

**Delivering Energy to Improve Lives** 

# Northeast Summer Operations Meeting

June 2021











### Agenda



- Operations Update
- TGP Gas Control Overview
- 2020/2021 Winter Lookback
- Planned Summer Maintenance
- Scheduling Review
- Commercial Update

Mitch Myer Manager, Operations- New England Area

Ganesh Venkateshan Manager, TGP Gas Control

Cathy Soape Hutton Manager, TGP Trans and Storage Svc

Jim McCord Manager, TGP Marketing



#### **OPERATIONS UPDATE**

### **Operations Organizational Structure**





DIRECTOR-OPS

GPL-E-REGION DIRECTOR
SHOREWOOD CS 113

DEE BENNETT

DIRECTOR-OPS

GPL-E-EP LNG DIRECTOR

ELBA ISLAND OFFICE

STEVE HEARD

DIRECTOR-OPS

GPL-E-EP SOUTHEAST DIRECTOR
COLONIAL BROOKWOOD CENTER

CHRIS BRADBERRY

DIRECTOR-OPS

GPL-E-EP NORTHERN DIRECTOR
DIVISION 10 OFFICE

RON MILLER

DIRECTOR-OPS

GPL-E-EP GULF COAST DIRECTOR
NEW CANEY CS 302

CY HARPER II

DIRECTOR-OPS

GPL-E-EP CENTRAL DIRECTOR
DIVISION 9 OFFICE

JOHN PANNELL

### **Operations Organizational Structure**



DIRECTOR-OPS

GPL-E-EP NORTHERN DIRECTOR
DIVISION 10 OFFICE

RON MILLER

COORDINATOR-OPS SR I

GPL-E-EP NORTHERN DIRECTOR
DIVISION 10 OFFICE

SUSAN ANDRESEN

SUPV-MEASUREMENT

GPL-E-MEASUREMENT SOUTH DIV 10

CARROLLTON CS 214

JAMES BURRIS JR

MANAGER-OPS

GPL-E-EP NORTHERN DIRECTOR

AGAWAM CS 261

MITCHELL MYER

MANAGER-OPS

GPL-E-EP NORTHERN DIRECTOR
HAMBURG CS 229

TOM SUTTON

MANAGER-OPS

GPL-E-EP NORTHERN DIRECTOR
CAMBRIDGE CS 209

CARL BAYER

MANAGER-OPS

GPL-E-EP NORTHERN DIRECTOR

NASSAU CS 254

BUTCH FERGUSON JR

SUPV-CORROSION CORROSION EAST DIV 10
DIVISION 10 OFFICE
MIKE PIECIUK

SUPV-TECHNICAL SVC

GPL-E-MECHANICAL DIV 10

MARIENVILLE CS 307

DAVE SWANSON

SUPV-CORROSION

GPL-E-CORROSION WEST DIV 10

CLIFTON SPRINGS CS 237

VINCENT BULLOCK JR

SUPV-MEASUREMENT

GPL-E-MEASUREMENT NORTH DIV 10

CLIFFORD CS 321

JIM HOLSINGER

ENGINEER-PIPELINE II
GPL-E-EP NORTHERN DIRECTOR
DIVISION 10 OFFICE

DOM SANTANIELLO

MANAGER-OPS

GPL-E-EP NORTHERN DIRECTOR
COUDERSPORT CS 313

JAKE TAYLOR

#### Winter Lookback



- Scheduled Maintenance all maintenance by early November
- Winter Weather Preparation
  - Proven effective
- Contingency plans implemented
  - Compressor station
  - Pipeline and meter station

### **Capital Improvements**



## 2021 Projects offer significant upside

- Working to improve our ESG metrics
  - Valve replacements
  - More coordinated approach for reducing pressure in pipeline segments
  - Finishing effort to replace two aging turbines with a state of the art machine
    - Net emissions reduction
    - Net noise reduction
- Reliability boosting additions
- Noticeability reductions

### **Pipeline Integrity Summary**



#### Inline Inspection

- Continuing with robust ILI program 3 of 5 segments inspected in 2021 to date
- ILI Tool Selection Technology continues to improve
- Goal is still to receive inspection results early to avoid impactful outages during the heating season

#### Remediation

- Technological improvements
  - Dent fatigue life analysis
  - Foreign crossing review, etc.
  - Continued development of engineering analysis

#### Mega Rule

- Running expanded suite of ILI
- Many pressure tests coming over the next several years

# Construction Project Initiation Process Submitting and requesting information for Upgrade Projects



- Initial requests should be sent to KMEncroachmentsNorth@kindermorgan.com
  - If we receive requests outside of this address, we'll forward for appropriate handling
- Simple checklist of information to include
- Once in receipt, we:
  - Will offer assistance with engineering if needed/possible
  - Will participate in field assessments to finalize and agree on work plans
- Interconnect Agreements

# Construction Project Initiation Process Cont. Submitting and requesting information for Upgrade Projects



#### Interconnect Information Form

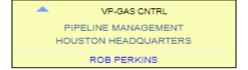
KINDER	INTERCONNECT INFORMATION FORM
Requesting Company	Date
Reason for Work	
	Existing Asset Information
KM Pipeline	KM Receipt or KM Delivery
Meter Station Name	Requested In-Service
Street Address	City, State
Lat/Long	Agreement Available?
	Requester Information
Name & Title	
Phone	
Email	
	Project Information
Ownership Demarcation	Work Proposed Inside KM
Location Change?	Buildings?
Work Include Increase in	Work Include New
Flows?	Buildings?
Work Include Changes to	Outage Acceptable for Work,
Pressures or	if Required?
Temperatures?	
	Support Documentation/Information
Please Provide the Following (as Available):	
Scope of Work	
Site Drawings	
Expected Flow Conditions	
Existing Agreement	
Other Support	
Documentation	
Remarks	



