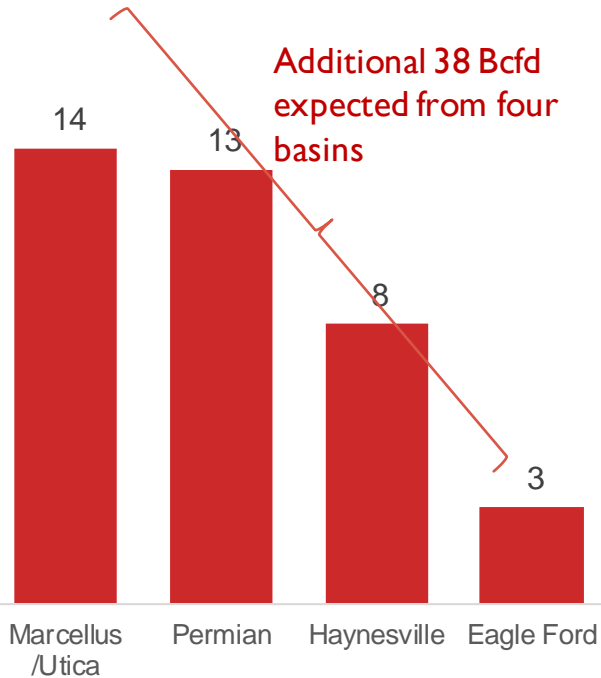
Population growth, urbanization and economic development create growing demand for affordable, reliable energy sources

Source: International Energy Agency World Energy Outlook 2018, New Policies Scenario. New Policy Scenario considers (1) today's policy frameworks, (2) the continued evolution of known technologies and (3) policy ambitions announced as of August 2018, including commitments made under the Paris Agreement.

# SUBSTANTIAL GROWTH PROJECTED FOR U.S. NATURAL GAS SUPPLY

## KEY BASINS DRIVING U.S. GROWTH

2018 to 2030 growth in Bcfd



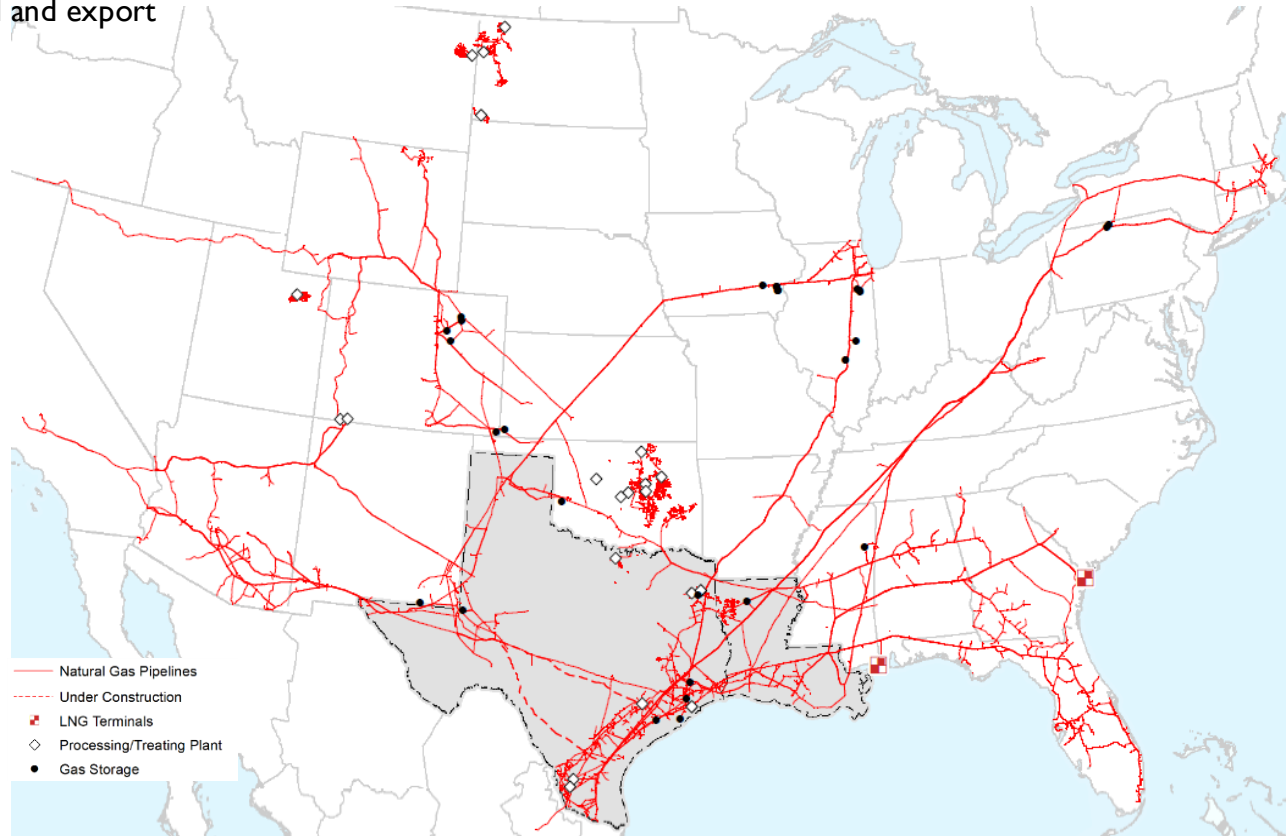
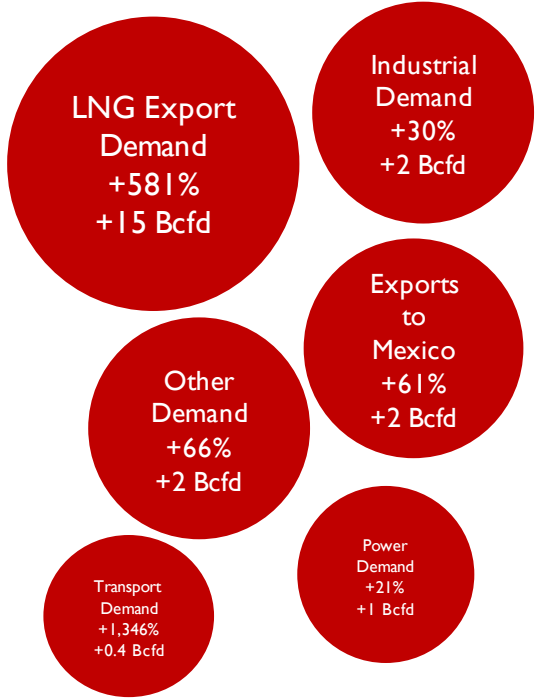
Total U.S. natural gas production to grow by over 30 Bcfd or nearly 40% by 2030

Source: WoodMackenzie, North America Gas Markets Long-Term Outlook Summer 2019. Growth relative to projected 2018 production at the time of the report. Forecast assumes aggregate of other U.S. basins shrinks by 5 Bcfd.

Kinder Morgan network connects key supply basins to multiple demand points along the Gulf Coast

# U.S. NATURAL GAS DEMAND IS CONCENTRATED IN GULF COAST

Forecasted Texas and Louisiana demand and export growth between 2018 and 2030:



>70% of forecasted 2018-2030 growth is in Texas and Louisiana, where we have significant assets in place

Source: WoodMackenzie, North America Gas Markets Long-Term Outlook, Summer 2019.



# \$5.7BN OF COMMERCIALY-SECURED CAPITAL PROJECTS UNDERWAY

~\$400 million of new projects added during Q2 2019 & over \$1 billion added year-to-date

(as of 6/30/2019)	Demand Pull / Supply Push	KMI Capital (\$ billion)	Estimated In-Service Date	Capacity
<b>Natural Gas</b>				
Permian takeaway projects (GCX, PHP, TX Intrastates, EPNG, NGPL)		\$ 1.6	Q4 2019 – 2020	7.0 Bcfd
Elba liquefaction and related terminal facilities		1.2	First unit in Q3 2019	0.4 Bcfd
Bakken G&P expansions (Hiland Williston Basin)		0.5	Q3 2019 – 2020	Various
Supply for U.S. power & LDC demand (TGP, FGT, NGPL, CIG, SNG)		0.3	Q3 2019 – 2023	1.0 Bcfd
Supply for LNG export (NGPL, KMLP)		0.3	Q3 2019 – 2022	1.9 Bcfd
Mexico export (EPNG, Sierrita)		0.2	2020	0.6 Bcfd
Other natural gas		0.3	Various	>1.5 Bcfd
<b>Total Natural Gas</b>		<b>\$ 4.4</b>	<b>~77% of total &amp; 5.6x EBITDA multiple</b>	
<b>Additional projects</b>		<b>1.3</b>		
<b>Total Backlog</b>		<b>\$ 5.7</b>		

- Significant investment opportunities resulting from our expansive, strategically-located natural gas pipelines network
- Additional projects are primarily liquids-related (crude oil and refined products)
  - \$0.6 billion for CO<sub>2</sub> EOR oil production, \$0.3 billion for CO<sub>2</sub> & transport, \$0.3 billion for terminals and \$0.1 billion for liquids pipelines
- Beyond the backlog, expect \$2 to \$3 billion per year of ongoing organic investment opportunities

Note: See Non-GAAP Financial Measures and Reconciliations. EBITDA multiple reflects KM share of estimated capital divided by estimated Project EBITDA.

# SUPPORTING THE BUILDOUT OF U.S. LNG EXPORTS

Serving significant liquefaction capacity & well-positioned to capture more

## Kinder Morgan network advantages:

### Natural gas leader

~70,000 miles of natural gas pipelines  
Move ~40% of U.S. natural gas

### Supply diversity

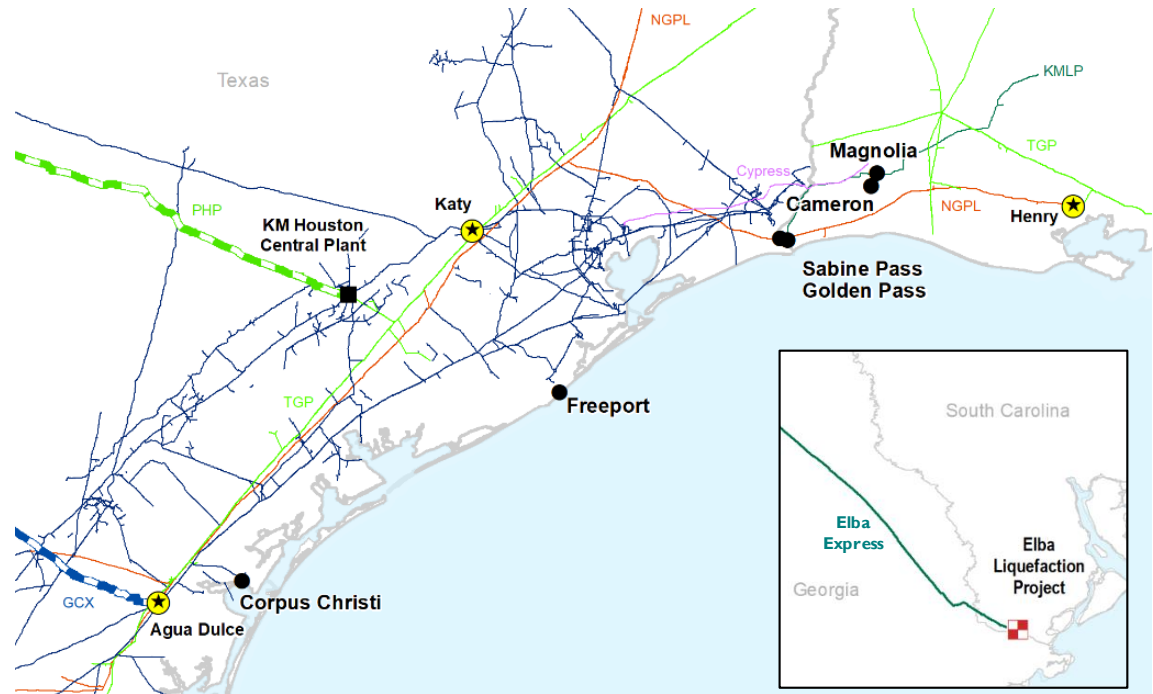
Connected to every important U.S. natural gas resource play

### Premier deliverability

657 Bcf of working gas storage in production and market areas

### Transporter of choice

Over 5.7 Bcfd of transport capacity contracted for 19-year average term



Connecting diverse supply options to multiple developing LNG demand centers

# A CORE ENERGY INFRASTRUCTURE HOLDING

Significant cash flow generation & returning significant value to shareholders

**>\$40 billion market capitalization**

One of the 10 largest energy companies in the S&P 500; ~15% insider ownership

**Investment grade rated debt**

Recent upgrades to mid-BBB by S&P, Moody's, and Fitch reflect balance sheet strength

**5% current dividend yield**

based on \$1.00 in 2019 and \$20 share price

**25% dividend growth in 2020**

planned increase to \$1.25

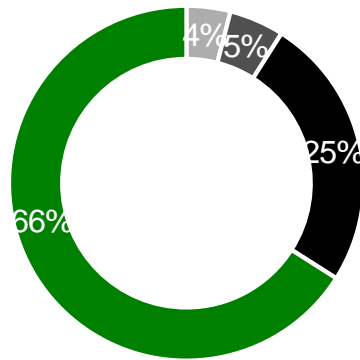
**\$2 billion share buyback program**

purchased ~\$525 million since December 2017

# STABLE, FEE-BASED CASH FLOW FROM HIGH QUALITY CUSTOMERS

Underpinned by multi-year contracts with diversified customer base

**STABLE CASH FLOWS<sup>(a)</sup>**



**66%** Take-or-pay

Entitled to payment regardless of throughput for periods of up to 20+ years

**25%** Fee-based

Supported by stable volumes, critical infrastructure between major supply hubs & stable end-user demand

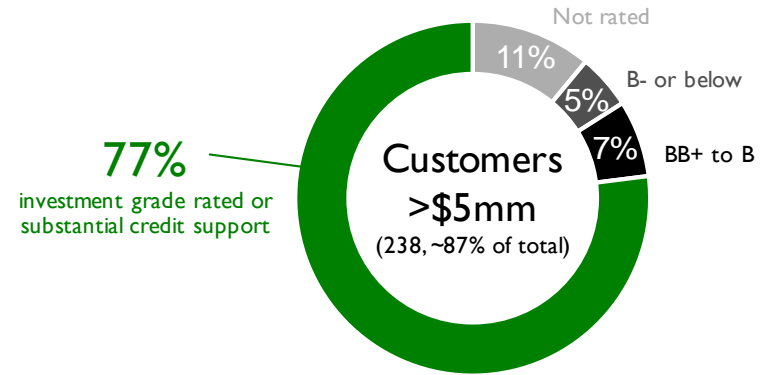
**5%** Hedged

Disciplined approach to managing price volatility, substantially hedged near-term exposure

**4%** Other

Commodity-price based, limited to small portions of unhedged oil and gas production and G&P business

**HIGH QUALITY CUSTOMERS<sup>(b)</sup>**



**77%**  
investment grade rated or substantial credit support

plus:

**~69% overall from end-users of the products we handle**

a) Based on 2019 budgeted Segment EBDA before Certain Items plus JV DD&A. See NonGAAP Financial Measures and Reconciliations.

b) Based on 2019 budgeted net revenues, which include our share of unconsolidated joint ventures and net margin for our Texas Interstate customers & other midstream businesses. Chart includes customers >\$5mm at their respective company credit ratings as of 1/9/2019 per S&P and Moody's, shown at the S&P-equivalent rating & utilizing a blended rate for split-rated companies. End-users includes utilities, LDCs, refineries, chemical companies, large integrators, etc.

