KINDER MORGAN

2019 Customer Meeting
West Region Gas Pipelines

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Regarding Forward-Looking Statements

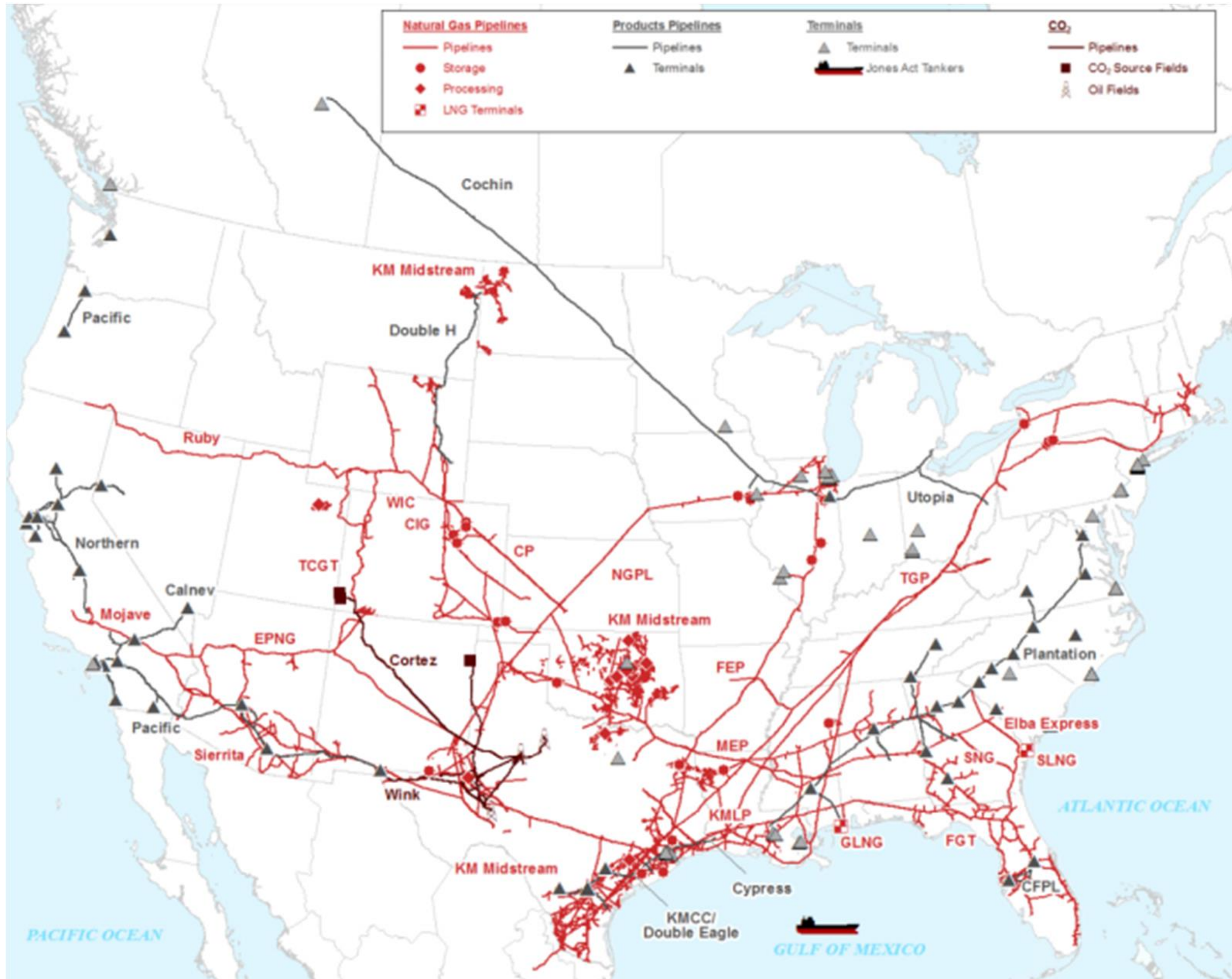
This presentation contains forward-looking statements. These forward-looking statements are identified as any statement that does not relate strictly to historical or current facts. In particular, statements, express or implied, concerning future actions, conditions or events, future operating results or the ability to generate revenues, income or cash flow or to make distributions or 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 Energy Partners, L.P., Kinder Morgan Management, LLC, El Paso Pipeline Partners, L.P., and 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.