#### GAS CONTROL

### **Gas Control Organizational Structure**





ADMINISTRATIVE ASST SR GPL-E-GAS CONTROL EAST HOUSTON HEADQUARTERS

GLENDA COMEAUX

VP-STORAGE

GAS STORAGE ENGINEERING
HOUSTON HEADQUARTERS

ANDERS JOHNSON

DIRECTOR-GAS CNTRL

GPL-E-GAS CONTROL EAST
HOUSTON HEADQUARTERS

LAYNE SANDERS

DIRECTOR-COMPLIANCE/CODE ST
PIPELINE MANAGEMENT
HOUSTON HEADQUARTERS

NANCY WELSH

VP-PIPELINE MANAGEMENT

GPL-W-WEST REGION PIPELN MGMT
COLORADO SPRINGS OFFICE

JIM CORDARO

DIRECTOR-GAS CNTRL
PIPELINE MANAGEMENT
HOUSTON HEADQUARTERS

BRIAN MERCHANT

DIRECTOR-GAS CNTRL

TEJAS GAS CONTROL
HOUSTON HEADQUARTERS

SEAN SASKO

DIRECTOR-SYSTEM DESIGN
SYSTEM DESIGN
HOUSTON HEADQUARTERS
HUBERT ELDRIDGE

VP-TRANSPORTATION/STORAGE
TRANSPORTATION/STORAGE SRVCS
HOUSTON HEADQUARTERS

GENE NOWAK

DIRECTOR-GAS CNTRL

TEJAS GAS CONTROL
HOUSTON HEADQUARTERS

ROBBIE STARNES

### **Gas Control Organizational Structure**



MANAGER-GAS CNTRL

GPL-E-GAS CONTROL EAST-TGP HOUSTON HEADQUARTERS

GANESH VENKATESHAN

CONTROLLER ASC

GPL-E-GAS CONTROL EAST-TGP HOUSTON HEADQUARTERS

SIMON AJOKU

CONTROLLER ASC

GPL-E-GAS CONTROL EAST-TGP HOUSTON HEADQUARTERS

JACOB DASILVA

CONTROLLER SR

GPL-E-GAS CONTROL EAST-TGP HOUSTON HEADQUARTERS

NOE GONZALEZ

CONTROLLER ASC

GPL-E-GAS CONTROL EAST-TGP HOUSTON HEADQUARTERS

ZACHARY MEINHOLD

CONTROLLER SR

GPL-E-GAS CONTROL EAST-TGP HOUSTON HEADQUARTERS

JOHN SHANKS

CONTROLLER

GPL-E-GAS CONTROL EAST-TGP HOUSTON HEADQUARTERS

HUNTER CALHOUN

CONTROLLER SR

GPL-E-GAS CONTROL EAST-TGP HOUSTON HEADQUARTERS

JUSTON HEADQUARTERS

CONTROLLER SR

GPL-E-GAS CONTROL EAST-TGP HOUSTON HEADQUARTERS

TRAVIS HARRY

MANAGER IC-CAPACITY PLANNING

GPL-E-GAS CONTROL EAST-TGP HOUSTON HEADQUARTERS

JOHN O'NEAL