# FUNDAMENTAL UPDATE

JASON CONNELLY

DIRECTOR - COMMERCIAL ASSET OPTIMIZATION

NASHVILLE, TENNESSEE

AUGUST 22, 2019

# MARKETING & ASSET OPTIMIZATION TEAM

**KINDER MORGAN**

**Ernesto Ochoa**

Vice President Business Development  
Tennessee Gas Pipeline

Office: 713-420-1734

Cell: 713-206-3290

ernesto\_ochoa@kindermorgan.com

**KINDER MORGAN**

**Jason Connelly**

Director - Commercial  
Tennessee Gas Pipeline

Office: 713-420-2446

Cell: 713-444-3940

jason\_connolly@kindermorgan.com

**KINDER MORGAN**

**Coralie Sculley**

Director – Commercial North LDC  
Tennessee Gas Pipeline

Office: 713-420-6338

Cell: 713-818-0411

coralie\_sculley@kindermorgan.com

**KINDER MORGAN**

**Mark Wilson**

Manager - Commercial  
Tennessee Gas Pipeline

Office: 713-420-7205

Cell: 205-447-2589

mark\_wilson@kindermorgan.com

**KINDER MORGAN**

**Adam Ledet**

Account Manager – Asset Opt.  
Tennessee Gas Pipeline

Office: 713-420-4813

Cell: 504-909-0552

adam\_ledet@kindermorgan.com

**KINDER MORGAN**

**Adrienne Reid**

Account Manager – South LDC  
Tennessee Gas Pipeline

Office: 713-369-8413

Cell: 719-235-7105

adrienne\_reid@kindermorgan.com

**KINDER MORGAN**

**Brenden Marquardt**

Account Manager  
Tennessee Gas Pipeline/SNG

Office: 713-420-2109

Cell: 281-773-4366

brenden\_marquardt@kindermorgan.com

**KINDER MORGAN**

**Jim McCord**

Account Director – Producer/LNG  
Tennessee Gas Pipeline

Office: 713-420-5661

Cell: 832-655-4043

james\_mccord@kindermorgan.com

**KINDER MORGAN**

**Kenny Durio**

Account Manager – Asset Opt.  
Tennessee Gas Pipeline

Office: 713-420-5307

Cell: 281-381-2757

kenneth\_durio@kindermorgan.com

**KINDER MORGAN**

**Scott Minear**

Account Manager – Asset Opt.  
Tennessee Gas Pipeline

Office: 713-420-5177

Cell: 281-369-9305

scott\_minear@kindermorgan.com

# ACCOUNT SERVICES

**KINDER MORGAN**

**Ruth Hearn**  
Director – Account Services  
Tennessee Gas Pipeline

Office: 713-420-3881  
ruth\_hearn@kindermorgan.com

**KINDER MORGAN**

**Chris Brown**  
Analyst  
Tennessee Gas Pipeline

Office: 713-420-6201  
Chris\_brown@kindermorgan.com

**KINDER MORGAN**

**Andres Rodriguez**  
Analyst  
Tennessee Gas Pipeline

Office: 713-420-4776  
Andres\_Castro@kindermorgan.com

**KINDER MORGAN**

**David Chamness**  
Manager  
Tennessee Gas Pipeline

Office: 713-420-7205  
David\_Chamness@kindermorgan.com

**KINDER MORGAN**

**Sherry Michalk**  
Analyst  
Tennessee Gas Pipeline

Office: 713-420-3735  
Sherry\_Michalk@kindermorgan.com

**KINDER MORGAN**

**Greg Pollard**  
Analyst  
Tennessee Gas Pipeline

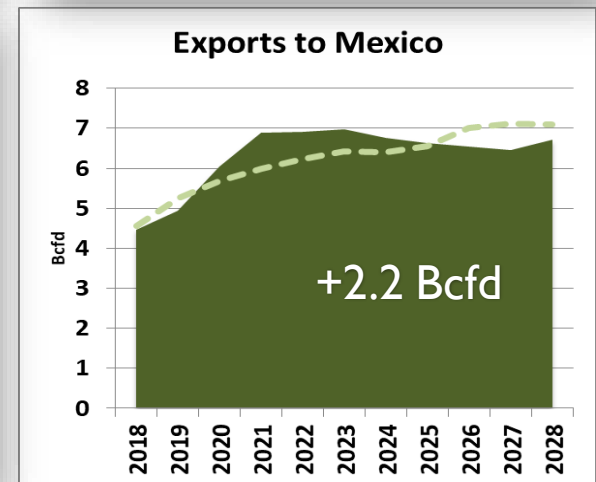
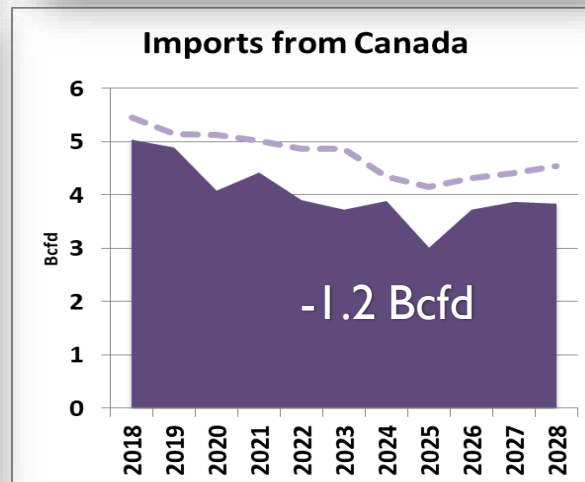
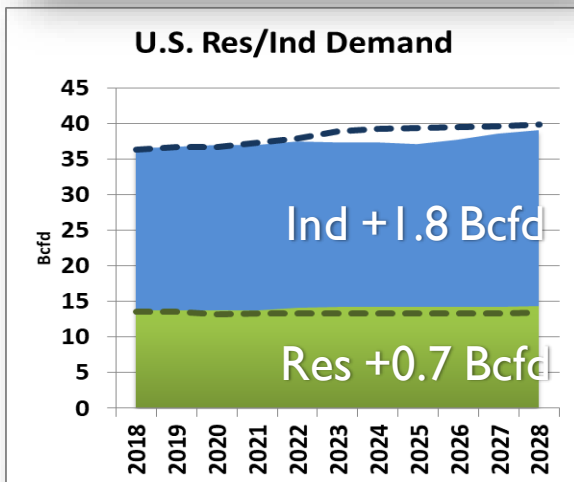
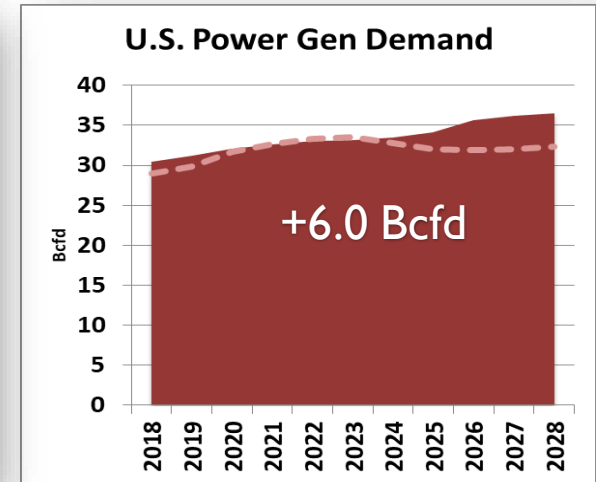
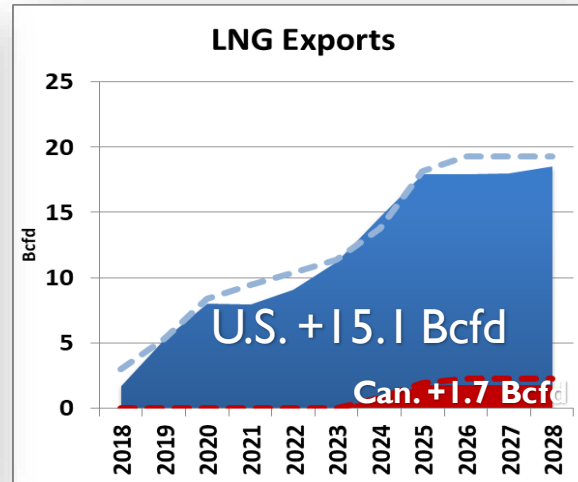
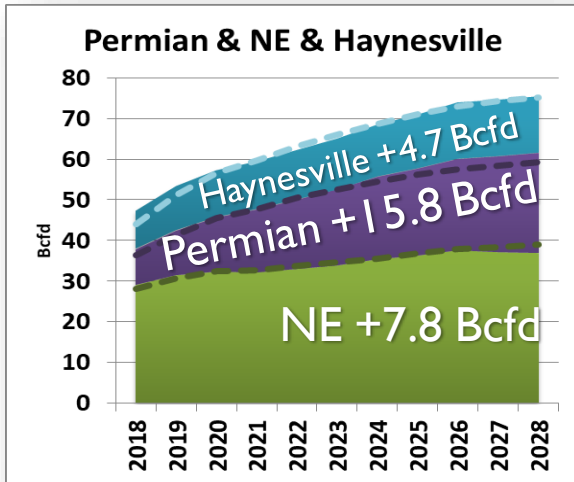
Office: 713-420-7149  
Gregory\_Pollard@kindermorgan.com

**KINDER MORGAN**

**Naga Surapareddy**  
Analyst  
Tennessee Gas Pipeline

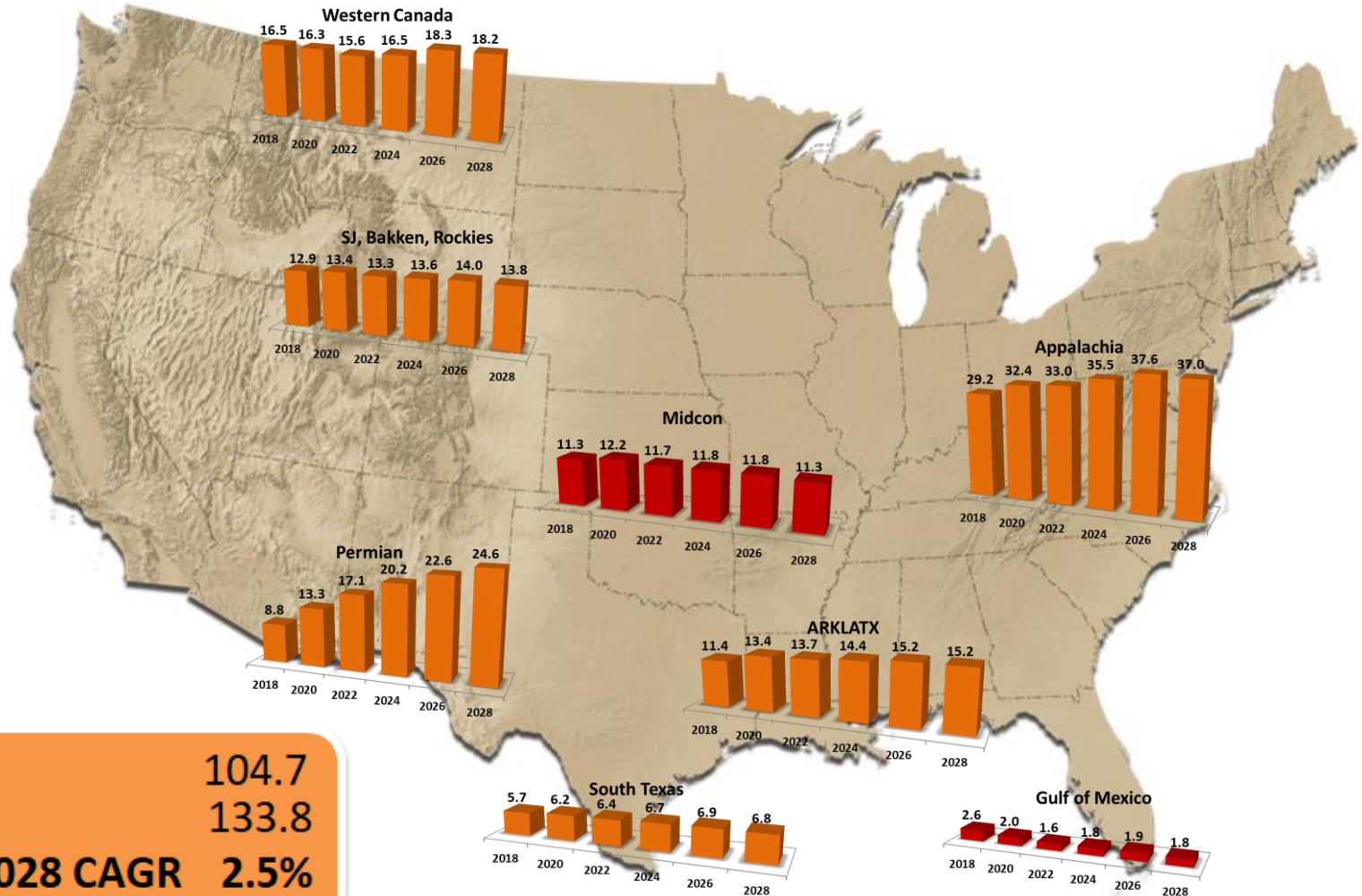
Office: 713-420-7680  
Naga\_Surapareddy@kindermorgan.com