Agenda

- Opening Remarks – Will Brown
- Macro Presentation – George Wayne
- Break
- Western Market Insights & Trends
  - CAISO – Dennis Peters
  - NMOGA – Ryan Flynn
  - COGA – Dan Haley
  - Q & A
- Break
- Business Development – Greg Ruben
- Logistics – Tim Dorpinghaus

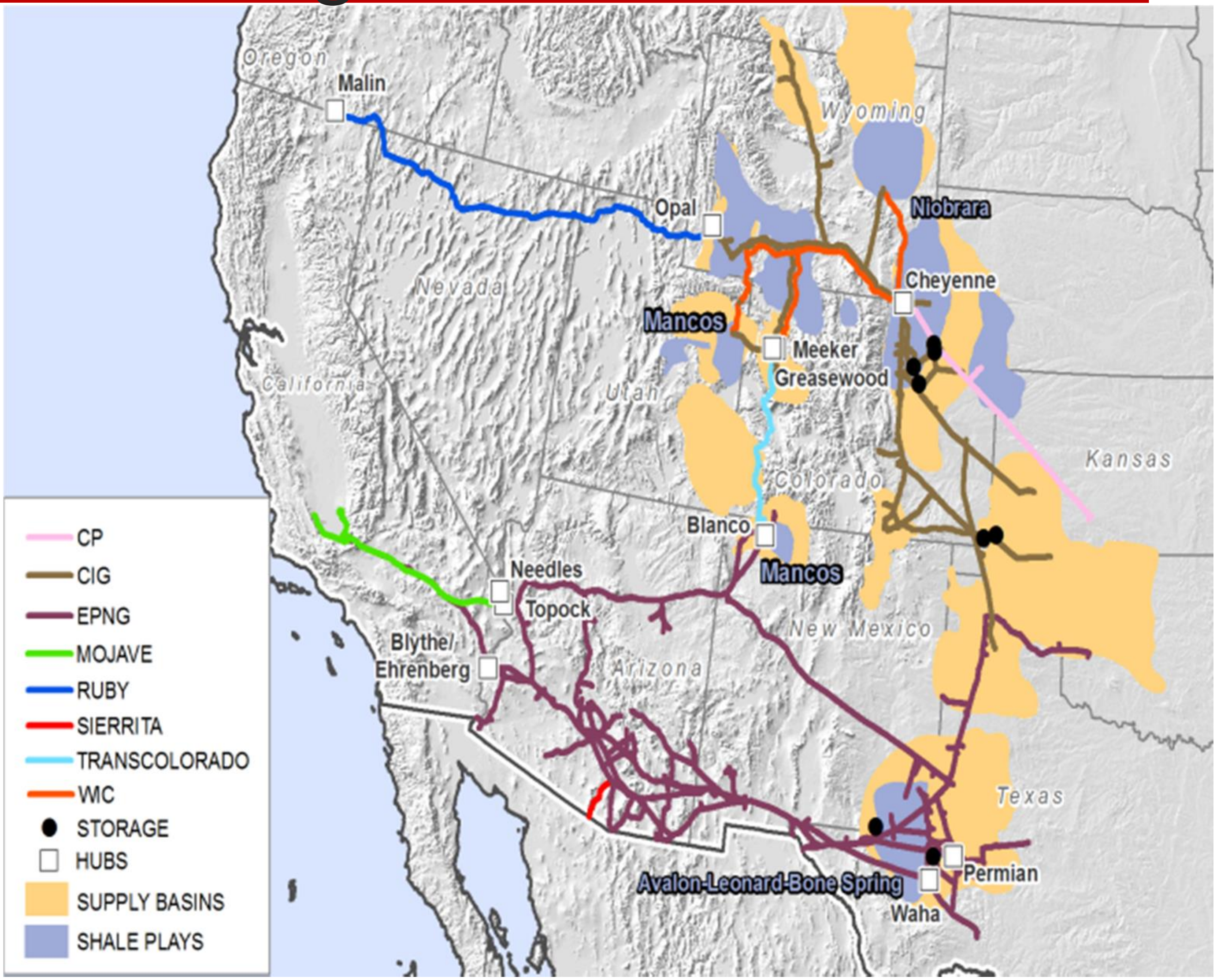
Kinder Morgan Asset Map

- Largest natural gas network in North America
- Largest independent transporter of petroleum products in North America
- Largest transporter of CO2 in North America
- Largest independent terminal operator in North America