CONTROLLER

GPL-E-GAS CONTROL EAST-TGP HOUSTON HEADQUARTERS

TREY SOAPE III

CONTROLLER ASC

GPL-E-GAS CONTROL EAST-TGP HOUSTON HEADQUARTERS

ABHISHEK CHAUDHARI

CONTROLLER LEAD

GPL-E-GAS CONTROL EAST-TGP HOUSTON HEADQUARTERS

TONTIEADQUARTERS

CONTROLLER SR

GPL-E-GAS CONTROL EAST-TGP

HOUSTON HEADQUARTERS

CHUCK MARSHALL

CONTROLLER

GPL-E-GAS CONTROL EAST-TGP HOUSTON HEADQUARTERS

CODY SAFFORD

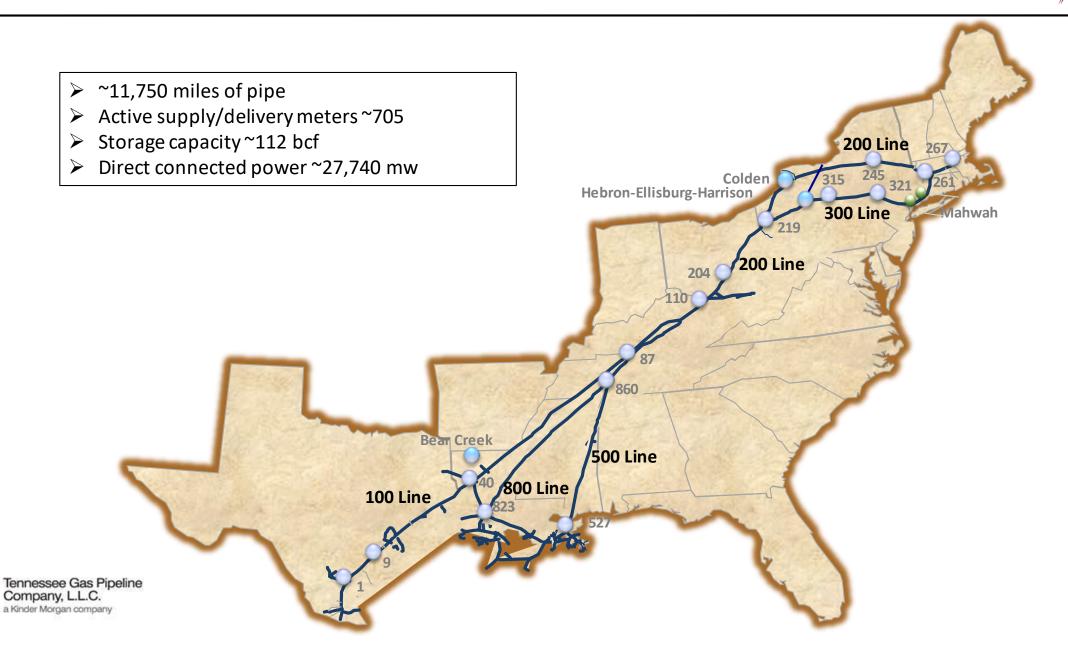
CONTROLLER LEAD

GPL-E-GAS CONTROL EAST-TGP HOUSTON HEADQUARTERS

TAEKO YONEYAMA

### **TGP System Map**







#### WINTER 2020 – 2021 LOOK BACK

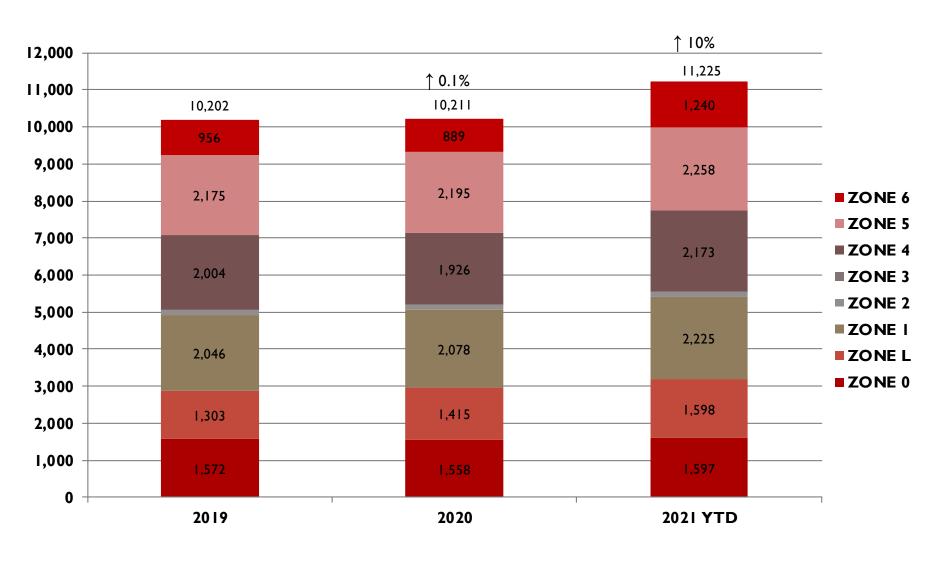
#### Winter 2020-2021



- Overview
  - Seasonal Winter Demand
  - System-wide throughput increased 2% compared to previous winter
  - Storage Inventories levels were at anticipated levels and lower than last year levels
  - System Wide Peak Day was ~12.48 Bcf/d on February 12, 2021
  - Exports to Mexico decreased 9% compared to previous winter
  - Stronger power loads in the Northeast compared to prior years.
- Supply
  - Supply in Zone 4 consistent as previous Winter
  - Supply changes were demand related at Dracut/Distrigas
- Operational Challenges

### **TGP System Wide Throughput**





## Winter System Wide Flows



	2018-2019	2019-2020	2020-2021	<u>Change</u>
LDC	2,120	2,030	2,092	+3%
Power	1,105	1,286	1,390	+8%
Interconnects	5,840	5,494	5,312	-3%
Mexico	918	890	807	-9%
LNG	108	1,145	1,490	+30%
Industrial	56	47	50	+6%
TOTAL	10,146	10,892	11,141	+2%

Volumes are MDth/d

#### Winter Northeast Flows



	<u>2018-2019</u>	2019-2020	2020-2021	<u>Change</u>
LDC	1,582	1,516	1,564	+3%
Power	247	298	333	+12%
Pipeline Interconnects	1,526	1,520	1,487	-2%
TOTAL	3,354	3,334	3,385	+1.5%