# KINDER MORGAN MACRO OUTLOOK KEY TRENDS



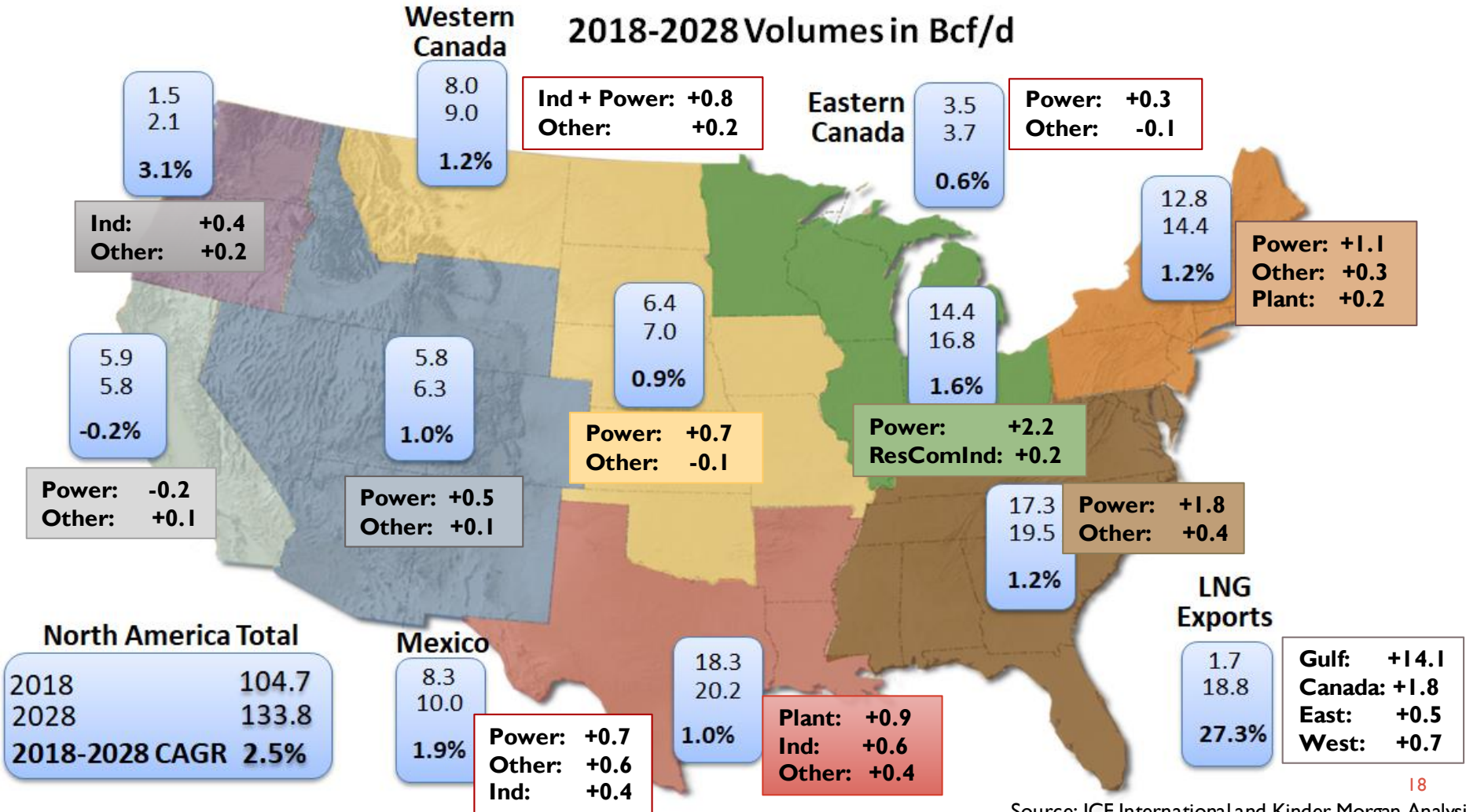


# NORTH AMERICA 10 YR PRODUCTION OUTLOOK

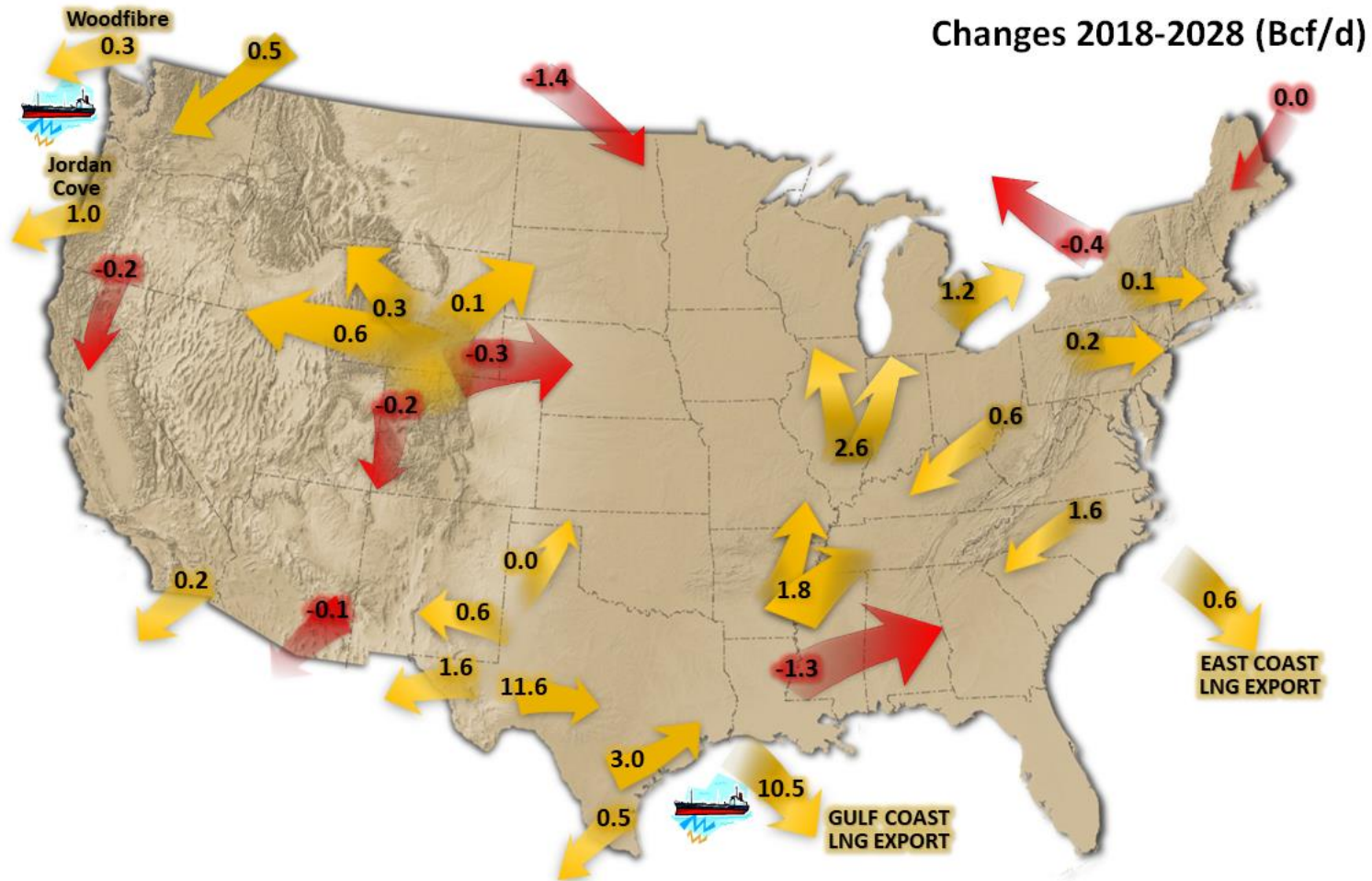


# NORTH AMERICA 10 YR DEMAND OUTLOOK

2018-2028 Volumes in Bcf/d

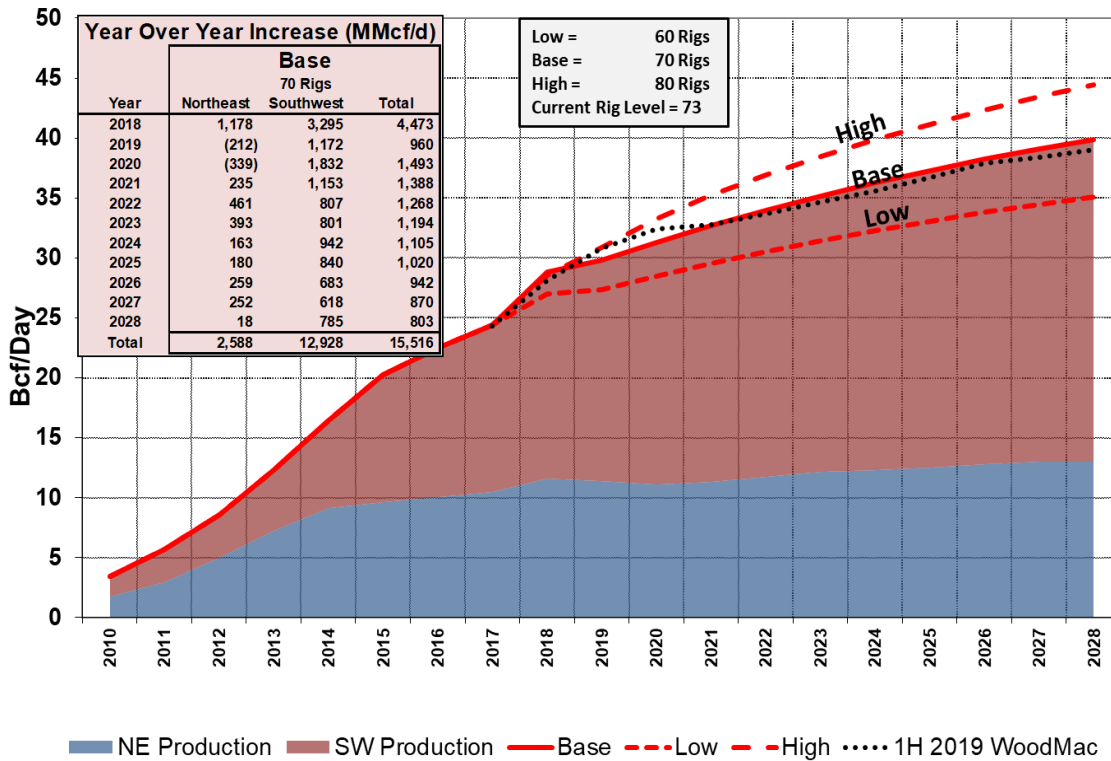


# LOWER 48 FLOW CHANGES INCLUDING IMPORT/EXPORT

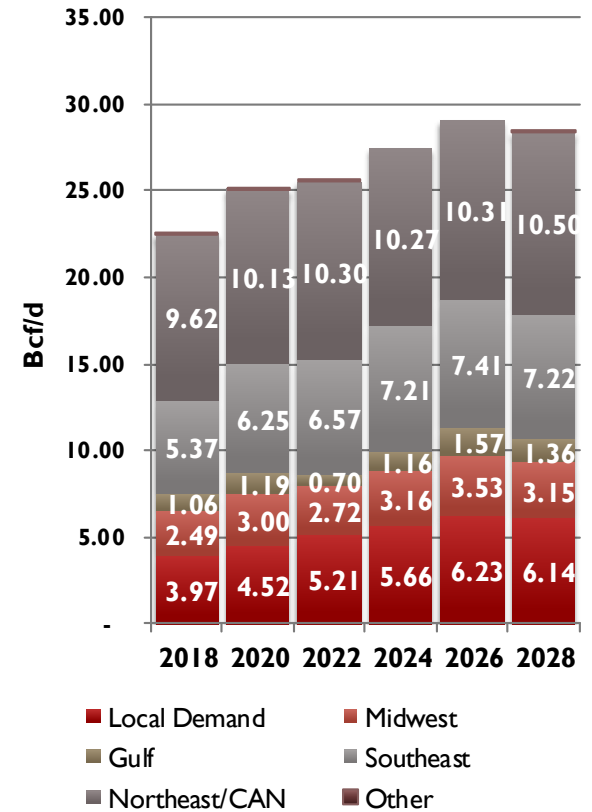


# APPALACHIA GROWTH SLOWING

## Marcellus/Utica Area Wellhead Supply



## Marcellus/Utica Destination by Volume (Dry Gas)



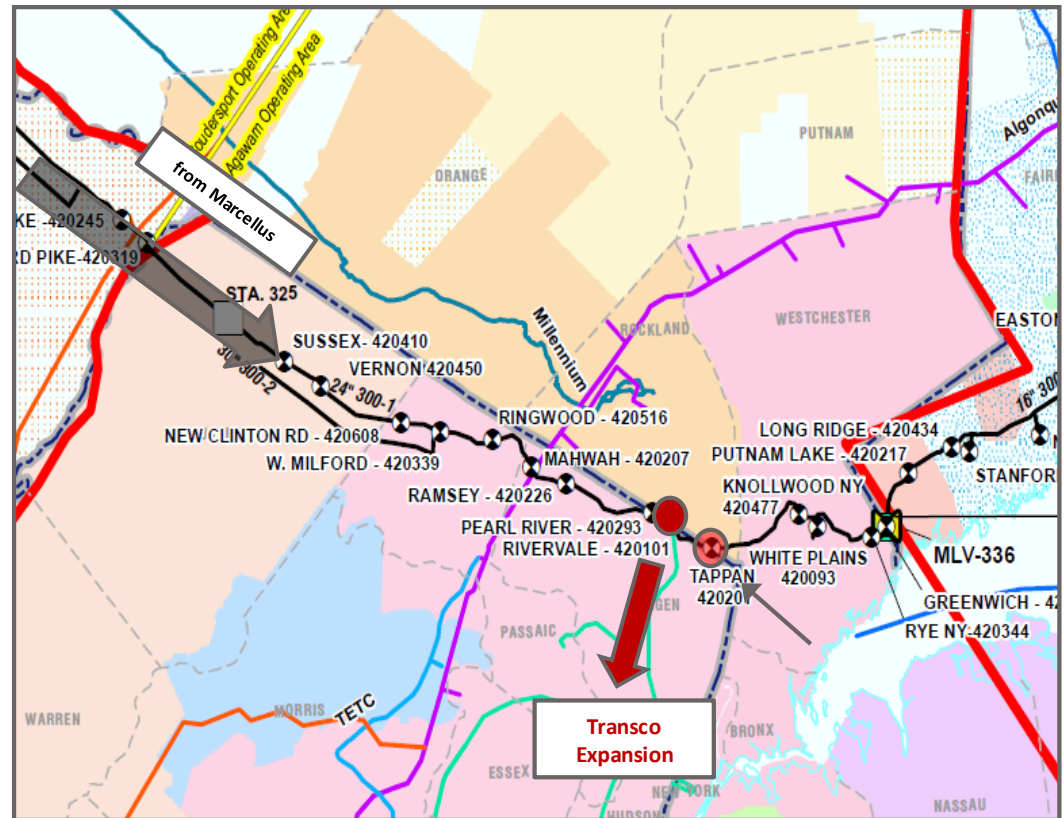
# NJ/NY FUNDAMENTAL BALANCE CHANGING

Winter Supply	MDth/d
Marcellus / Zone 4	1,620

Winter Demand	MDth/d
North to Zone 6	153
Local Demand	343
To Mahwah	889
To Rivervale	235
<b>Total Demand</b>	<b>1,620</b>

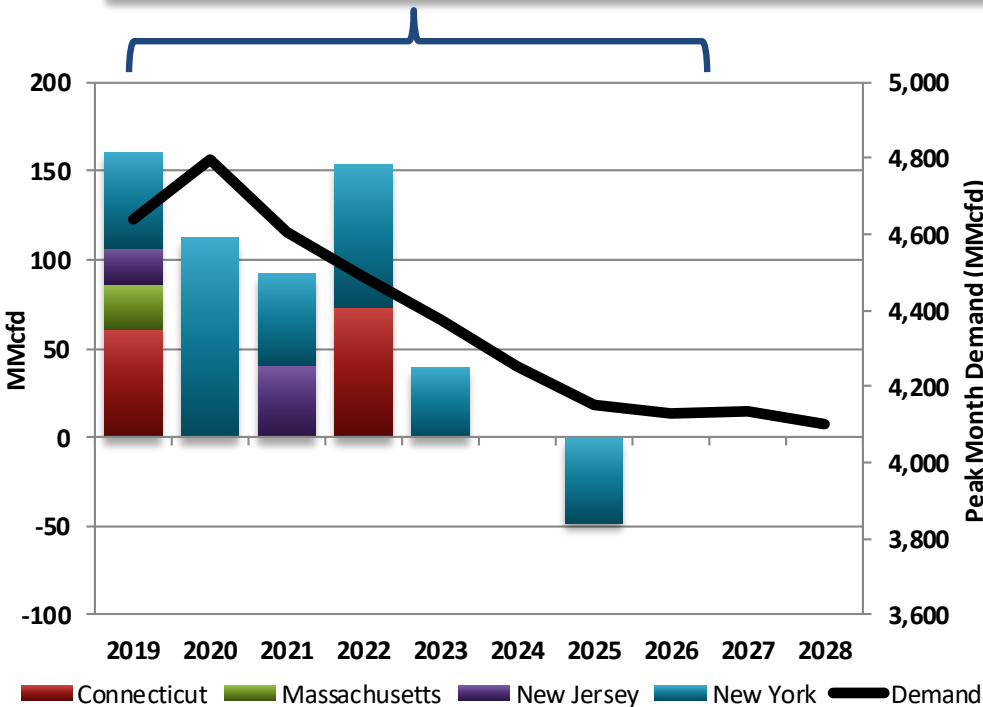
Transco expansion adds 50 – 100 MDth/d of demand in zone 5 without an increase in upstream supply.



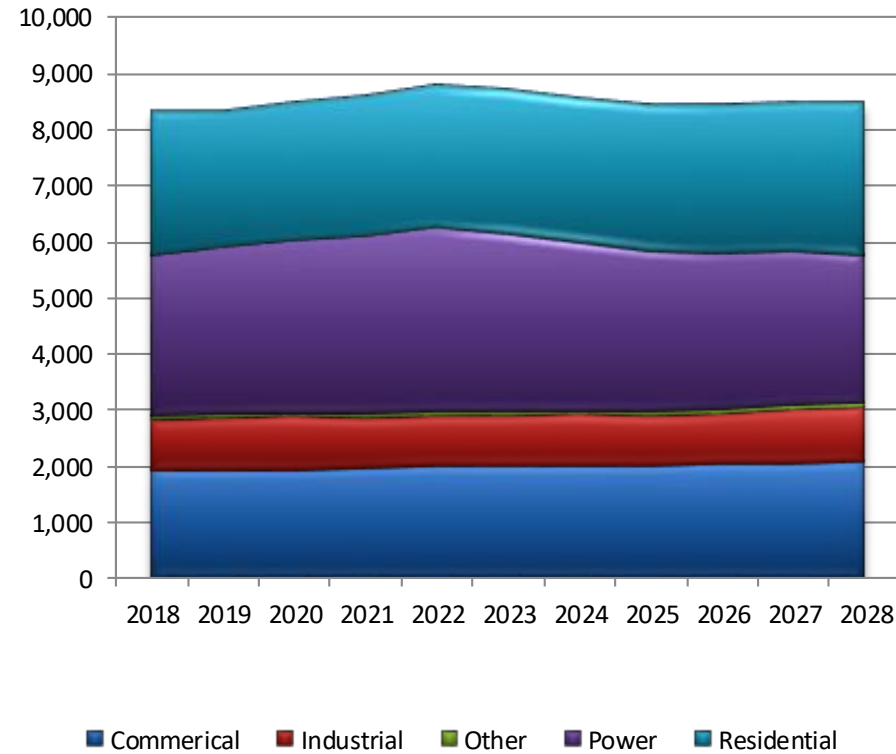
# NEW ENGLAND INCREMENTAL WINTER PEAK POWER GENERATION

510 MMcfd - Potential gas-fired generation load

- Result of retirements, fuel conversions, new builds, and expansions
- Primarily winter peak demand
- ~13% of 2018 average daily gas-fired generation



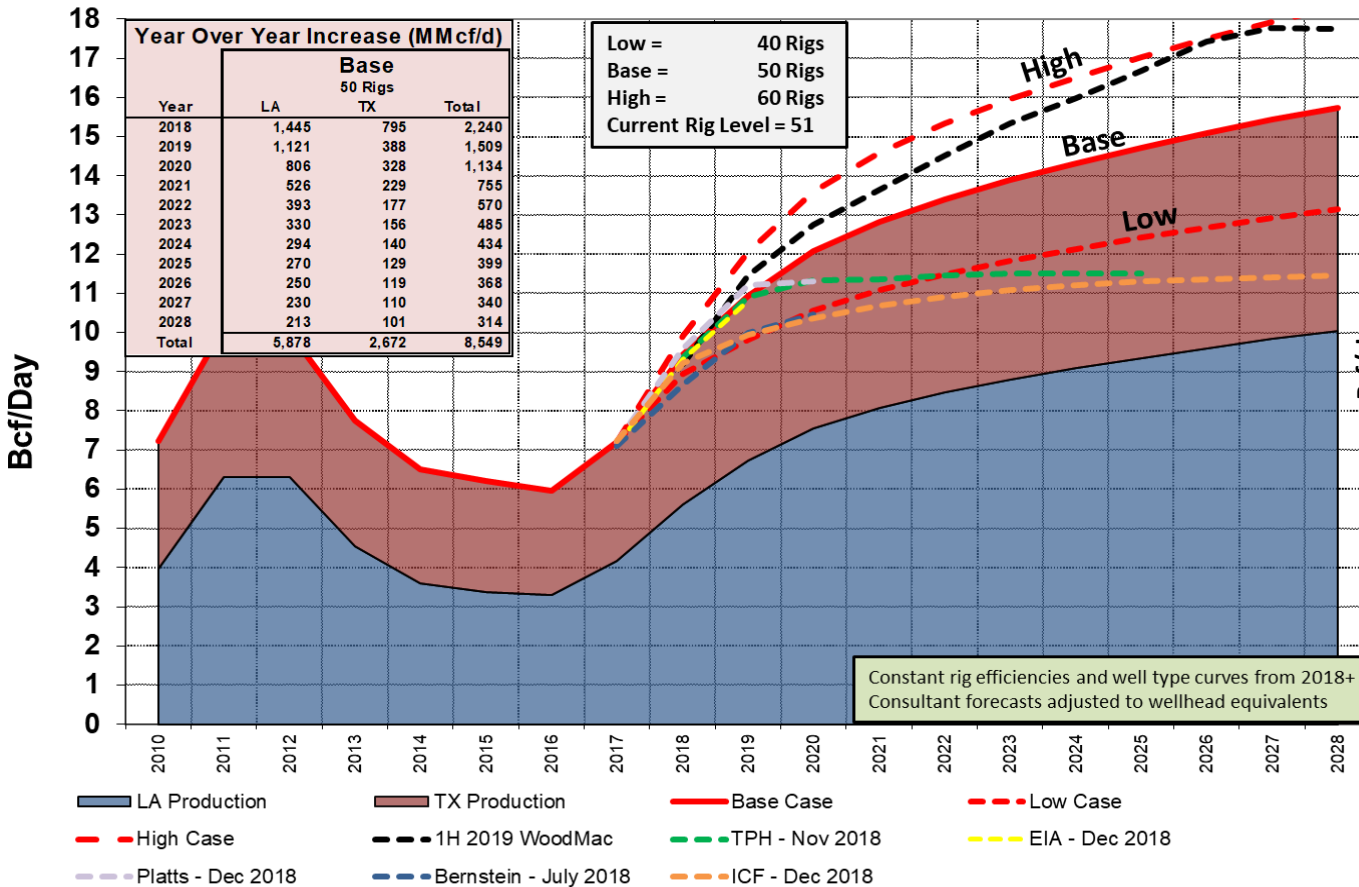
New England Demand by Sector



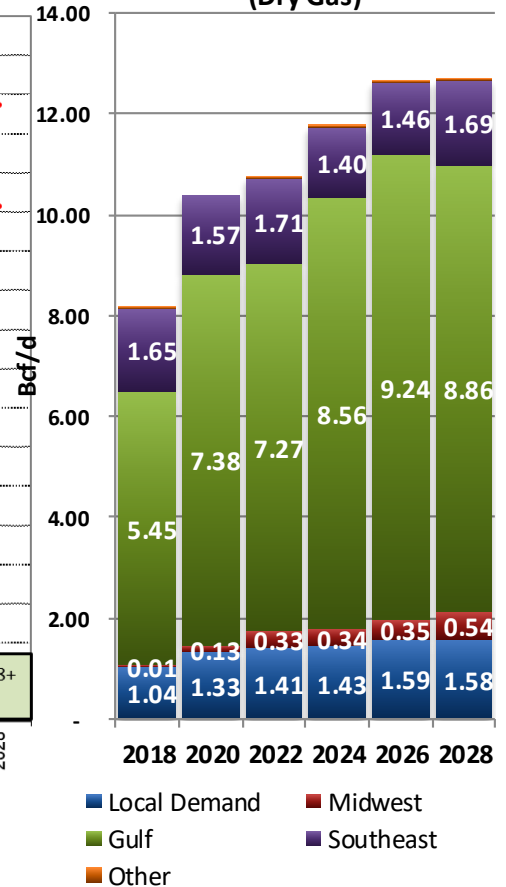
Commercial Industrial Other Power Residential