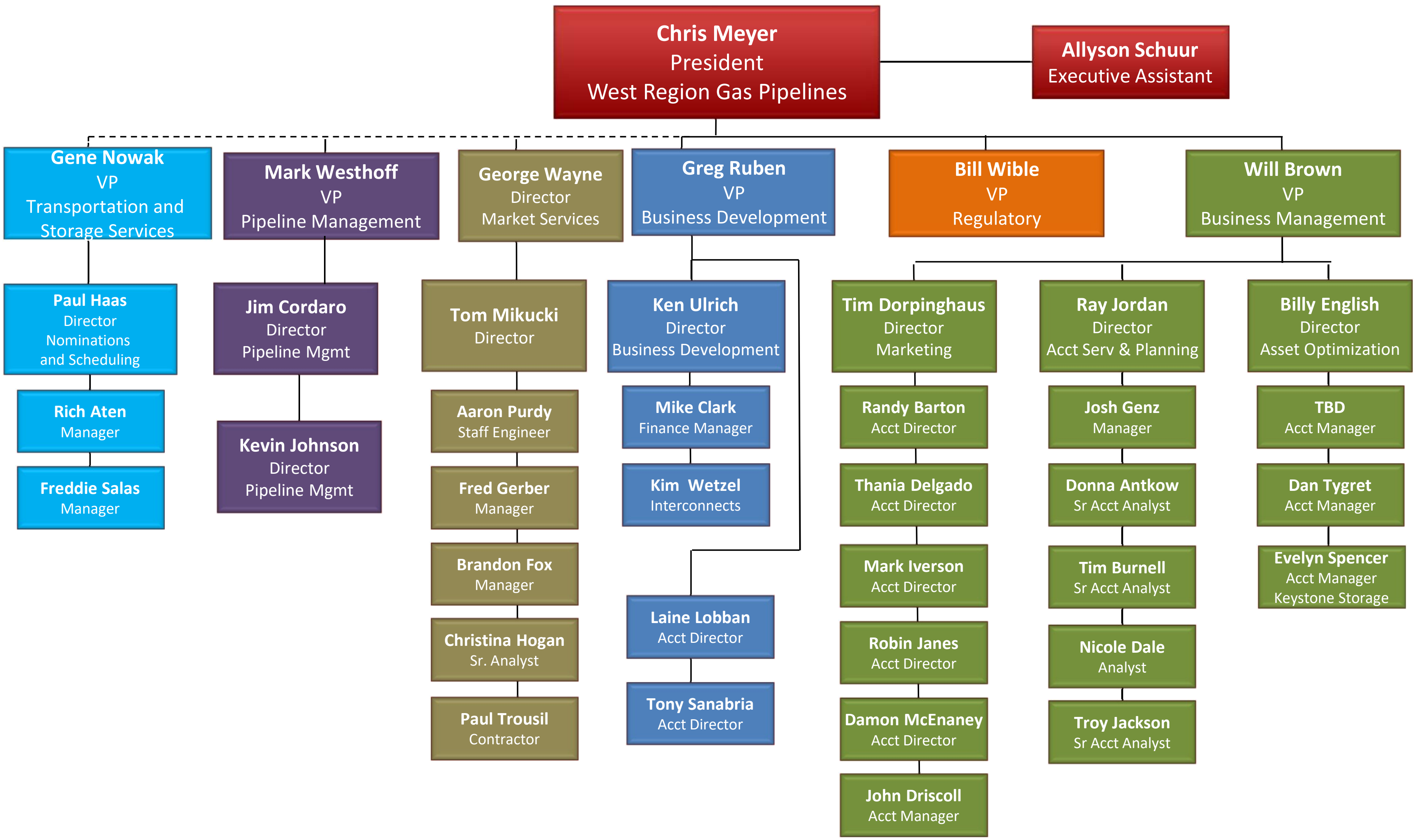


Kinder Morgan West Region

- Supply Access: Access to all Western basins with diverse geology and hydrocarbon mix;
- Storage Demand: Significant storage capacity with superior connectivity
- Power Demand: Renewable energy growth promotes gas-fired power backstop
- Mexico Exports: Leading connectivity for incremental supply to Mexico