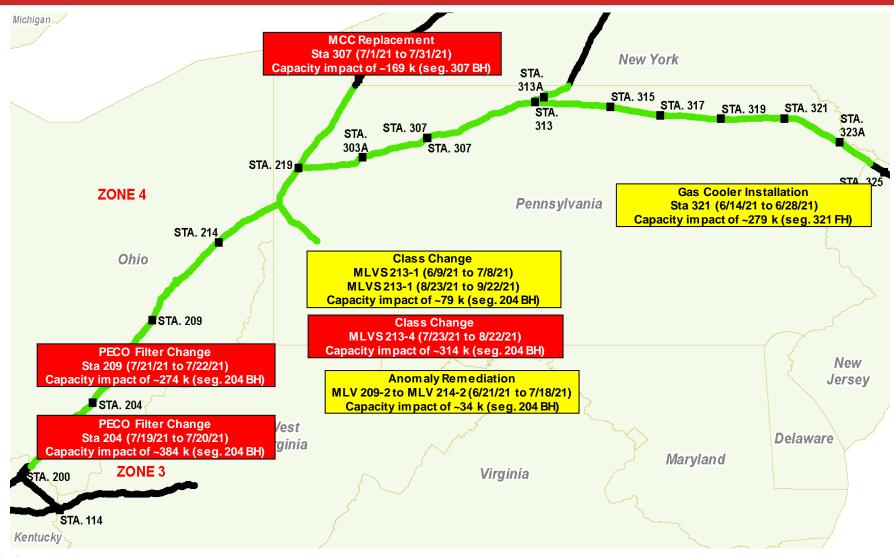
Volumes are MDth/d



#### PLANNED SUMMER MAINTENANCE



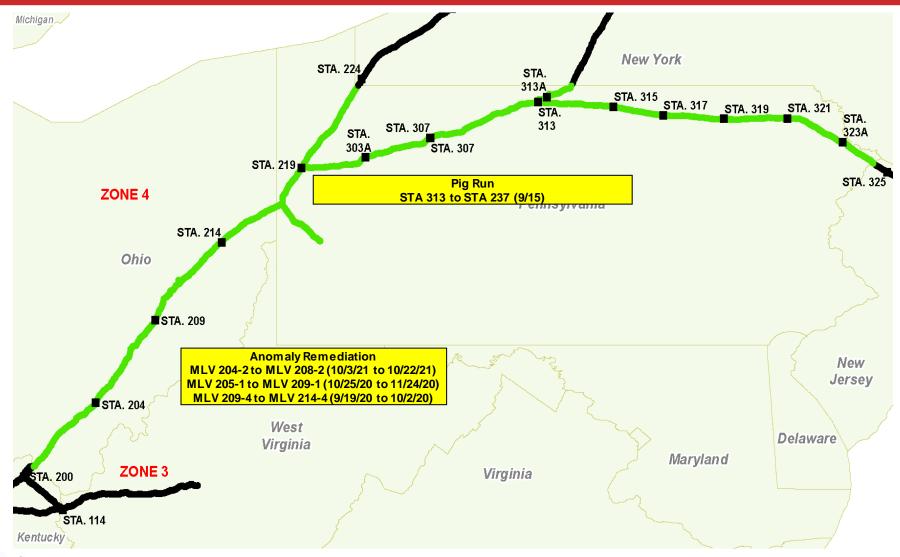
#### **Zone 4 (May - August)**







### **Zone 4 (Future Significant Outages)**

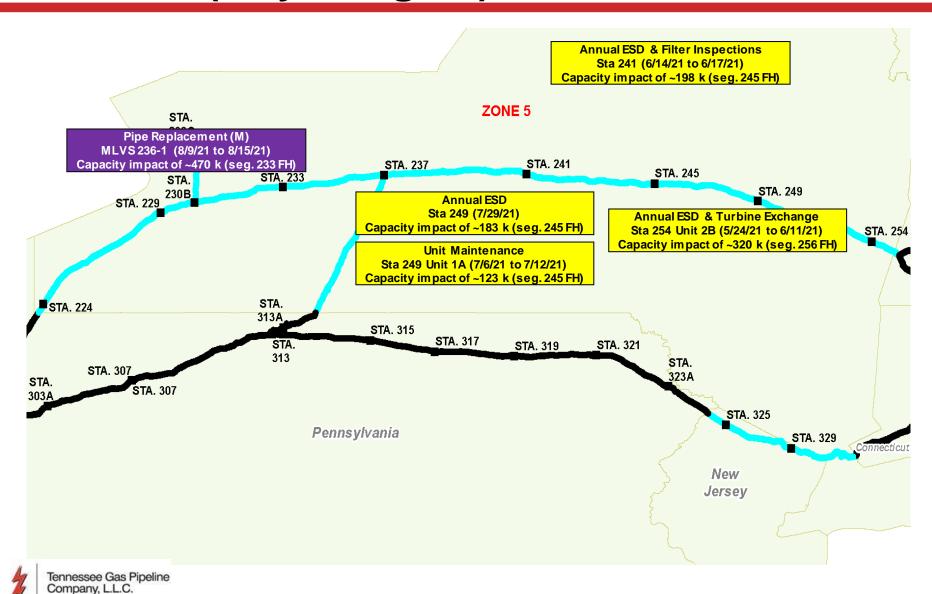






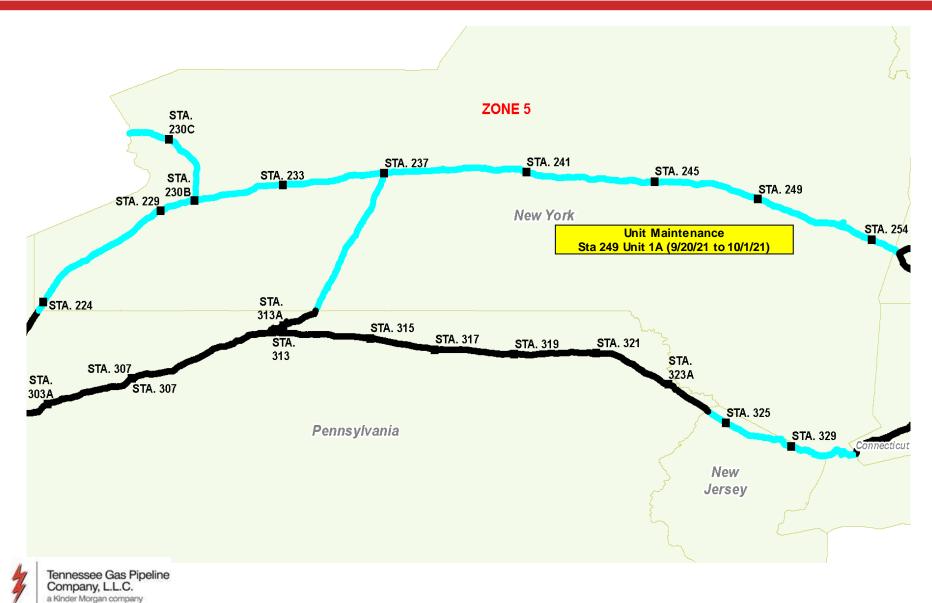
#### Zone 5 (May - August)