# HAYNESVILLE

## Haynesville Area - LA & TX Wellhead Supply

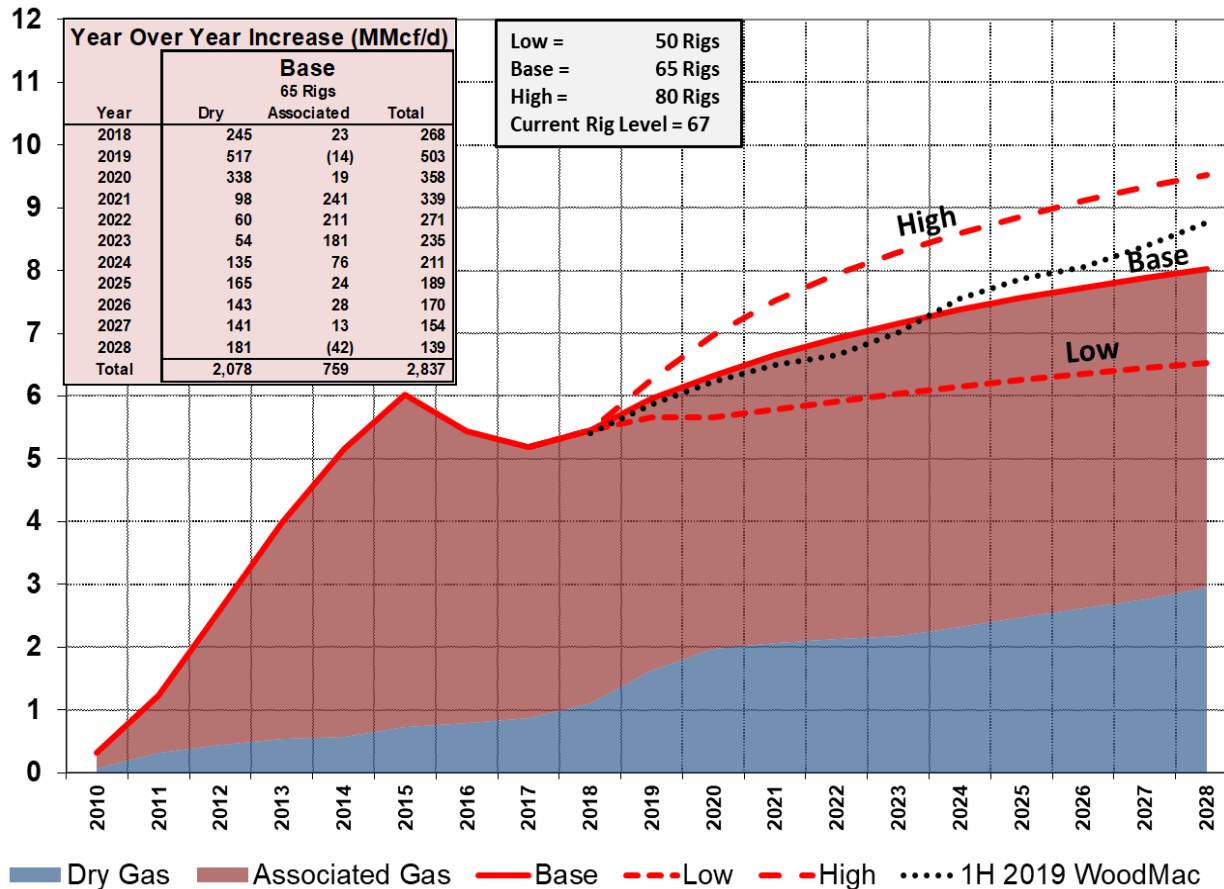


## Haynesville Destination by Volume (Dry Gas)

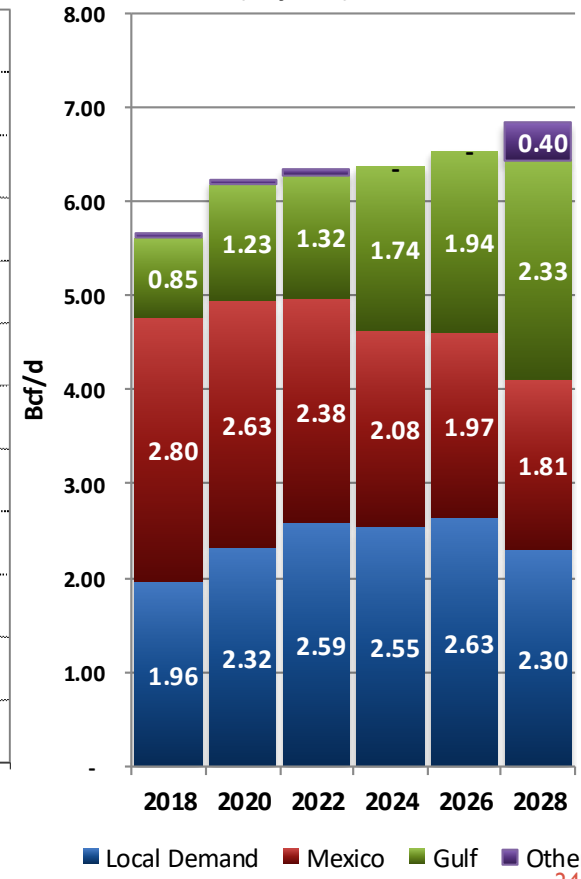


# EAGLE FORD

## Eagle Ford Wellhead Supply



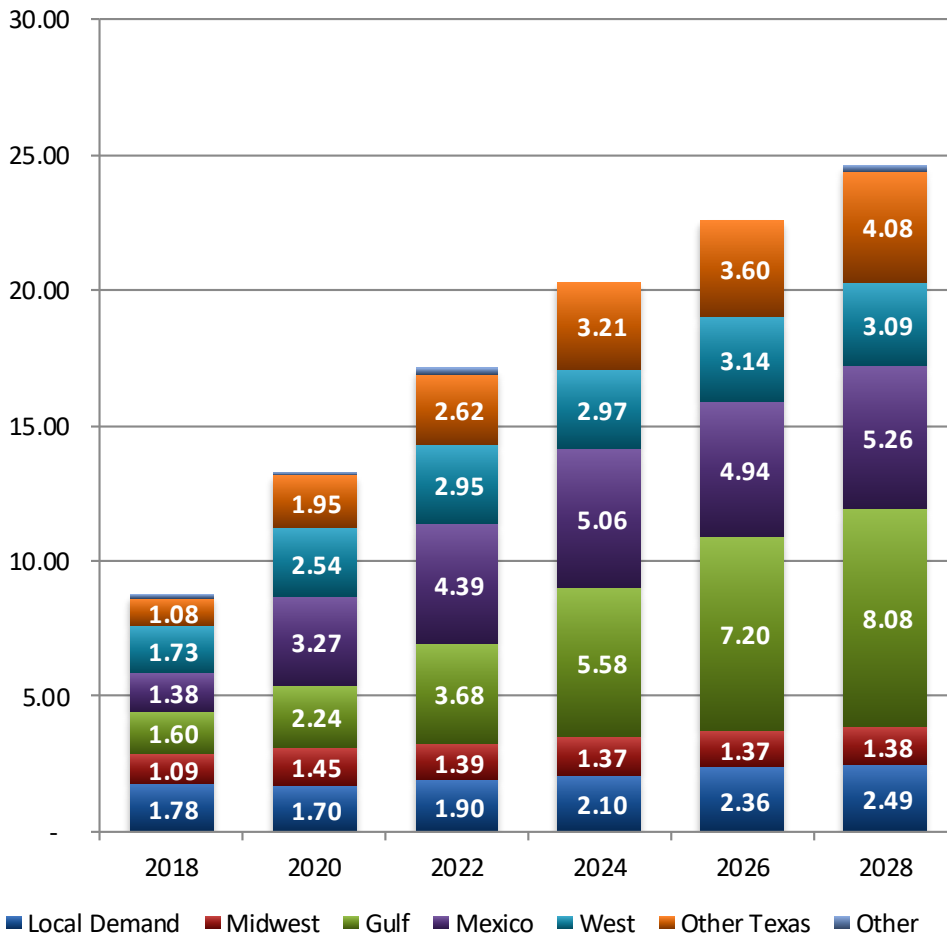
## Eagle Ford Destination by Volume (Dry Gas)



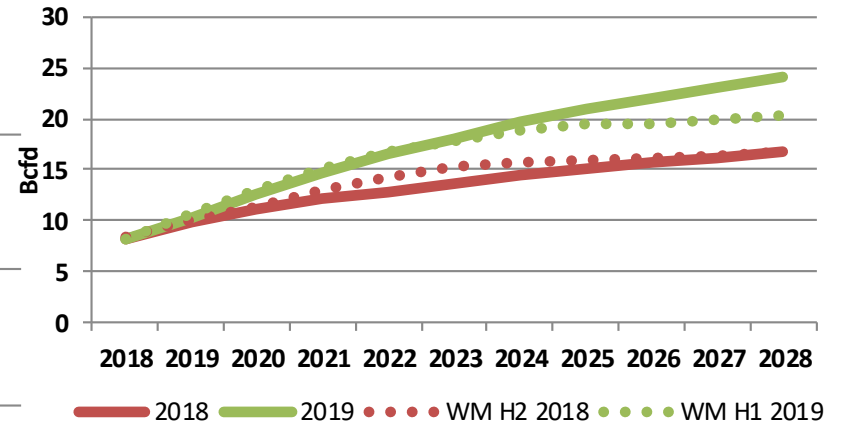


# PERMIAN PIPES RELIEVE PRESSURE, FOR A SHORT TIME

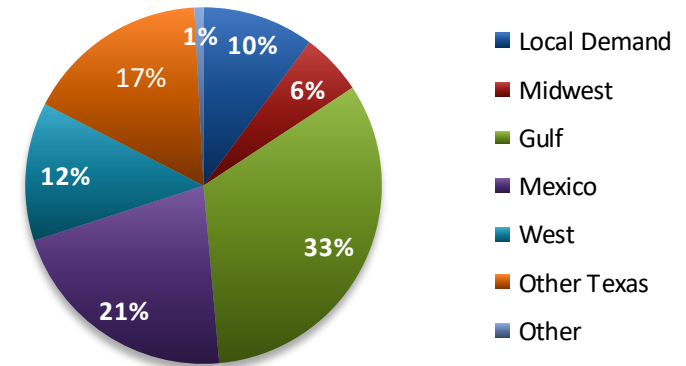
### Permian Destination by Volume



### Permian Supply Forecasts

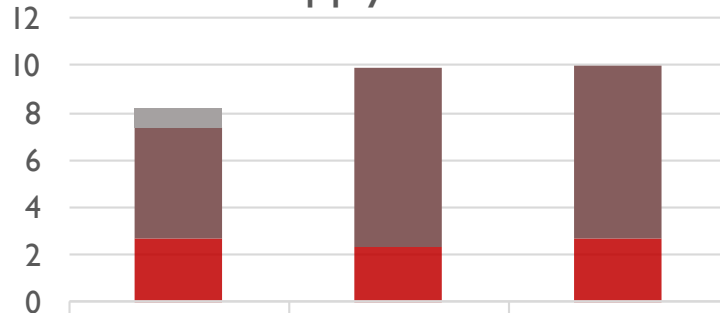


### 2028 Permian Destination Mix



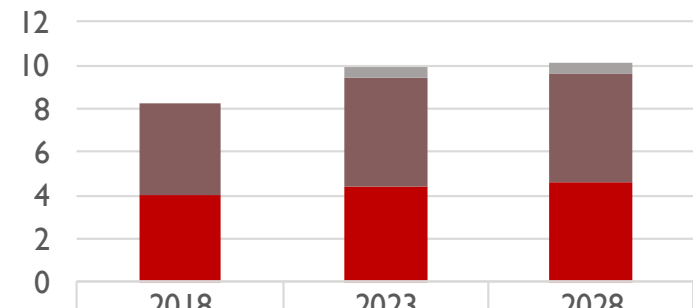
# MEXICO OUTLOOK

## KM Mexico Supply Outlook



	2018	2023	2028
LNG Imports	0.8	0	0
Gas Imports	4.7	7.6	7.3
Production	2.7	2.3	2.7
Total	8.2	9.9	10

## KM Mexico Demand Outlook



	2018	2023	2028
Other	0	0.5	0.5
Power	4.2	5	5
Industrial	3.9	4.3	4.5
LDC	0.1	0.1	0.1
Total	8.2	9.9	10

## Infrastructure Notes

- CFE has withheld approval of TC Energy's Sur de Texas – Tuxpan pipeline, now projected for 2021 start
- Tuxpan-Tula and Tula-Villa de Reyes delayed due to tribal right-of-way disputes
- Mexico has no storage; SENER has tasked CENAGAS with developing 45bcf of storage by 2026 to provide emergency balancing. No progress has been made since September 2018

# SUMMARY

- Permian gas coming eastward to Texas, Mexico, and Gulf Coast markets
- Gas may be constrained in South Texas due to lack of takeaway to Mexico
- Appalachia supply still growing, at a slower pace
- Demand driven by LNG exports and power generation
- Despite short term uncertainty in Mexico, demand needs far exceed domestic supply and Mexico will import gas from the US, particularly in South Texas
- New Jersey market will see increased competition for gas