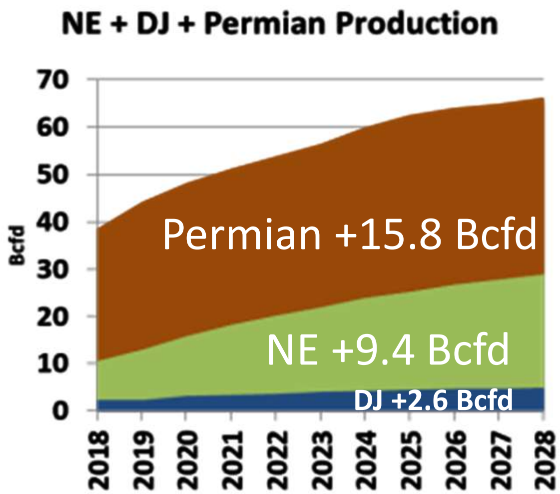
Kinder Morgan West Region Pipeline Team



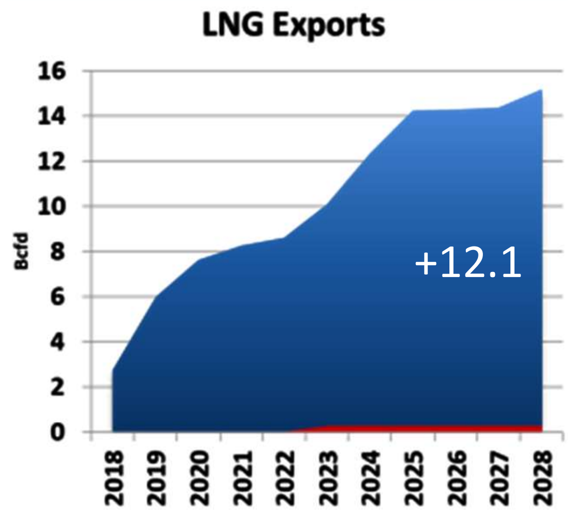
Macroeconomic Overview

George Wayne
Director, Market Services - KMI Pipeline Group