a Kinder Morgan company



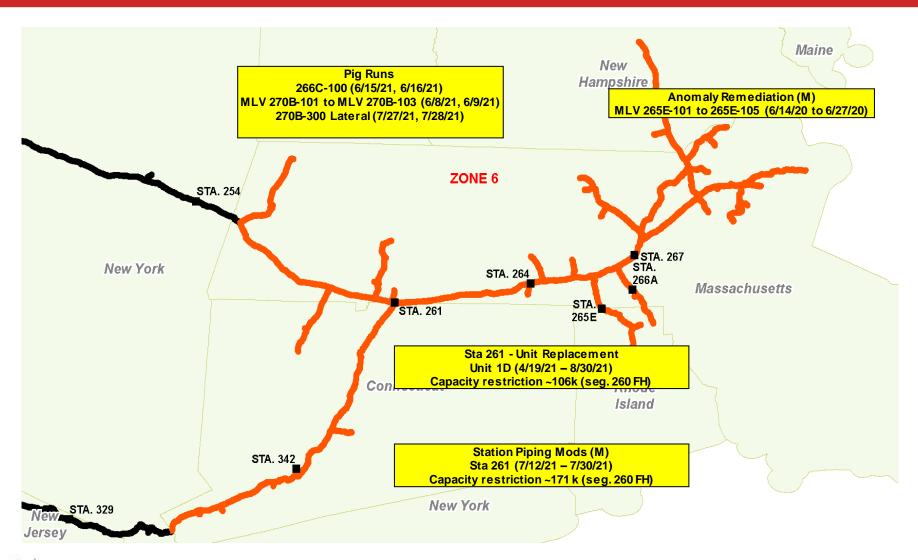


## **Zone 5 (Future Significant Outages)**





### Zone 6 (May - August)







#### SCHEDULING UPDATE

# **Transportation Storage Services**

Organizational Structure





MANAGER-SCHEDULING TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS

KATIE CORNUTT

MANAGER-SCHEDULING TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS CATHY SOAPE

MANAGER-SCHEDULING TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS ADAM HARRIS

MANAGER-SCHEDULING TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS RICHARD WILLIAMS

MANAGER-SCHEDULING TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS RENEE LEWIS

#### **Daytime Scheduling Reps**

MANAGER-SCHEDULING

TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS

ADAM HARRIS

#### Weekend/Evening Afterhours Reps

MANAGER-SCHEDULING TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS CATHY SOAPE

REP-SCHEDULER II

TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS

WALKER AGNEW

REP-SCHEDULER SR II TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS SUSANA LOPEZ

REP-SCHEDULER SR II TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS CARLA VANNOY

REP-SCHEDULER SR I TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS

VERONICA ESPARZA

REP-SCHEDULER SR II TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS ERIN MORTIMER

REP-SCHEDULER SR II TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS

DANA GOODMAN

REP-SCHEDULER SR II TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS DEB SHIPMAN

REP-SCHEDULER SR II TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS MANDEY ALLEN

REP-SCHEDULER SR II TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS JILL OVERMAN

REP-SCHEDULER SR I TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS

GINGER BRYAN

REP-SCHEDULER SR II

TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS DEBBIE TWEEDY

REP-SCHEDULER SR I TRANSPORTATION/STORAGE SRVCS HOUSTON HEADQUARTERS

NICOLE LANG

REP-SCHEDULER SR I KM INTRASTATE SCHEDULING HOUSTON HEADQUARTERS

NORMA VILLARREAL

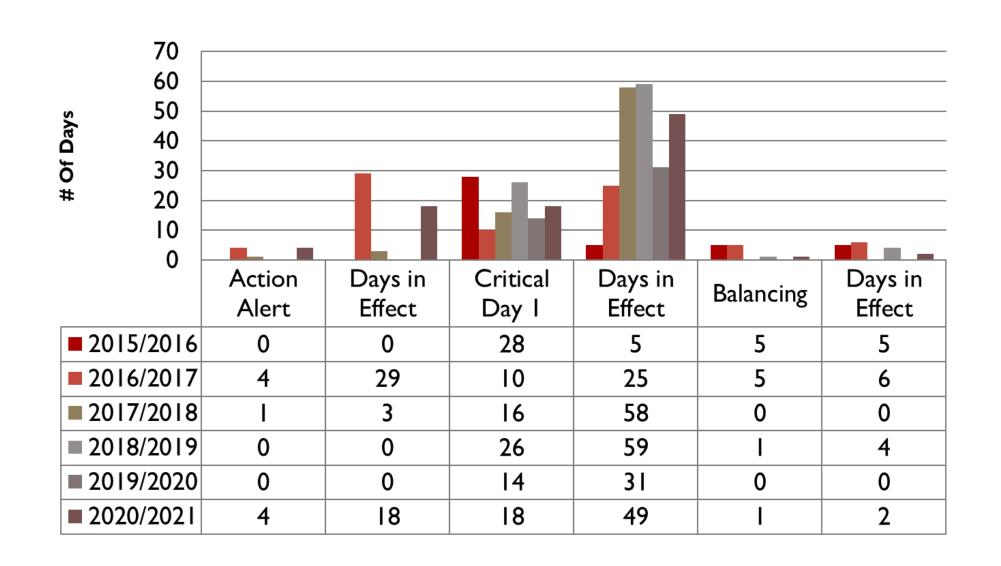
#### Winter Restrictions



Restriction Point Highly Utilized TGP Paths	Percentage Days Restricted (November - March)				
	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
Sta. 200/204	69%	68%	0%	0%	38%
Sta. 245	99%	100%	100%	100%	100%
Sta. 261	28%	81%	85%	63%	54%
Sta. 267	56%	68%	2%	0%	0%
MLV 268	0%	38%	9%	3%	5%
MLV 273	17%	76%	99%	70%	100%
Sta. 315 BH	97%	89%	61%	37%	100%
Sta. 321	93%	92%	81%	100%	100%
MLV 355 BH	5%	15%	34%	16%	28%
Sta. I BH	0%	21%	83%	17%	4%
Sta. 9 BH	44%	90%	31%	55%	13%
Mahwah	88%	60%	98%	100%	100%
Rivervale	81%	99%	88%	6%	0%