# OPERATIONS UPDATE

TOM DENDER

VICE PRESIDENT – PIPELINE MANAGEMENT

NASHVILLE, TENNESSEE

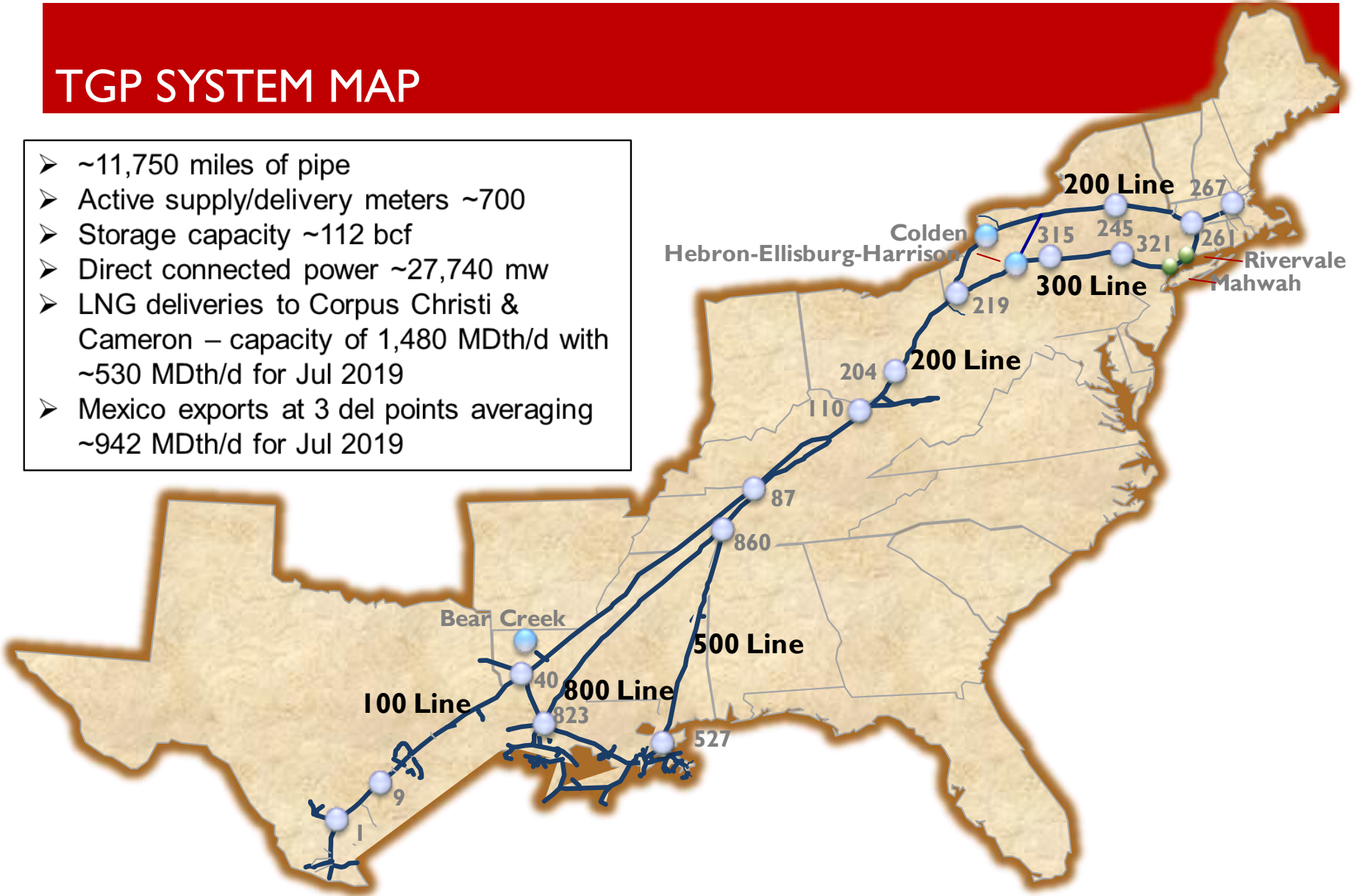
AUGUST 22, 2019

# TGP PIPELINE MANAGEMENT

- **Major growth drivers**
- **System wide flows and throughput**
- **Winter look back**
- **Summer update**
- **Operations expectations**

# TGP SYSTEM MAP

- ~11,750 miles of pipe
- Active supply/delivery meters ~700
- Storage capacity ~112 bcf
- Direct connected power ~27,740 mw
- LNG deliveries to Corpus Christi & Cameron – capacity of 1,480 MDth/d with ~530 MDth/d for Jul 2019
- Mexico exports at 3 del points averaging ~942 MDth/d for Jul 2019



# KEY GROWTH DRIVERS

## ■ SUPPLY

- Substantial associated gas growth in the Permian, proximity to largest growth markets along Gulf Coast
- Continued Marcellus/Utica production growth

## ■ DEMAND

- LNG: Commercial production for Cameron and Cheniere Corpus Christi
- Mexico: Heavy reliance on KM assets for import
- Power: Continued gasification of electric grid realized on TGP

# LNG DEMAND

Facility - Train	Status	Capacity (MDth/d)	In Service	Total Current Delivery*	KM Current Delivery*	KM % of Total	TGP Current Delivery*	TGP % of Total
Sabine Pass (1-5)	5 In Service	4,000	4,000	3,683	1,421	39%	0	0%
Cove Point	In Service	815	815	681	0	0%	0	0%
Corpus Christi 1-3	1 In Service**	2,400	800	1,400	984	70%	305	22%
Cameron 1-3	1 In Service	2,040	680	635	406	64%	406	64%
Elba Island 1-10	3Q19-4Q19	350	35	0	0	0%	0	0%
Freeport 1-3	3Q19-2Q20	1,980	0	80	6	8%	0	0%
<b>Total</b>		<b>11,585</b>	<b>6,330</b>	<b>6,479</b>	<b>2,817</b>	<b>43%</b>	<b>711</b>	<b>11%</b>

\*Current Delivery data is 07/20/19 – KM's peak LNG delivery

\*\*Corpus Christi: commissioning unit 2, which has a capacity of 800



# LNG DELIVERY GROWTH

## YOY Ave Daily Deliveries (through 7/31/19)

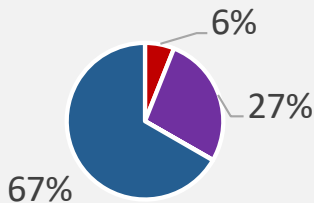
2018 by Facility



100%

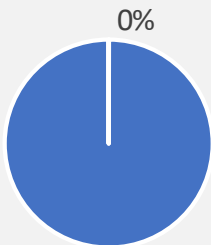
■ Sabine Pass LNG Terminal (Cheniere)

2019 by Facility



■ Cameron LNG Terminal (Sempra)  
 ■ Corpus Christi LNG Terminal (Cheniere)  
 ■ Freeport LNG Terminal  
 ■ Sabine Pass LNG Terminal (Cheniere)

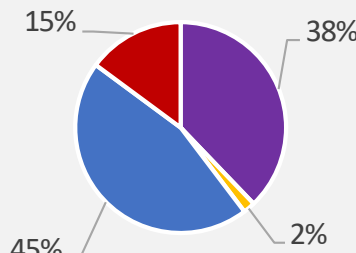
2018 by Pipeline



100%

■ NGPL

2019 by Pipeline



■ KMLP ■ MID ■ NGPL ■ TGP

Facility	Current Year	Prior Year	YOY Var	YOY Var %
Sabine Pass	1,229	536	655	129%
Corpus Christi	502	1	501	-
Cameron	111	0	111	-
Freeport	1	0	1	-
<b>LNG TOTAL</b>	<b>1,843</b>	<b>537</b>	<b>1,306</b>	<b>243%</b>

Pipeline	Current Year	Prior Year	YOY Var	YOY Var %
Midstream	71	0	71	-
TGP	310	0	310	-
KMLP	657	0	657	-
NGPL	805	537	268	50%
<b>LNG TOTAL</b>	<b>1,843</b>	<b>537</b>	<b>1,306</b>	<b>243%</b>

- ❖ Currently delivering ~2.1–2.3 Bcfd
- ❖ Peak delivery on 7/20/19 @ 2.82 Bcf
- ❖ Recently started delivering small volumes to Freeport from Midstream (Tejas)
- ❖ Feb fog and SPLIQ April maintenance impacted deliveries for several days

# ELBA ISLAND



# ELBA ISLAND



H1502610 - Elba Liquefaction Project

Image # 82  
Date : 02.21.2019  
Photo 888.542.0231

# STATION 836A – DELHI, LA

*Cameron LNG Project*



## EXPORTS TO MEXICO

	TGP	TOTAL KM	3rd Party Pipes	Total
YTD '18	872	2,992	1,755	4,747
YTD '19	907	3,042	2,221	5,263
Change	35	50	466	516
% Change	4%	2%	27%	11%
<b>57.8% KM Market Share</b>				

**YTD represents data through May**

- Total Mexico Exports up 11% YOY
- KM Exports up 2% YOY; represents 58% of total exports to Mexico
- TGP Exports up 4% YOY; represents 17% of total exports to Mexico

# STATION 106 – WINCHESTER, KY

## Out with the Old.....In with the New



# STATION 119A - ROCKY FORK, WV

*Broad Run Expansion Project*



# STATION 563– JOELTON, TN

*Broad Run Expansion Project*

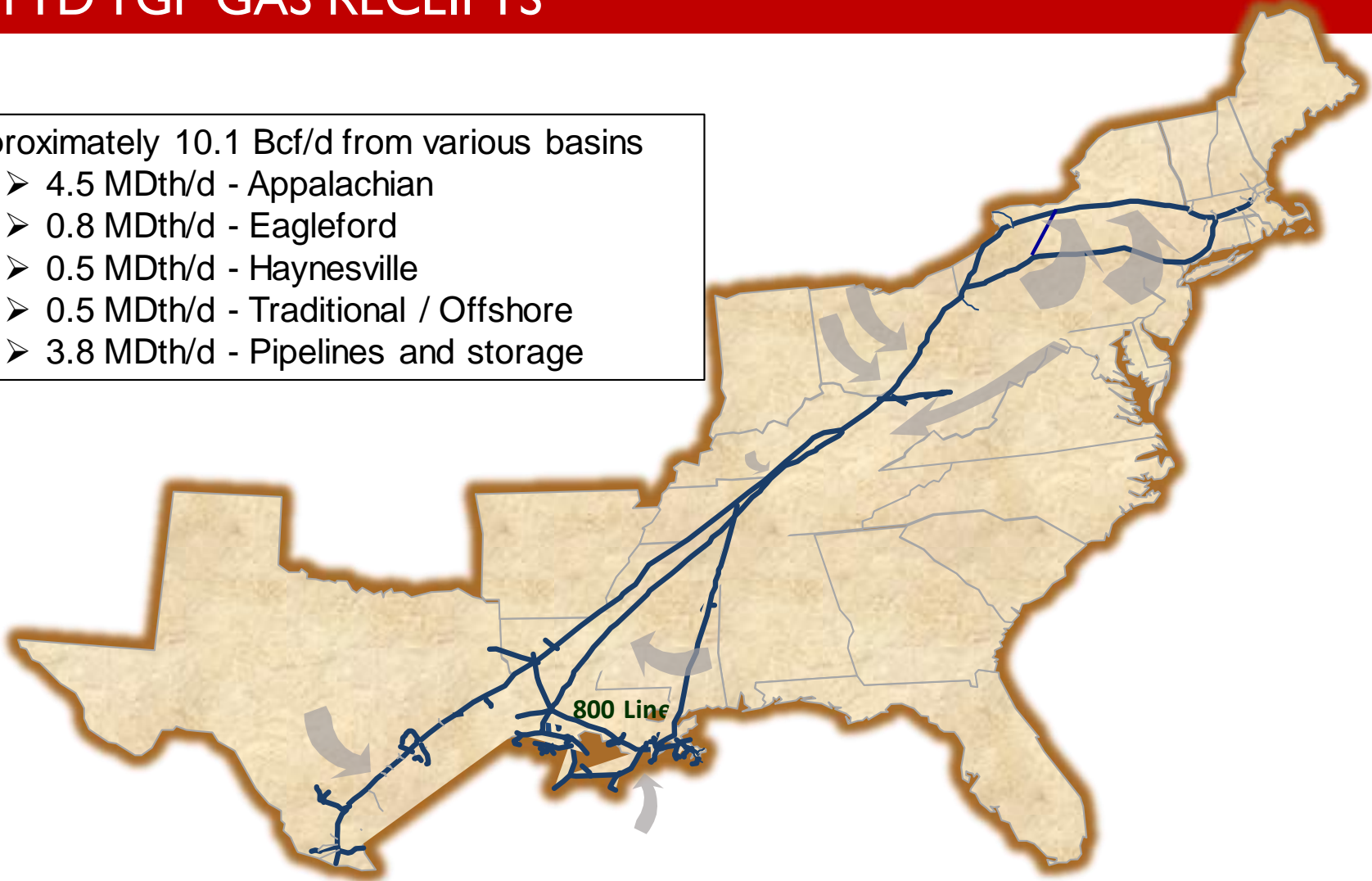




# YTD TGP GAS RECEIPTS

Approximately 10.1 Bcf/d from various basins

- 4.5 MDth/d - Appalachian
- 0.8 MDth/d - Eagleford
- 0.5 MDth/d - Haynesville
- 0.5 MDth/d - Traditional / Offshore
- 3.8 MDth/d - Pipelines and storage



# SOUTHWEST LOUISIANA EXPANSION

*Meter Station Connectivity*

**MEPTGP Meter Station**



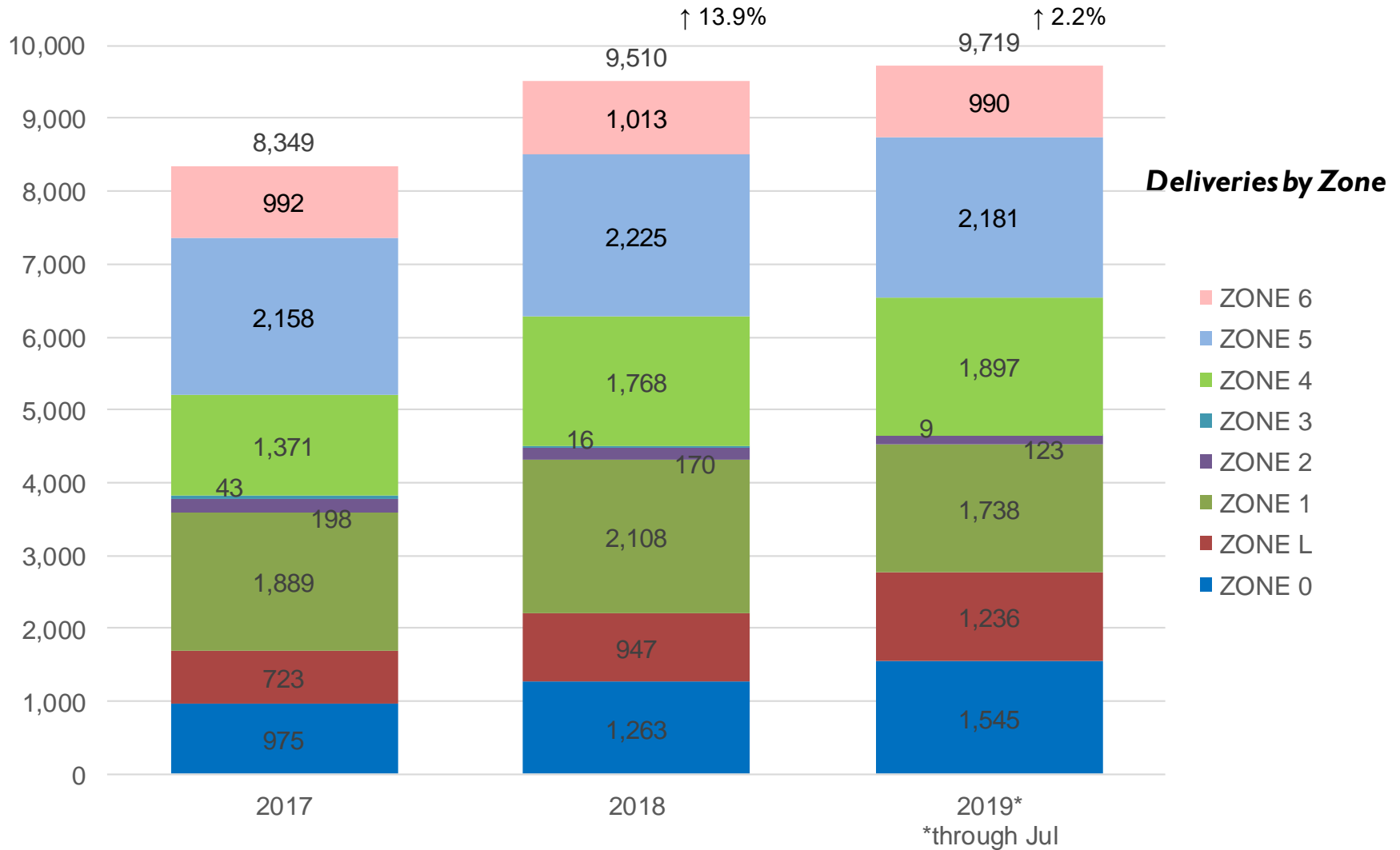
**Gulf Crossing TGP Meter Station**



**Enable TGP Meter Station**



# TGP SYSTEM WIDE THROUGHPUT



# WINTER 2018 - 2019

## ■ Overview

- Strong Winter Demand
  - 8 out of the Top-10 All-time System Peak Delivery Days occurred this past winter
- System-wide throughput increased 6% compared to previous winter
- Storage Inventories were slightly lower than the prior year's levels at the end of winter
- System Wide Peak Day was ~11.72 Bcf/d on January 30, 2019
- Power Plant Peak Day was ~2.16 Bcf/d on January 30, 2019
- Exports to Mexico increased 7% compared to previous winter

## ■ Supply

- Supply in Zone 4 down from previous Winters (Other projects in-service; Nexus and Atlantic Sunrise)
- More supply coming from Dracut/Distrigas