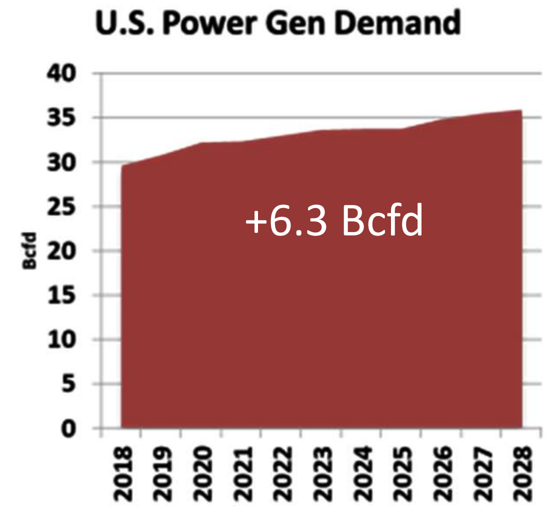
Key Trends



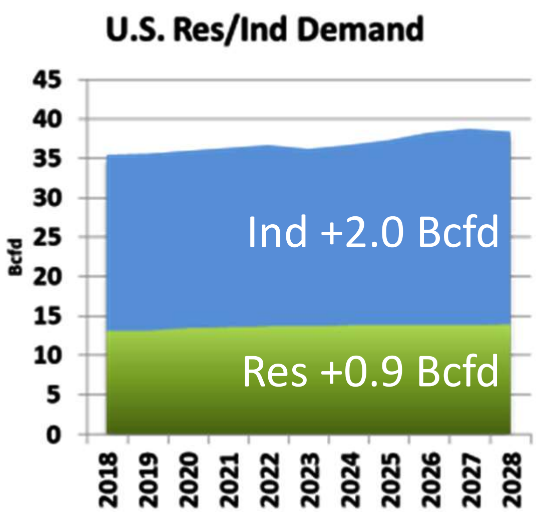
Continued supply increases



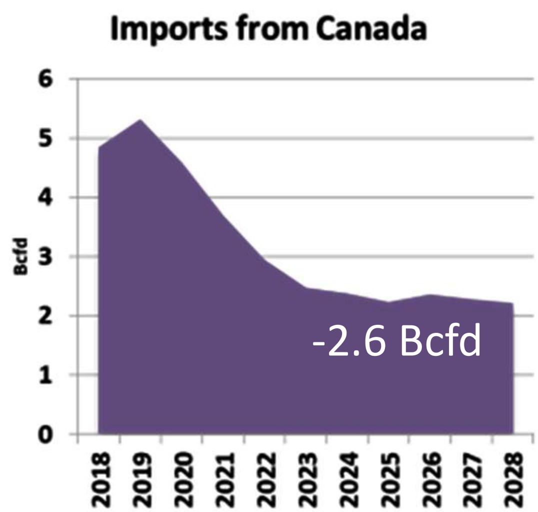