#### Winter Season OFOs- Zones 4,5 & 6





#### **Summer Restrictions**



Restriction Point Highly Utilized TGP Paths	Percentage Days Restricted (April – October)	Percentage Days Restricted (April – October)	Percentage Days Restricted (April - October)	Percentage Days Restricted (April - October)	Percentage Days Restricted (thru May)
	2017	2018	2019	2020	2021
Sta. 200/204	93%	67%	12%	44%	72%
Sta. 245	98%	98%	83%	94%	100%
Sta. 261	20%	49%	1%	14%	2%
Sta. 267	5%	10%	0%	0%	0%
MLV 268	0%	12%	0%	0%	0%
MLV 273	0%	17%	16%	66%	100%
Sta. 315 BH	99%	99%	70%	99%	100%
Sta. 321	76%	99%	63%	79%	100%
MLV 355 BH	29%	79%	23%	17%	64%
Sta. I BH	8%	80%	13%	17%	10%
Sta. 9 BH	50%	58%	22%	10%	7%
Mahwah	58%	50%	98%	89%	95%
Rivervale	57%	58%	68%	0%	0%

### **Current System Conditions**



- More gas moving toward the South
- Summer maintenance
  - Work with customers as operations allow
- Storage Utilization
  - Protect firm storage
- Daily system flexibility to manage scheduled payback
  - Gas control and Scheduling evaluate payback each cycle to determine availability
  - TGP encourages customers to nominate payback in an effort to minimize customer cashout exposure



#### COMMERCIALUPDATE

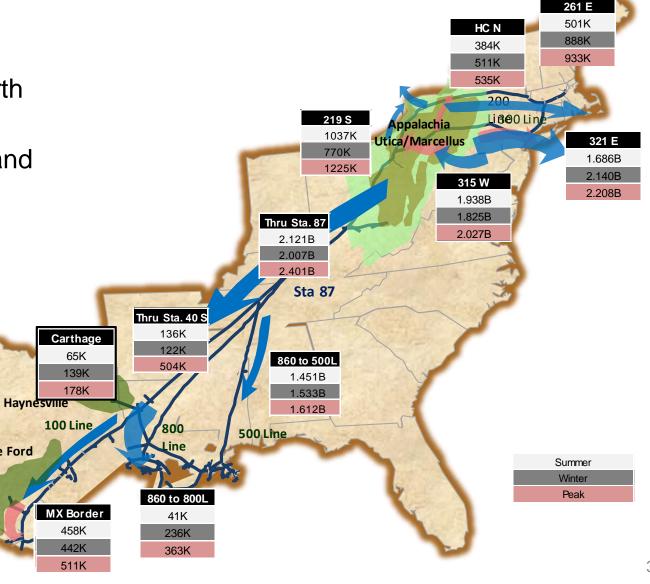
### System Flows



- High utilization across system year round
- Increasing demands to move gas north to south
- Traditional bottleneck into New England remains

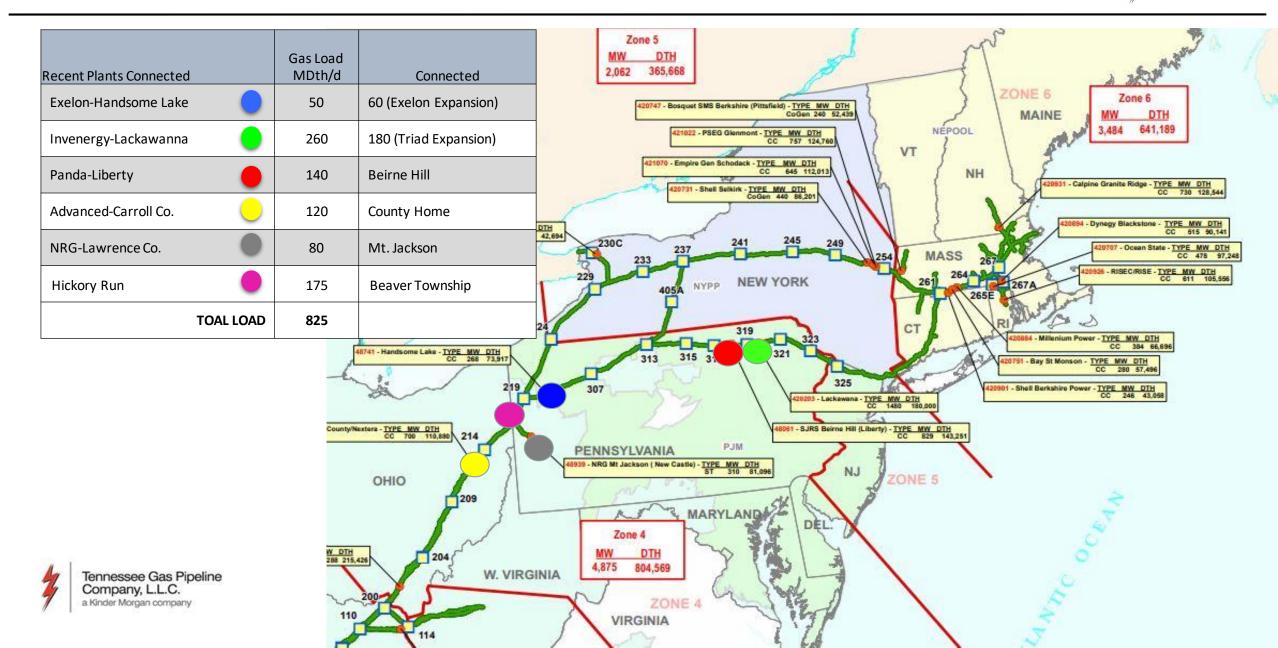
**Eagle Ford** 

- Power growth- PJM in particular
- Growing LNG Export
- Continued interest in Mexico
- Steady Canadian Exports



#### Appalachia: in-basin Activity attracts Power markets





# Kinder Morgan To Purchase Stagecoach Gas ServicesKINDER MORGAN

Kinder Morgan, Inc. announced that it has agreed to acquire –

- Stagecoach Gas Services LLC, a natural gas pipeline and storage joint venture between Consolidated Edison, Inc. and Crestwood Equity Partners LP.
- 4 natural gas storage facilities with a total FERC-certificated working gas capacity of 41 billion cubic feet and 185 miles of natural gas pipelines with multiple interconnects to major interstate natural gas pipelines, including Tennessee Gas Pipeline.
- The transaction requires regulatory approval under Hart-Scott-Rodino, and it is expected to close in the third quarter of 2021.