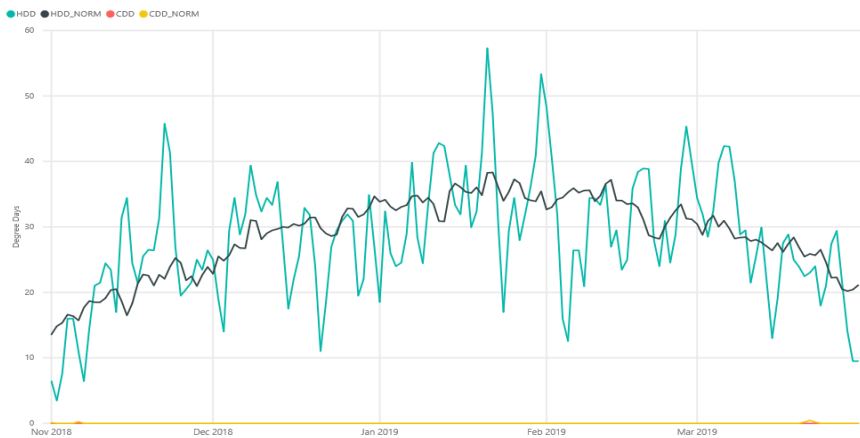
## ■ Operational Challenges

# WINTER 2018 - 2019 WEATHER (NORMAL...OR NOT)

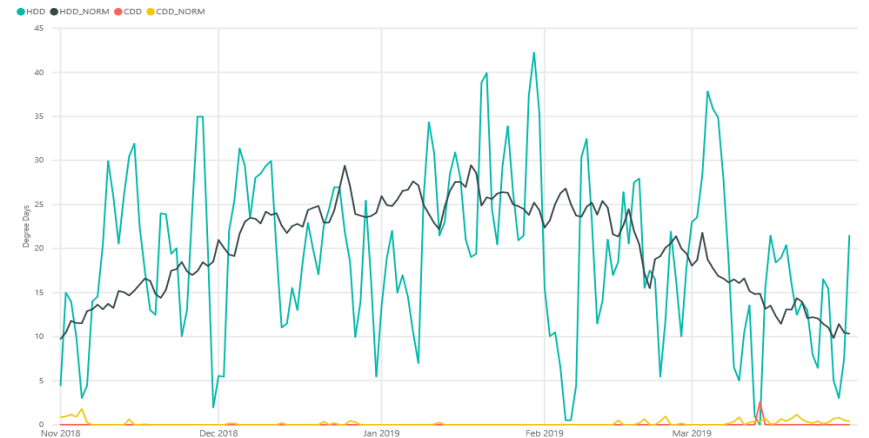
## TGP System HDDs vs Norm

PL	HDD	HDD_NORM	HDD_VAR	HDD_Var%
<b>TGP</b>	<b>46,606</b>	<b>46,118</b>	<b>488</b>	<b>1.1%</b>
KBNA - NASHVILLE	2,900	3,040	-140	-4.6%
KBOS - BOSTON	4,259	4,344	-85	-2.0%
KBUF - BUFFALO	5,245	5,023	222	4.4%
KCMH - COLUMBUS	4,402	4,303	99	2.3%
KCON - CONCORD	5,590	5,435	155	2.9%
KCRW - CHARLESTON	3,620	3,667	-47	-1.3%
KELM - CORNING	5,088	5,166	-77	-1.5%
KHPN - WHITE PLAINS	4,471	4,372	99	2.3%
KIAH - HOUSTON	1,257	1,274	-16	-1.3%
KJFK - NEW YORK	4,007	3,901	106	2.7%
KMFE - MC ALLEN	500	527	-28	-5.3%
KORH - WORCESTER	5,267	5,067	201	4.0%
<b>Total</b>	<b>46,606</b>	<b>46,118</b>	<b>488</b>	<b>1.1%</b>

### Boston vs Norm



### Nashville vs Norm



## WINTER 2018 -2019 SYSTEM WIDE FLOWS

	<u>2016-2017</u>	<u>2017-2018</u>	<u>2018-2019</u>	<u>Change</u>
LDC	1,724	1,880	2,120	+13%
Power	1,095	1,324	1,105	-17%
Interconnects	5,263	5,471	5,840	+7%
Mexico	844	857	918	+7%
LNG	-	-	108	-
Industrial	59	63	56	-7%
<b>TOTAL</b>	<b>8,985</b>	<b>9,595</b>	<b>10,147</b>	<b>+6%</b>

• All volumes are MDth/d

# SUMMER SYSTEM WIDE 2019

## ■ Overview

- System-wide throughput flat compared to previous summer
- Challenging Maintenance Season

## ■ Demand

- Strong demand across system
- Decreases in Power (-15.5%) and Interconnect (-6.4%) demand
- Increases in Mexico (4.9%) and LDC (14.6%) demand
- New LNG demand ~430 MDth/d

# SUMMER WEATHER

- April – Jul has been 2.3% warmer than normal system wide although the Northeast has been much warmer
- June was 9.7% cooler than normal
- July was 13.3% warmer than normal

PL	CDD	CDD_NORM	CDD_VAR	CDD_Var%
<b>TGP</b>	<b>9,968</b>	<b>9,746</b>	<b>221</b>	<b>2.3%</b>
KBNA - NASHVILLE	1,189	1,134	55	4.9%
KBOS - BOSTON	569	494	75	15.2%
KBUF - BUFFALO	355	388	-33	-8.5%
KCMH - COLUMBUS	723	721	2	0.3%
KCON - CONCORD	395	317	78	24.8%
KCRW - CHARLESTON	789	745	44	6.0%
KELM - CORNING	315	325	-10	-3.1%
KHPN - WHITE PLAINS	522	503	19	3.8%
KIAH - HOUSTON	1,745	1,761	-15	-0.9%
KJFK - NEW YORK	638	639	-1	-0.2%
KMFE - MC ALLEN	2,385	2,379	6	0.2%
KORH - WORCESTER	341	341	1	0.2%
<b>Total</b>	<b>9,968</b>	<b>9,746</b>	<b>221</b>	<b>2.3%</b>



## SUMMER SYSTEM WIDE FLOWS

	<u>2017</u>	<u>2018</u>	<u>2019*</u>	<u>Change</u>
LDC	872	1,036	1,187	+15%
Power	1,337	1,547	1,308	-15%
Pipeline Interconnects	4,672	5,704	5,337	-6%
Mexico	789	880	923	+5%
LNG	-	-	426	-
Industrial	58	54	45	-17%
<b>TOTAL</b>	<b>7,728</b>	<b>9,221</b>	<b>9,226</b>	<b>0%</b>

Volumes are MDth/d

\*Through July

## OPERATIONAL EXPECTATIONS

### ■ Continued high utilization system wide

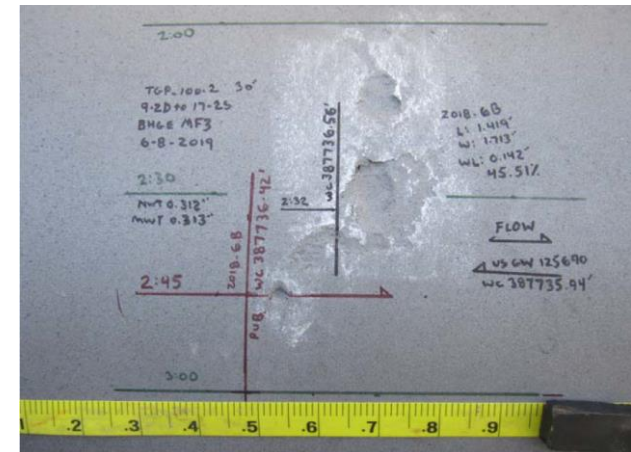
- Scheduling maintenance and outages is becoming increasingly challenging
- Significant coordination effort to minimize customer impact
- Multi-year analysis when scheduling known major outages

### ■ Continued maintenance and integrity efforts ensure



### Reliability

- Significant integrity management emphasis
  - 2019:68 pig runs – 3,561 miles
- Reliability Programs supported by internal MPS teams
- Routine PHMSA required inspections and maintenance



***Kinder Morgan provides energy transportation and storage services in a safe, efficient and environmentally responsible manner for the benefit of people, communities and businesses.***

# TENNESSEE GAS PIPELINE OPERATIONS CONTACT LIST

<u>Gas Control</u>	<u>Transportation and Storage</u>	<u>Commercial/Marketing</u>	<u>Field Operations</u>
24 hour and emergency <b>800-231-2800</b>	24 hour Scheduling Hotline 713-420-4999	Jason Connelly - Director 713-420-2446 Cell – 713-444-3940	Tom Burgett– Director (Northeast) 860-763-6027 Cell – 713-829-2919
Ganesh Venkateshan – Mgr 713-420-2099 Cell –832-980-8296	Cathy Soape – Manager 713-420-3814 Cell – 713-922-5083	Ernesto Ochoa – VP 713-420-1734 Cell – 281-414-3823	John Pannel – Director (Central) 615-221-1511 Cell – 615-714-1930
Layne Sanders – Dir 713-420-5024 Cell – 832-563-5024	Adam Harris – Manager 713-420-2672 Cell – 281-389-0024	Kimberly Watson – President 713-369-9233 Cell – 713-204-5423	Chris Bradberry – Director (Southeast) 205-325-7277 Cell – 205-567 - 0777
Danny Ivy - VP 713-369-9311 Cell – 713-829-2761	Katie Cornutt – Manager 713-420-5648 407-902-8027		Cy Harper – Director (South) 281-689-4534 Cell – 205-613-6701
Tom Dender – VP 713-420-3833 Cell – 205-572-1549	Gina Mabry – Director 713-420-3685 Cell – 281-744-8666		Ron Bessette– VP 713-420-6012 Cell – 413-313-4380
	Gene Nowak – VP 713-369-9329 Cell – 713-252-9759		Ken Grubb –COO GAS Pipelines 713-369-8763 Cell – 713-702-1210

# COMMERCIAL UPDATE

ALISON STRINGER  
DIRECTOR - BUSINESS DEVELOPMENT

NASHVILLE, TENNESSEE

AUGUST 22, 2019

# BUSINESS DEVELOPMENT MACRO DRIVERS

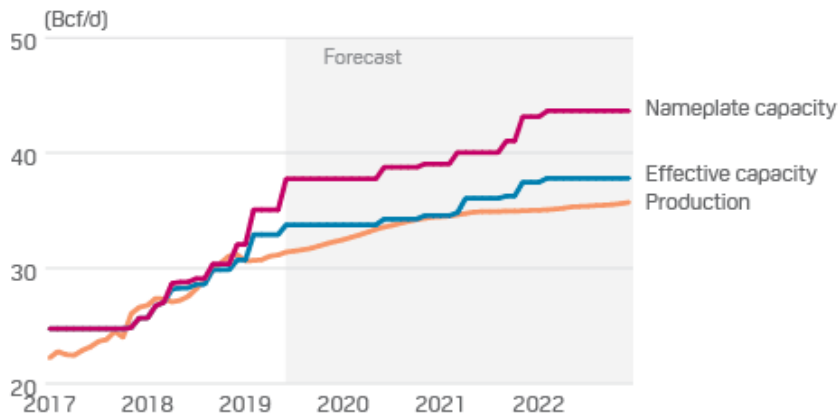
- ❑ Appalachia growth slowing, competition from Permian and Haynesville
  - TGP supply connectivity remains strong and attracts power gen
- ❑ Local supply will serve local demand in pipe constrained areas like New England
  - TGP meeting LDC customer growth needs with discrete, executable projects
- ❑ LNG exports represent largest share of demand growth
  - TGP supply connectivity key to recent success and development opportunities
- ❑ Despite short-term uncertainty in Mexico, demand needs far exceed domestic supply
  - Mexico will continue to import gas from US, particularly in South Texas
- ❑ Permian supply growth will drive next wave of development opportunities

# APPALACHIA – INFRASTRUCTURE UNCERTAIN

- Slowdown in new project applications
- Uncertainty around remaining projects in queue
- Greenfield pipeline additions unlikely
  - Narrow basis
  - Attractive in-basin pricing
- 2023-24 production approaching “Effective Capacity” out of basin

Project Name	Capacity (MMcf/d)	In-Service
Constitution *	650	??
Northern Access *	500	??
PennEast *	1,000	??
Atlantic Bridge	133	Mid 2020
Transco NE Supply	400	Late 2020
Mountain Valley	2,000	Early 2021
Atlantic Coast Pipeline	1,500	Mid 2022

**NORTHEAST NAMEPLATE AND EFFECTIVE CAPACITY AMOUNTS**



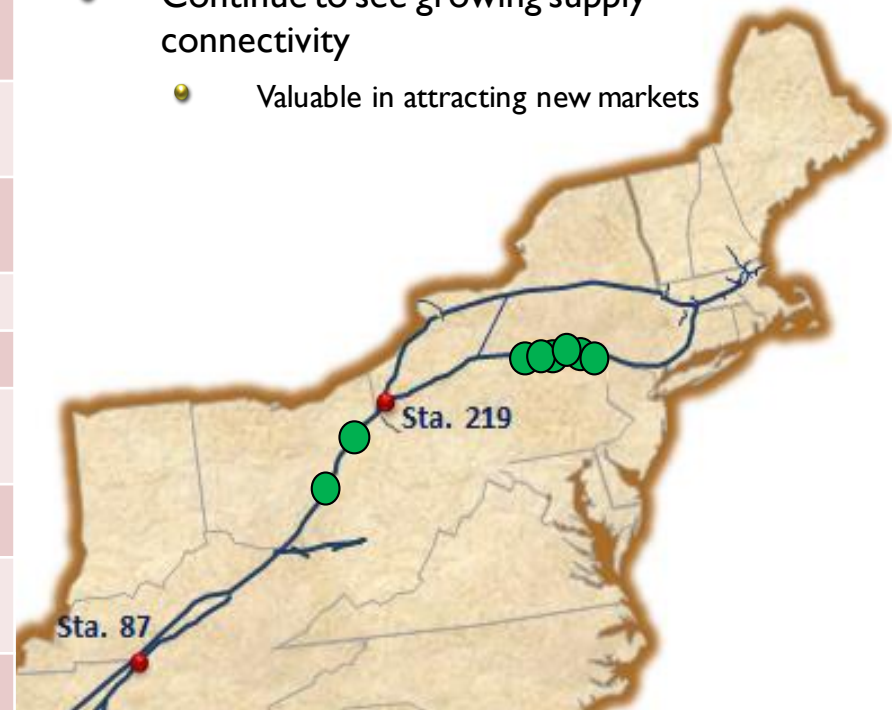
Source: S&P Global Platts Analytics

# APPALACHIA

## GROWING TGP CONNECTIVITY

Meter Name	Location	Capacity (MMcf/d)	In-Service
<b>TOTAL 2017</b>		<b>600</b>	
Williams – MacNew	Susquehanna, PA	600	Q1 2018
ETC – Dunkleburger	Tioga, PA	275	Q1 2018
PVR- Regency-Bradford*	Bradford, PA	50	Q2 2018
Rattlesnake Hill	Susquehanna, PA	290	Q4 2018
<b>TOTAL 2018</b>		<b>1,215</b>	
Williams Stagecoach	Bradford, PA	550	Q1 2019
DTI -Sweden Valley	Tuscarawas, OH	150	TBD
Hilcorp – Martin	Lawrence, PA	180	Q1 2019
NFG Wellsboro Inter #2*	Tioga, PA	205	Q2 2019
<b>TOTAL 2019</b>		<b>1,085</b>	







- Inflection point with Appalachia Projects
  - Development environment challenging
  - Slow down in new projects and uncertainty related to existing projects
- Continue to see growing supply connectivity
  - Valuable in attracting new markets

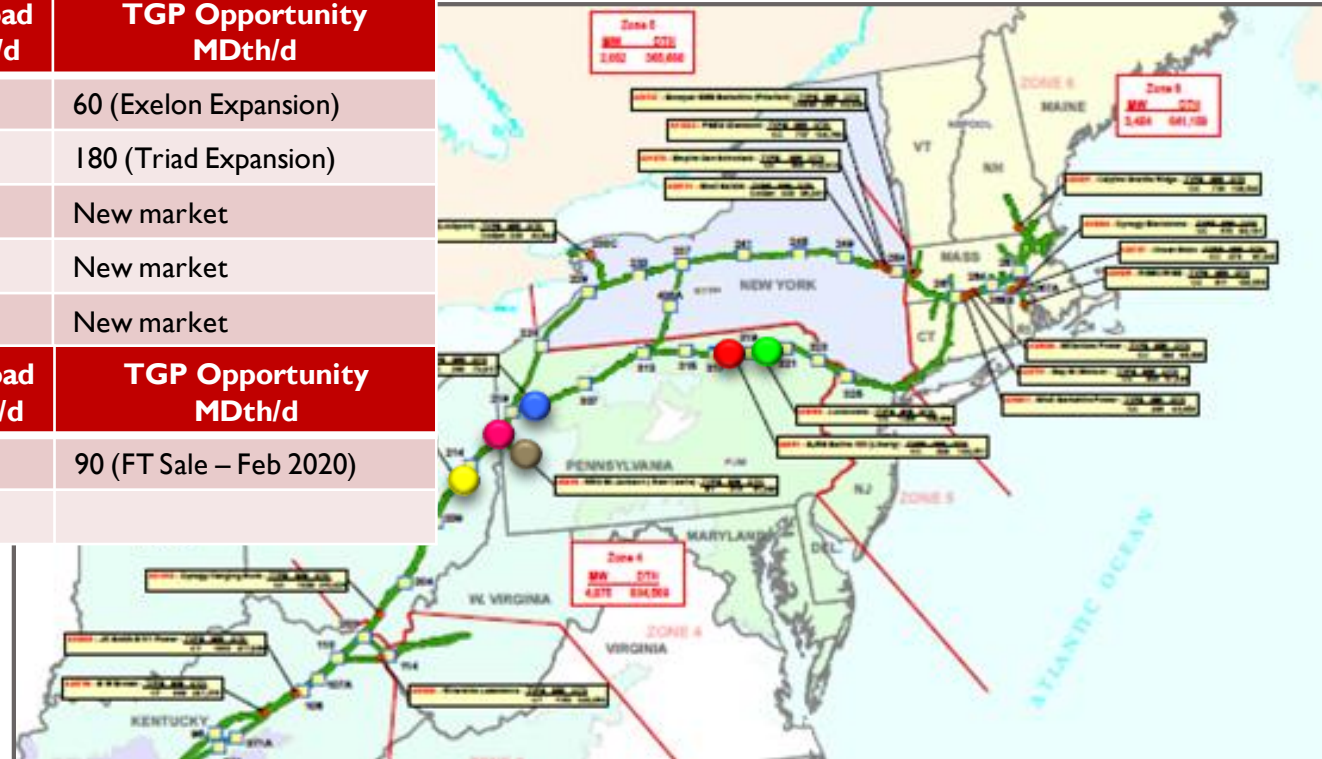


\*upgrade to an existing meter

# APPALACHIA

## IN-BASIN ACTIVITY ATTRACTS POWER MARKETS

Recent Plants Connected	Gas Load MDth/d	TGP Opportunity MDth/d
 Exelon-Handsoma Lake	50	60 (Exelon Expansion)
 Invenegy-Lackawanna	260	180 (Triad Expansion)
 Panda-Liberty	140	New market
 Advanced-Carroll Co.	120	New market
 NRG-Mt. Jackson	80	New market
Current Opportunities	Gas Load MDth/d	TGP Opportunity MDth/d
 Tyr-Hickory Run	175	90 (FT Sale – Feb 2020)
<b>TOTAL LOAD</b>	<b>825</b>	