U.S. becomes net exporter



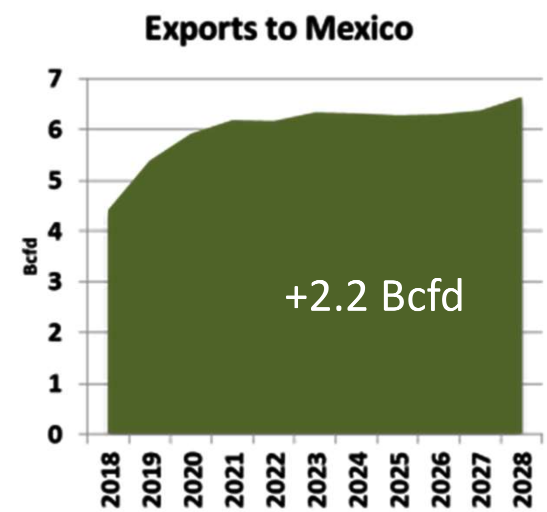
More Gas-fired generation



Industrial demand growth



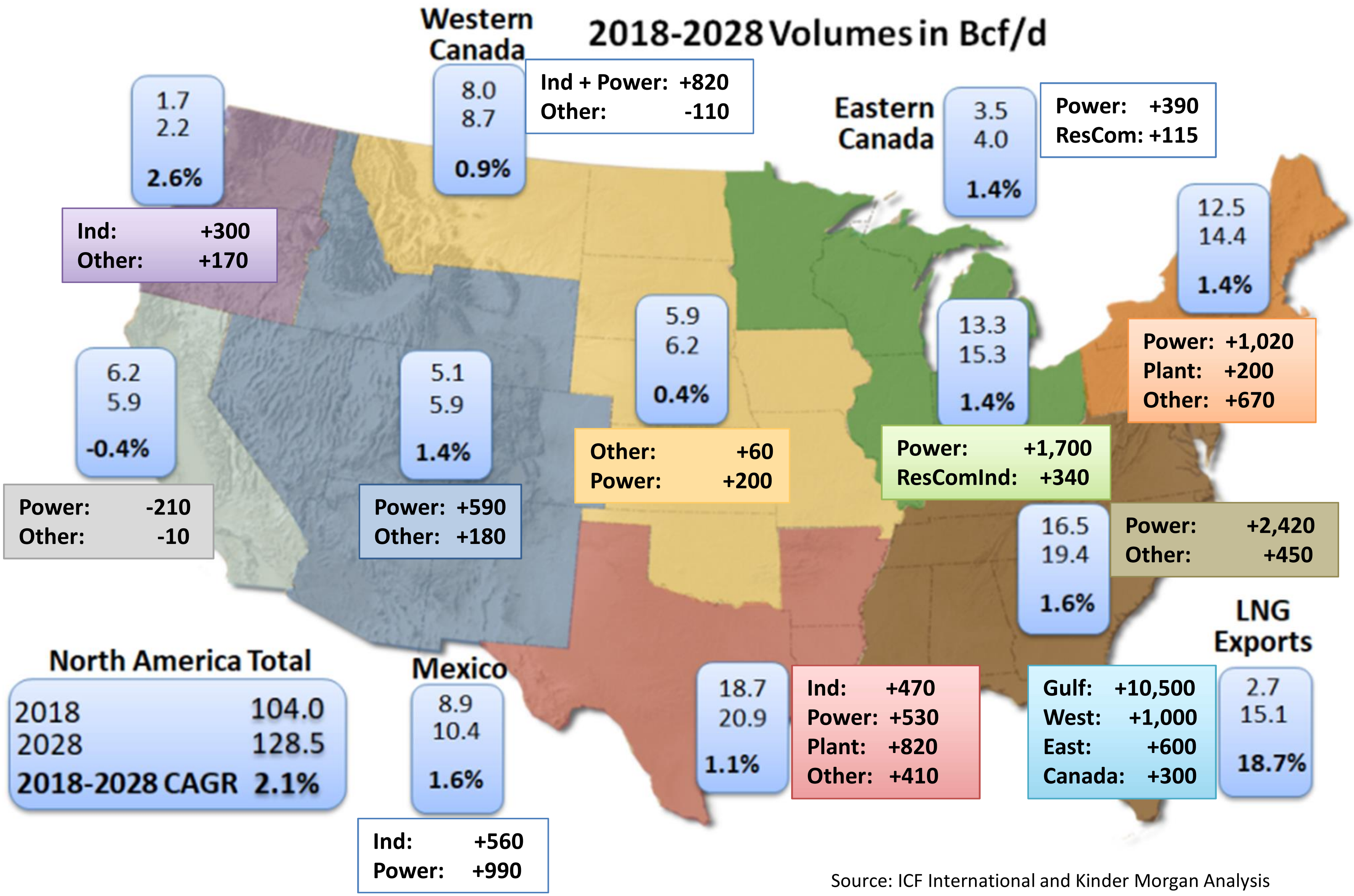
Less Canadian Exports to U.S.