### Line 261 Upgrade

**Construction Phase** 



#### Commercial Driver:

Residential/commercial gas demand growth

• Capacity: 96,400 Dth/d

#### Customer:

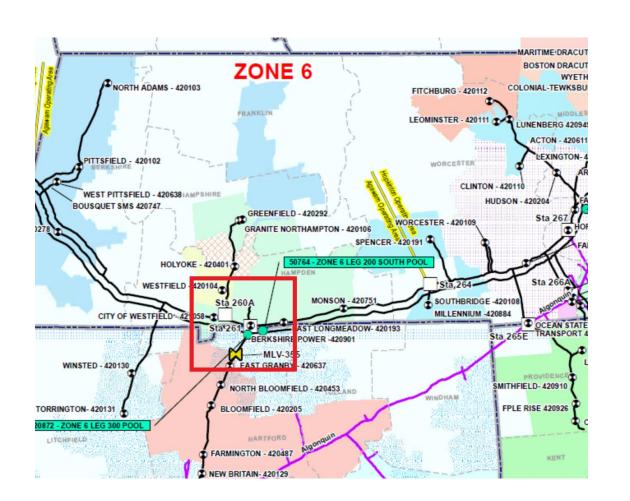
**Eversource Gas of Massachusetts** 

#### Project Scope:

HP Replacement at Station 261 2 miles of looping Springfield Lateral

#### Phased In-service:

✓ November 2020 – Looping - Complete November 2021 – HP Replacement



# East 300 Upgrade Regulatory/Permitting Phase



Commercial Driver:

Residential/commercial gas demand growth

Capacity: 115,000 Dth/d

Customer:

Consolidated Edison Company of New York

• In-service: November 2023

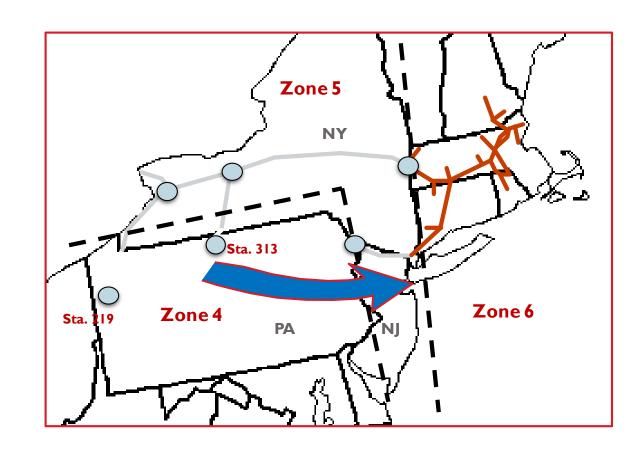
Project Scope:

Compression only in NJ and PA

Project Status:

FERC 7C Application – filed June 30, 2020 (CP20-493)

EIS to be issued on 9/24/21. 90 day authorization deadline set for 12/23/21





#### Park and Loan Services



### Park & Loan – Term (PAL-T) ROPT & ROLT

#### **Attributes:**

- Highest form Interruptible Services
- Invoiced on Total Quantity (TQ)

#### Offerings:

>Term >Balancing >Operational

#### **Term**

- Based on Market Price
- Cash, Balmo and Forwards
- Timing, Location and quantity based on operational flexibility

#### **Balancing**

- Acts like synthetic storage
- Price varies based on turns, locations and term
- Yearly and Monthly terms

#### **Operational**

Contracted on a customer needs basis as operational flexibility allows



### Recognized Industry Leader

ESG Multi-faceted Approach



#### Leadership

- 2019 Emissions Intensity 0.02% TGP; 0.03% KM
- ONE Future Founding Member
- INGAA GHG Task Force
- Carbon Neutral Pipeline Ruby
- EPA Natural Gas STAR & Methane Challenge Programs

#### Transparency

- ESG Report
- Utilize 3<sup>rd</sup> Party metrics

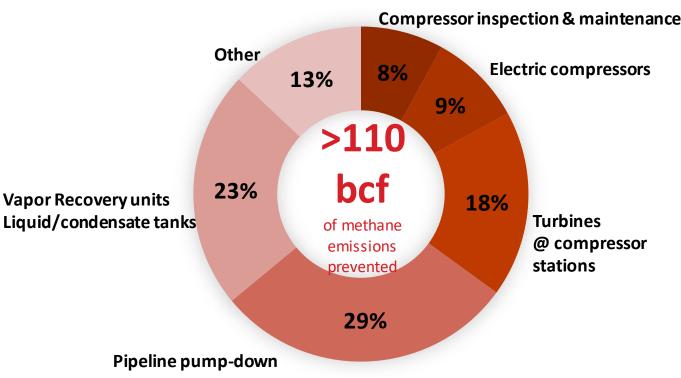
#### Collaboration

- Environmental Agencies studies & new technology
- Evaluate Opportunity expansions & new facilities
- Producers, Shippers & Peers

#### Emission Reduction Methods

- Pipeline pump-down
- Compressor inspection & maintenance
- Electric Compressor
- Vapor Recovery Units
- Turbines @ compressor stations