# NEW ENGLAND AND NEW YORK / NEW JERSEY

## HOW ARE WE RESPONDING?

### ■ Project Planning

- Extended timelines – from filing to in-service
- Thorough risk identification & planning
- Stakeholder engagement and outreach
- Safety and security

### ■ Relationship with Customers

- Stronger partnerships
- Earlier engagement
- Setting expectations
- Combined outreach and communication

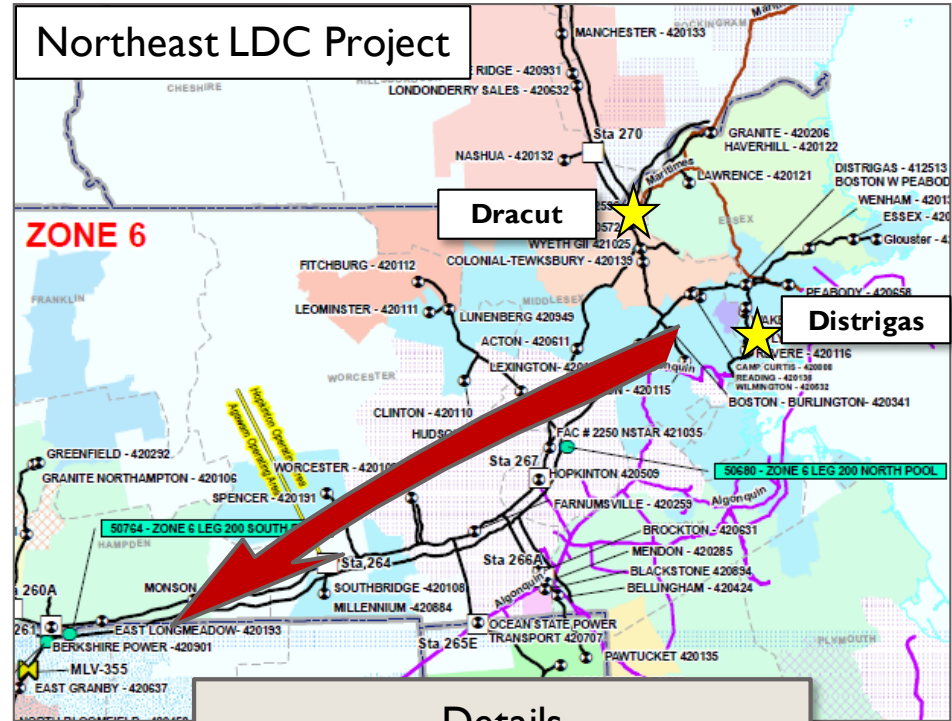
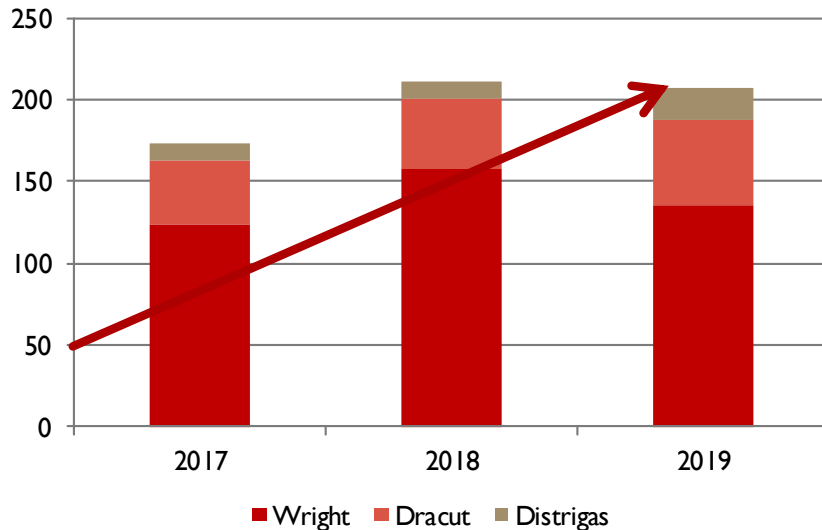
### ■ Contracting

- Recognition of risks
- Risk allocation
- Account for potential schedule impacts



# NEW ENGLAND LOCAL SUPPLY MEETS LOCAL DEMAND

NE Supply – June YOY



**Details**

Commercial Driver:	LDC gas demand growth
Capacity:	~160,00 Dth/d
Customer(s):	New England LDCs
In-service:	November 1, 2018
Term:	20 years

# LINE 261 UPGRADE – REGULATORY / PERMITTING PHASE

## Details

### Commercial Driver:

- Residential/commercial gas demand growth

Capacity: 101,400 Dth/d

### Customer:

- Columbia Gas of Mass (96,400 Dth/d)
- Holyoke (5,000 Dth/d)

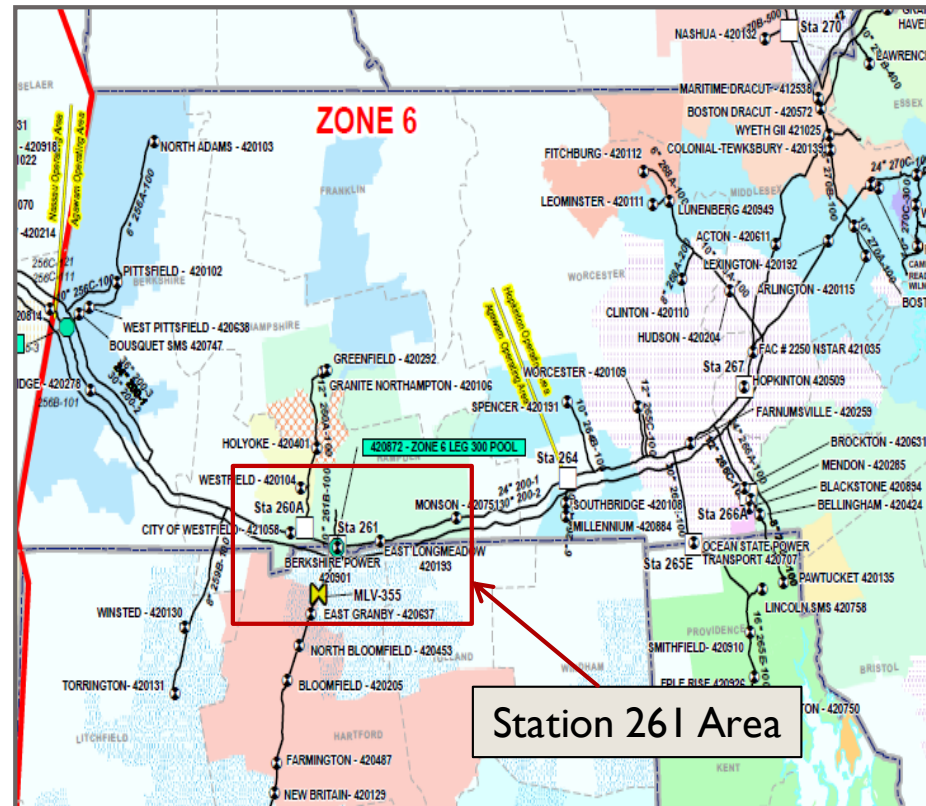
Phased In-service: 2019-2020 timeframe

### Project Scope:

- HP Replacement at Station 261
- 2 miles of looping Springfield Lateral

### Project Status:

- FERC 7C Application filed - October 2018
- Federal Permit applications filed - October 2018



# EAST 300 UPGRADE – DEVELOPMENT

## Details

### Commercial Driver:

- Residential/commercial gas demand growth

Capacity: 110,000 Dth/d

### Customer:

- Consolidated Edison Company of New York

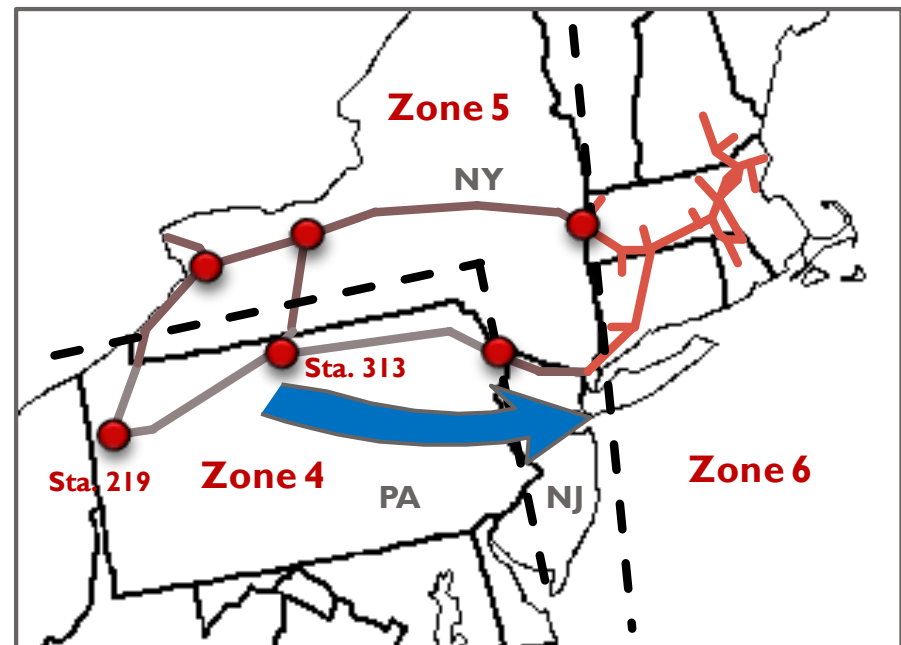
In-service: November 1, 2023

### Project Scope:

- Compression only in NJ and PA

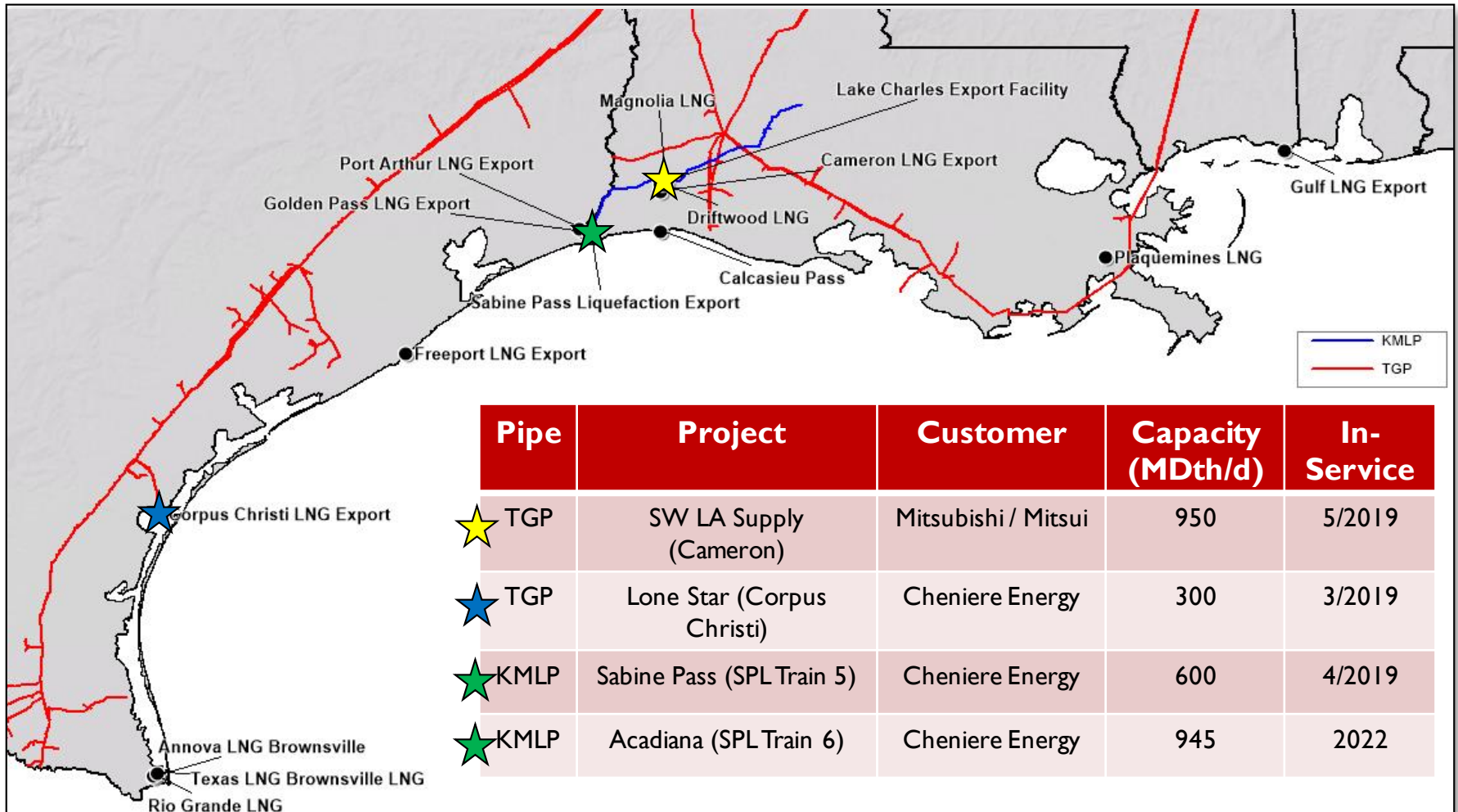
### Project Status:

- BOD approvals - April 2019
- Binding Open Season - May 2019



# LNG EXPORT MARKET

## TGP / KMLP SUCCESS STORY / OPPORTUNITIES



# ASAP – SOUTH OF STATION 87 – DEVELOPMENT

## Details

**Capacity:** 228,000 Dth/d

**Term:** 10 Years

**In-Service:** November 1, 2020

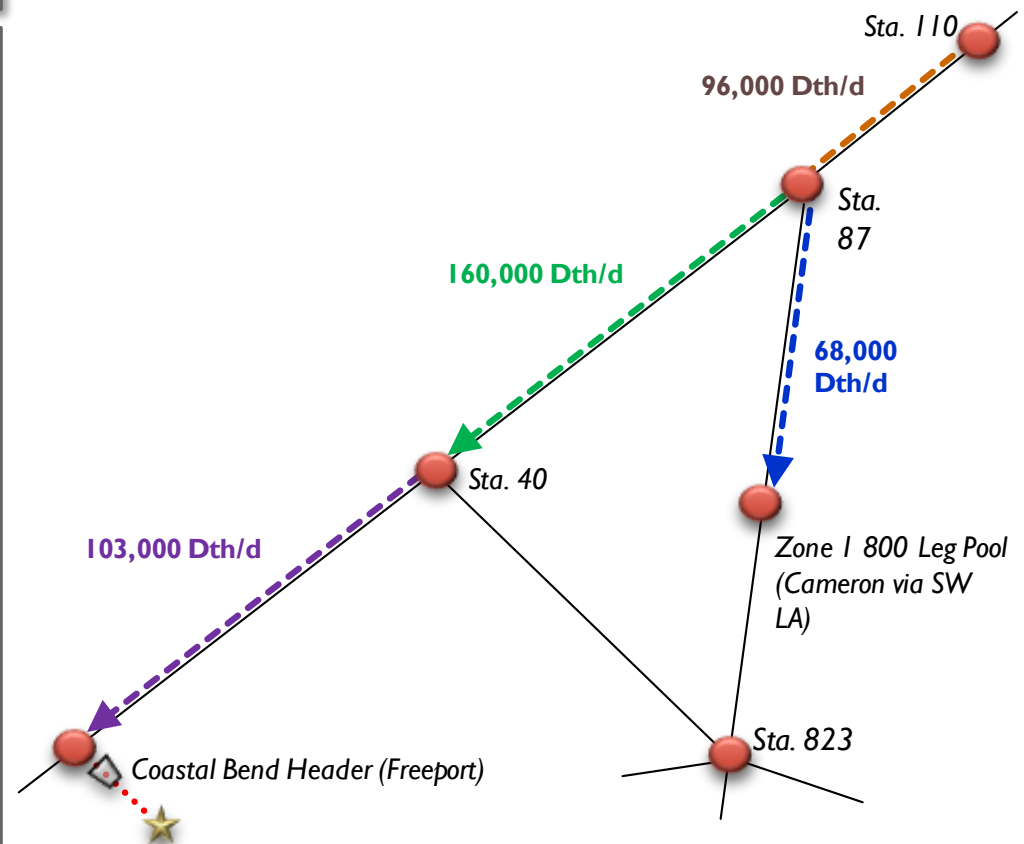
**Open Season:** July 12 – August 23, 2019  
(Binding SRF)