More U.S. Exports to Mexico

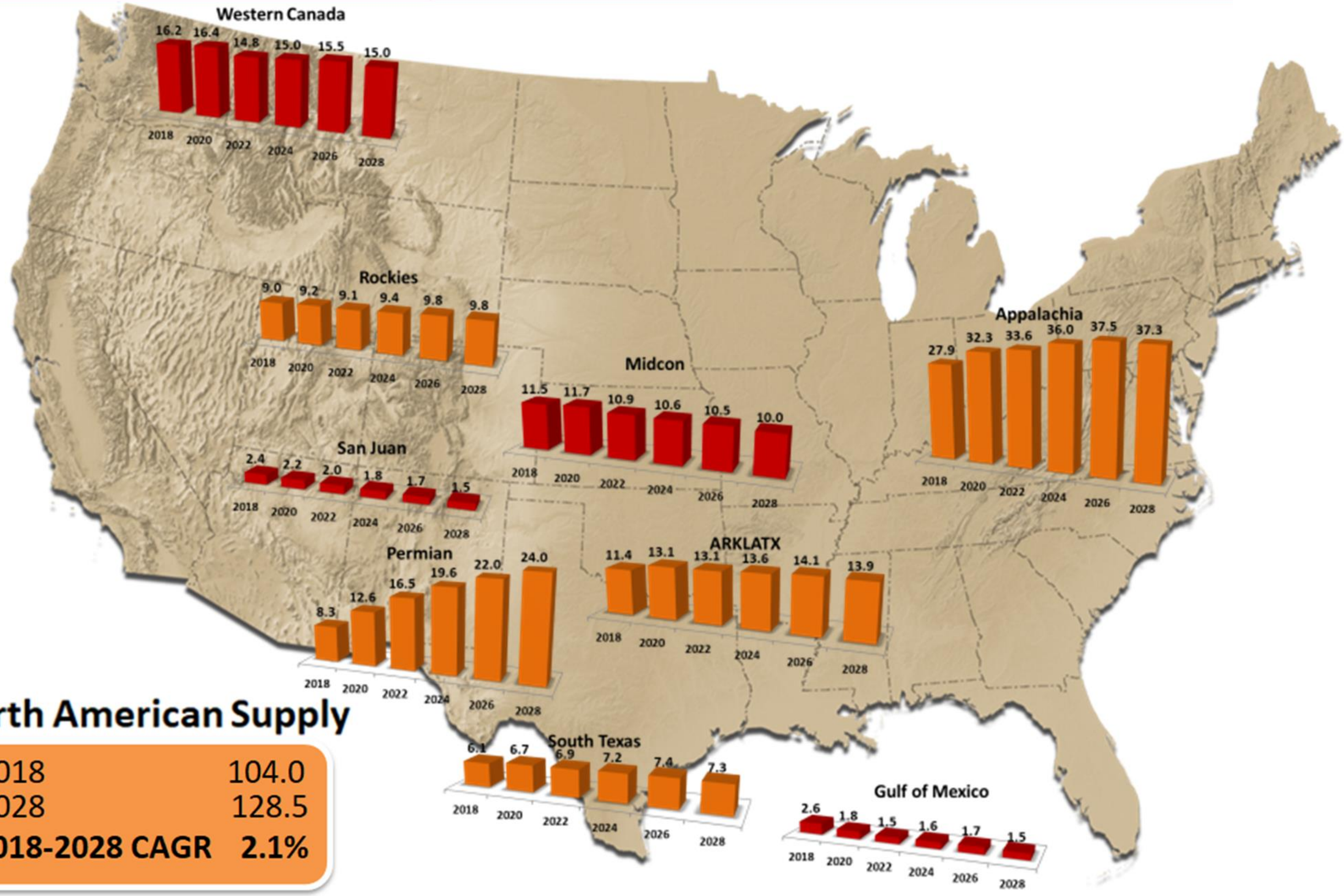
Source: ICF International and Kinder Morgan Analysis