### Responsibly Sourced Gas (RSG)



- Concept started by One Future Coalition Members
  - Goal: ensure the future of natural gas as a long-term sustainable fuel
  - Includes production, gathering, processing, transmission storage
     & distribution companies

#### 5 Components:

- Methane Emissions Intensity: reduce to <1% by 2025</li>
- Water Conservation: water recycling and groundwater protection
- Chemical Management: management of chemicals in the drilling and fracturing processes
- High Integrity Well Certification: Trust Well Certification by IES (Independent Energy Standards) or similar entity
- Community: engage in community partnerships and collaboration with environmental organizations









































































#### **Opportunities**

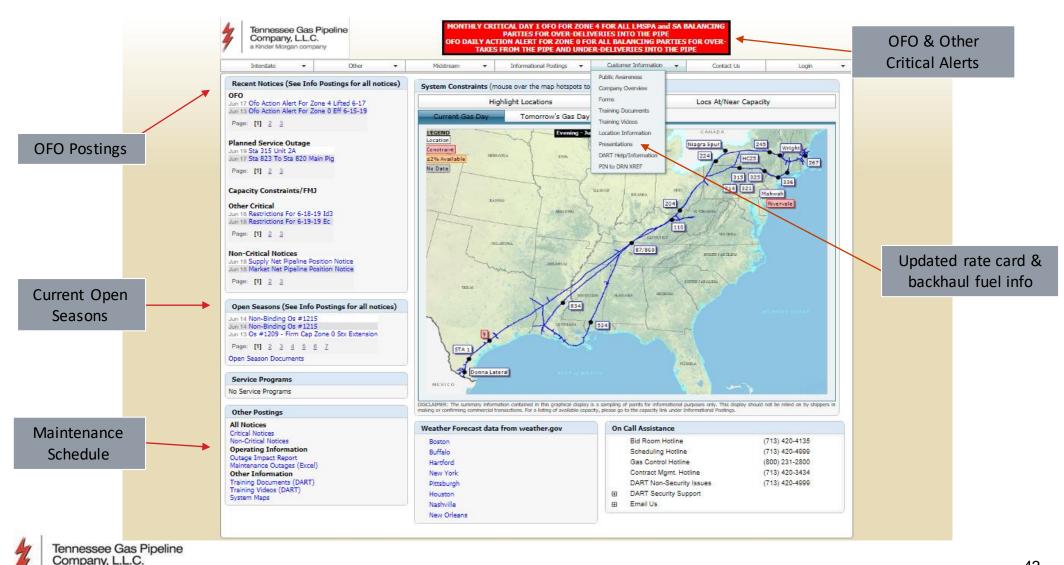


- Collaborate with upstream and downstream participants in the value chain
- Participate in 3<sup>rd</sup> Party Certification of value chain operations
- Partner in programs utilizing RSG wellhead to burner-tip
- Engage jointly with state commissions and other regulatory agencies
- Coordinate outreach efforts

#### **EBB Snapshot**

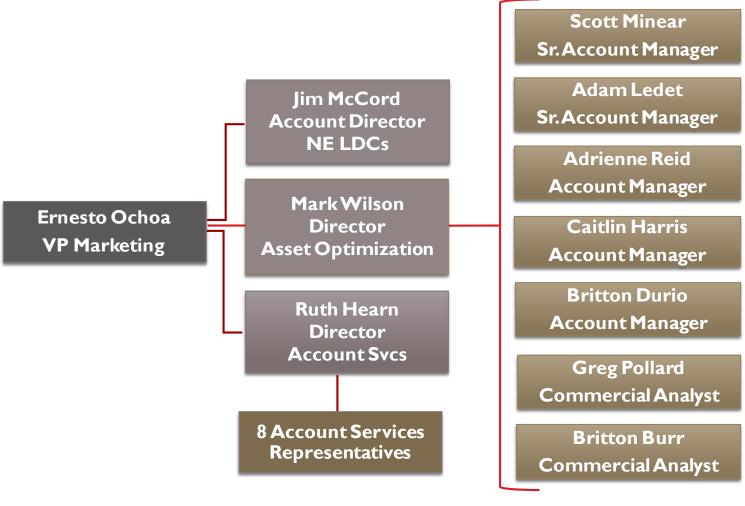
a Kinder Morgan company





### **Commercial Organization**







### **TGP Contact List**



Gas Control	Transportation and Storage	Commercial/Marketing	Field Operations
24 hour and emergency	24 hour Scheduling Hotline	Jim McCord - Manager, Marketing	Ron Miller- Director (Northeast)
800-231-2800	713-420-4999	713 – 420-5661	860-763-6027
		Cell – 832-655-4043	Cell – 713-829-2919
Ganesh Venkateshan – Manager	Cathy Soape – Manager		
713-420-2099	713-420-3814	Ruth Hearn-Director, Acct Svcs	John Pannel – Director (Central)
Cell –832-980-8296	Cell – 713-922-5083	713-420-3881	615-221-1511
		Cell- 281-352-7975	Cell – 615-714-1930
Layne Sanders – Director	Adam Harris – Manager		
713-420-5024	713-420-2672	Mark Wilson - Director, Optimization	Chris Bradberry – Director (Southeast)
Cell - 832-563-5024	Cell - 281-389-0024	713-420-7205	205-325-7277
		Cell – 205-447-2589	Cell - 205-567 - 0777
Rob Perkins - VP	Gina Mabry - Director		
713-420-5229	713-420-3685	Ernesto Ochoa – VP	Cy Harper – Director (South)
Cell - 205-527-0650	Cell – 281-744-8666	713 – 420-1734	281-689-4534
		Cell – 281-414-3823	Cell – 205-613-6701
	Gene Nowak - VP		
	713-369-9329		Ron Bessette- VP
	Cell – 713-252-9759		713-420-6012
			Cell – 413-313-4380