### Receipt Points

- 228,000 Dth/d from Zone I Sta. 87 Pool
- Up to 96,000 Dth/d from Sta. 110

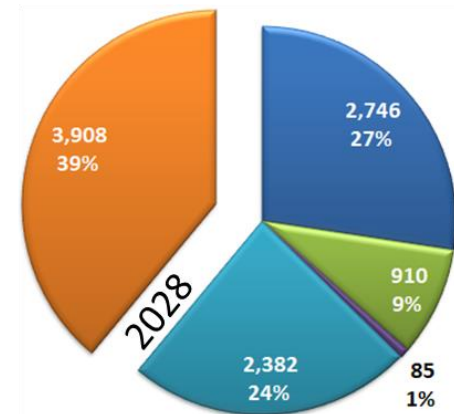
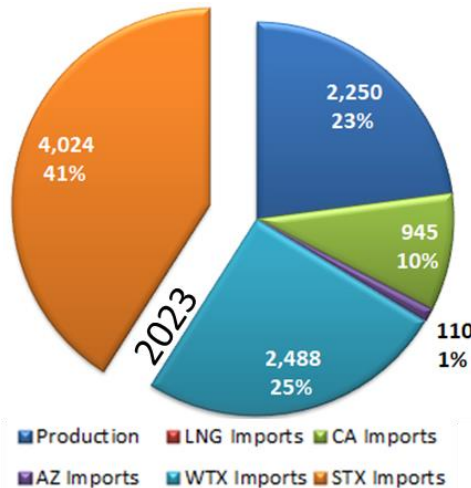
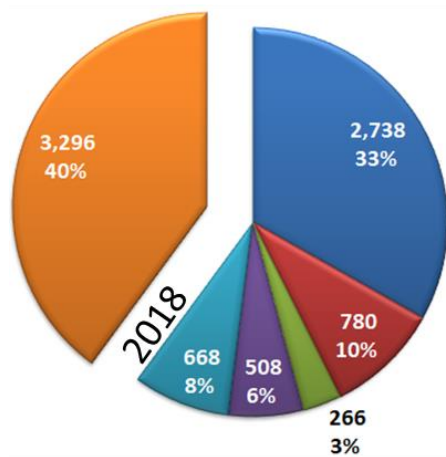
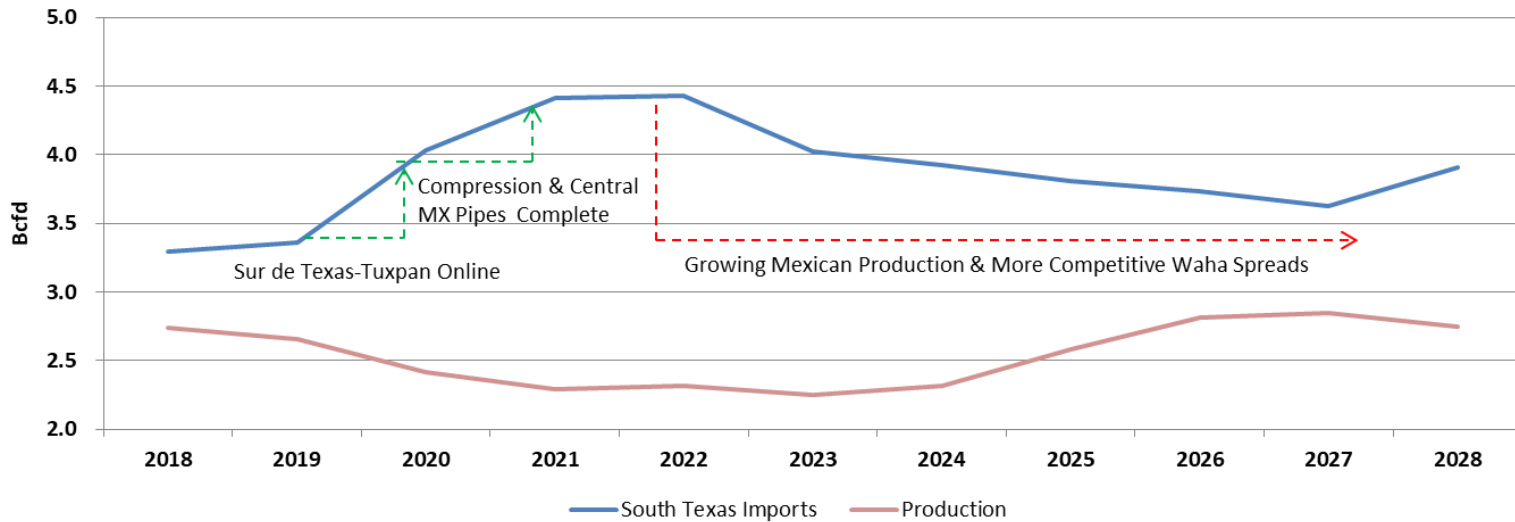
### Delivery Points

- 103,000 Dth/d to Coastal Bend Header
- 57,000 Dth/d to Zone 0 – 100 Leg North Pool
- 68,000 Dth/d to Zone I – 800 Leg North Pool



# MEXICO

## SOUTH TEXAS IMPORTS



■ Production    ■ LNG Imports    ■ CA Imports  
■ AZ Imports    ■ WTX Imports    ■ STX Imports

# MEXICO / SOUTH TEXAS – DEVELOPMENT

## Details

### Commercial Driver:

- Growing Mexico demand

Volume: up to 115,000 Dth/d

### Capacity path:

- Receipts from Agua Dulce/GCX

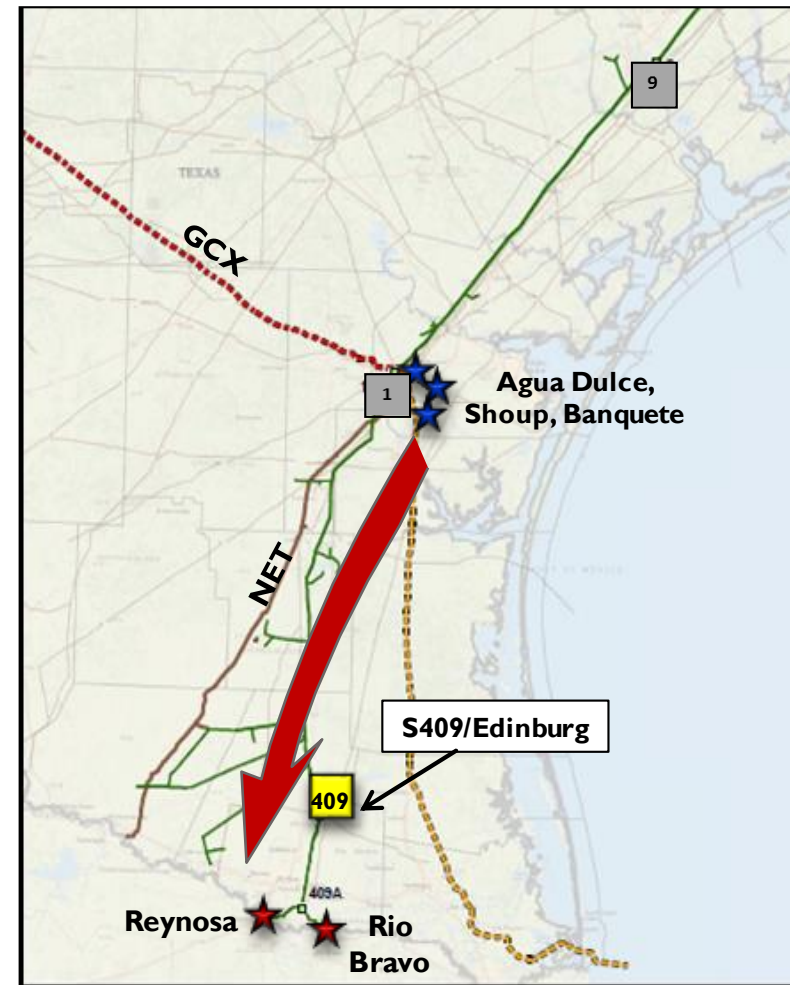
In-service: 4Q 2021

### Project Scope:

- Compression only, no looping

### Status:

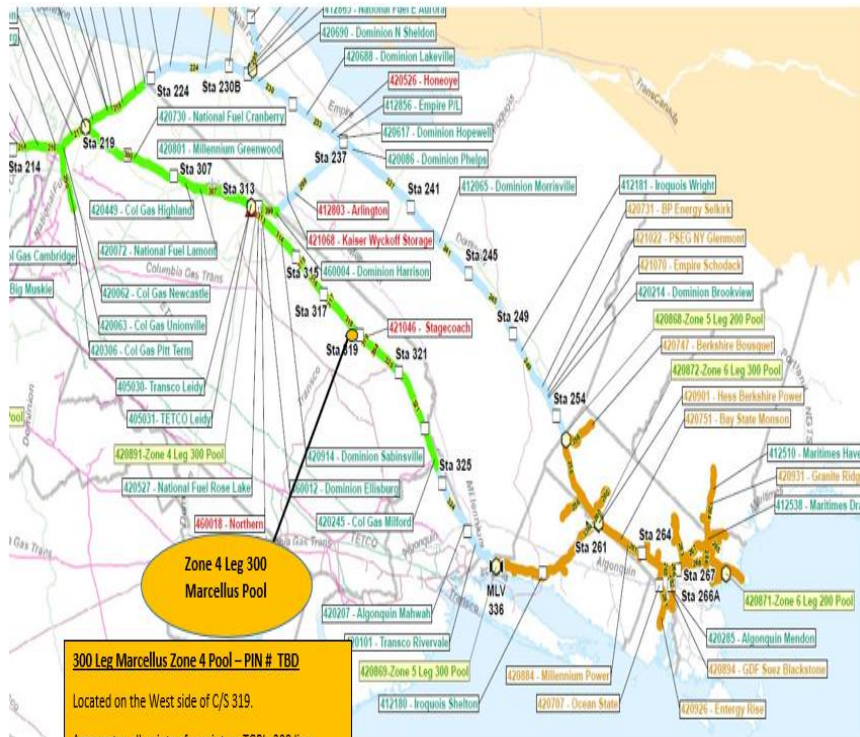
- Binding open season posted May 2 thru June 21
- On-going negotiations with bidders





# POOLING CHANGES – BORDER AND MARCELLUS

## New Pool: TGP 300L – Marcellus – Zone 4



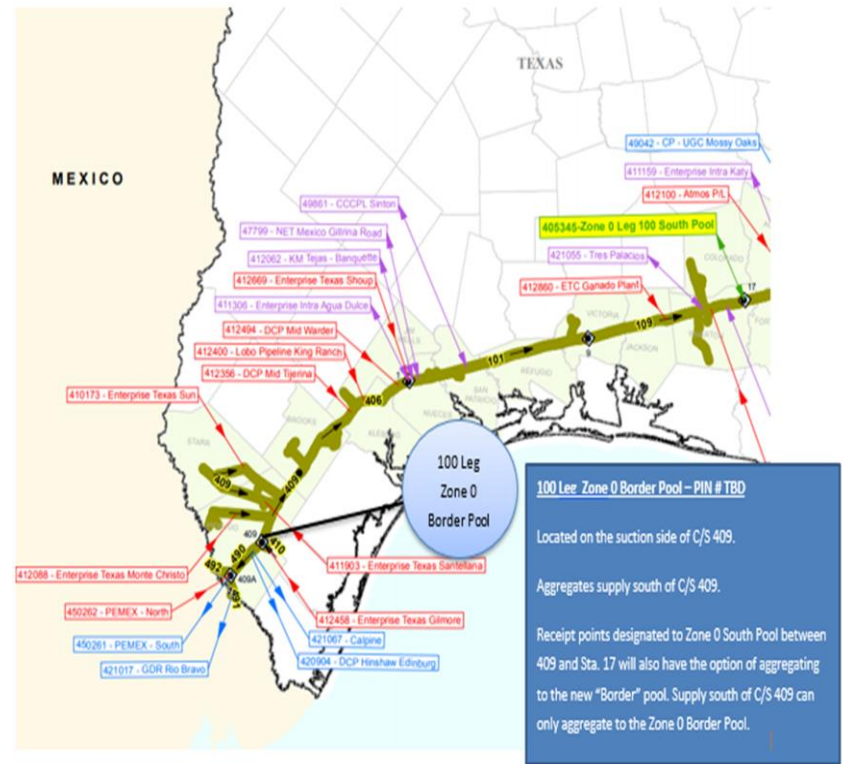
**300 Leg Marcellus Zone 4 Pool – PIN # TBD**

Located on the West side of C/S 319.

Aggregates all points of receipt on TGP's 300 line between C/S 315 and Pa/NU state line at C/S 325.

300L supply aggregators with receipt points previously aggregating to the Zone 4 Leg 300 Pool (Sta. 313) pooling pt. will retain those rights and may also aggregate to new Marcellus Pool.

## New Pool: TGP 100L – Zone 0 – Border



**100 Leg Zone 0 Border Pool – PIN # TBD**

Located on the suction side of C/S 409.

Aggregates supply south of C/S 409.

Receipt points designated to Zone 0 South Pool between 409 and Sta. 17 will also have the option of aggregating to the new "Border" pool. Supply south of C/S 409 can only aggregate to the Zone 0 Border Pool.

# NEW COMMERCIAL SERVICES

## AUTO-PAL

- ❑ Utilizes existing PAL Services (APAL)
- ❑ Aimed to enhance imbalance management across system
- ❑ Reduce timing issues between real-time gas needs and gas nom cycles
- ❑ Available at the meter level (i.e. LMS)

## 800L Storage

- ❑ FS-FLEX
- ❑ Early stage development
- ❑ Enhanced flexibility for LNG Market participants

## MX Border Storage

- ❑ Considering storage service at newly created “Border” pool (CS 409)
- ❑ Enhance liquidity and flexibility for Mexico/ TX LNG markets
- ❑ High flexibility in valuable market area, downstream of prevailing restrictions
- ❑ Potential for new commercial product offerings

# SUMMARY

- ❑ Successful track record of developing and executing on projects
  - 2.5 Bcf/d and \$1.4B since 2017
- ❑ Inflection point with Appalachia Projects
  - Supply connectivity and in-basin activity still attracting markets
- ❑ Flat demand growth but constrained pipe capacity in NE and NY/NJ leads to opportunities
  - Smaller volume, discrete projects - executable
- ❑ Success attracting/executing projects to serve Texas /Gulf Coast LNG
- ❑ Strong demand from Mexico and Permian supply provide next wave of development opportunities

# BUSINESS DEVELOPMENT TEAM



**Preston Troutman**  
Vice President Business Development  
Tennessee Gas Pipeline

Office: 713-420-3022  
Cell: 713-206-3290  
preston\_troutman@kindermorgan.com



**Paul Smith**  
Director Business Development  
Tennessee Gas Pipeline

Office: 205-325-3515  
Cell: 205-910-9185  
paul\_smith2@kindermorgan.com



**Stuart Neck**  
Director Business Development  
Tennessee Gas Pipeline

Office: 713-420-2230  
Cell: 281-948-2405  
stuart\_neck@kindermorgan.com



**Alison Stringer**  
Director Business Development  
Tennessee Gas Pipeline

Office: 713-420-5176  
Cell: 281-814-7361  
alison\_stringer@kindermorgan.com



**Christine Pratt**  
Director Commercial  
Tennessee Gas Pipeline

Office: 713-420-3669  
Cell: 832-492-8067  
christine\_pratt@kindermorgan.com



**Mike Braly**  
Account Director  
Tennessee Gas Pipeline

Office: 713-369-9364  
Cell: 281-923-0959  
michael\_braly@kindermorgan.com

# TENNESSEE GAS PIPELINE ANNUAL CUSTOMER MEETING

## CLOSING REMARKS

ERNESTO OCHOA  
VICE PRESIDENT – COMMERCIAL

NASHVILLE, TENNESSEE

AUGUST 22, 2019

**THE BILTMORE | ASHEVILLE, NC**

**AUGUST 2020**



# TODAY'S SCHEDULE

Casual Attire - Day Activities

- **Thursday, August 22, 2019**
- 10:45 AM Load Buses - Lobby Lunch/Activities - Groups A & B (Badge Designation)
- 11:15 AM Lunch George Jones Museum
- 12:45 PM Load Buses Depart George Jones for Activities
- 1:00 PM Activities Sound Stage Studios Recording Experience
  - OR - Nelson's Green Brier & Corsair Distillery Tour (Badge Designation)
- 3:00 PM Groups Rotate
- 4:55 PM Load Buses Return to THOMPSON
- 6:15 PM Load Buses - Lobby Drinks & Dinner on Broadway
- 6:30 PM Drinks and Dinner Nashville Underground - Rooftop
- 9:30 – 11:15 PM Bus will run between the flags at Riverfront Park and Hotel

# THANK YOU!

WE APPRECIATE YOU  
AND OUR BUSINESS PARTNERSHIPS

SINCERELY,  
THE TENNESSEE GAS PIPELINE TEAM