Gas Demand
Including Exports



Source: ICF International and Kinder Morgan Analysis

Supply
Dry Gas



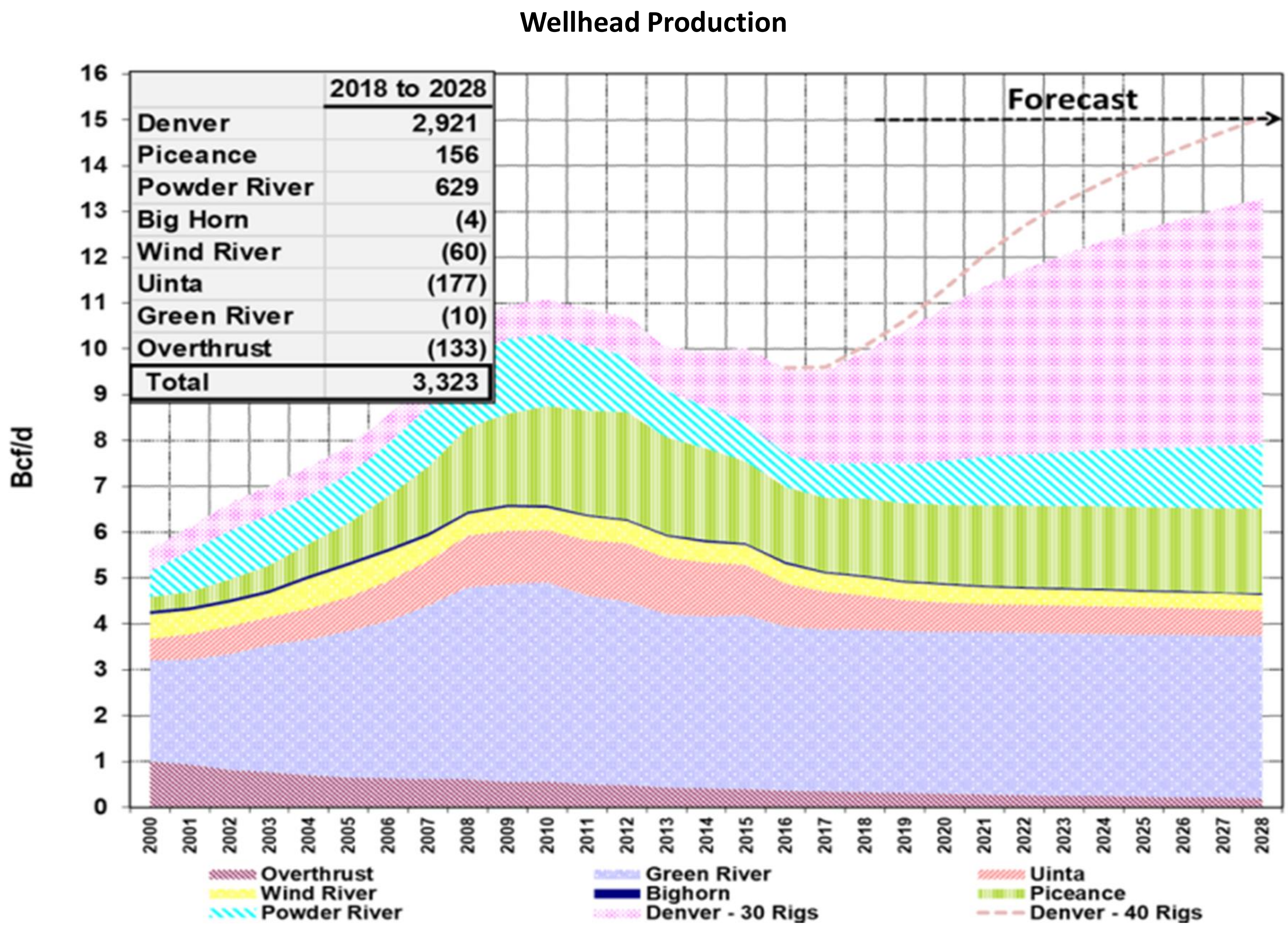
North American Supply

2018	104.0
2028	128.5
2018-2028 CAGR	**2.1%**

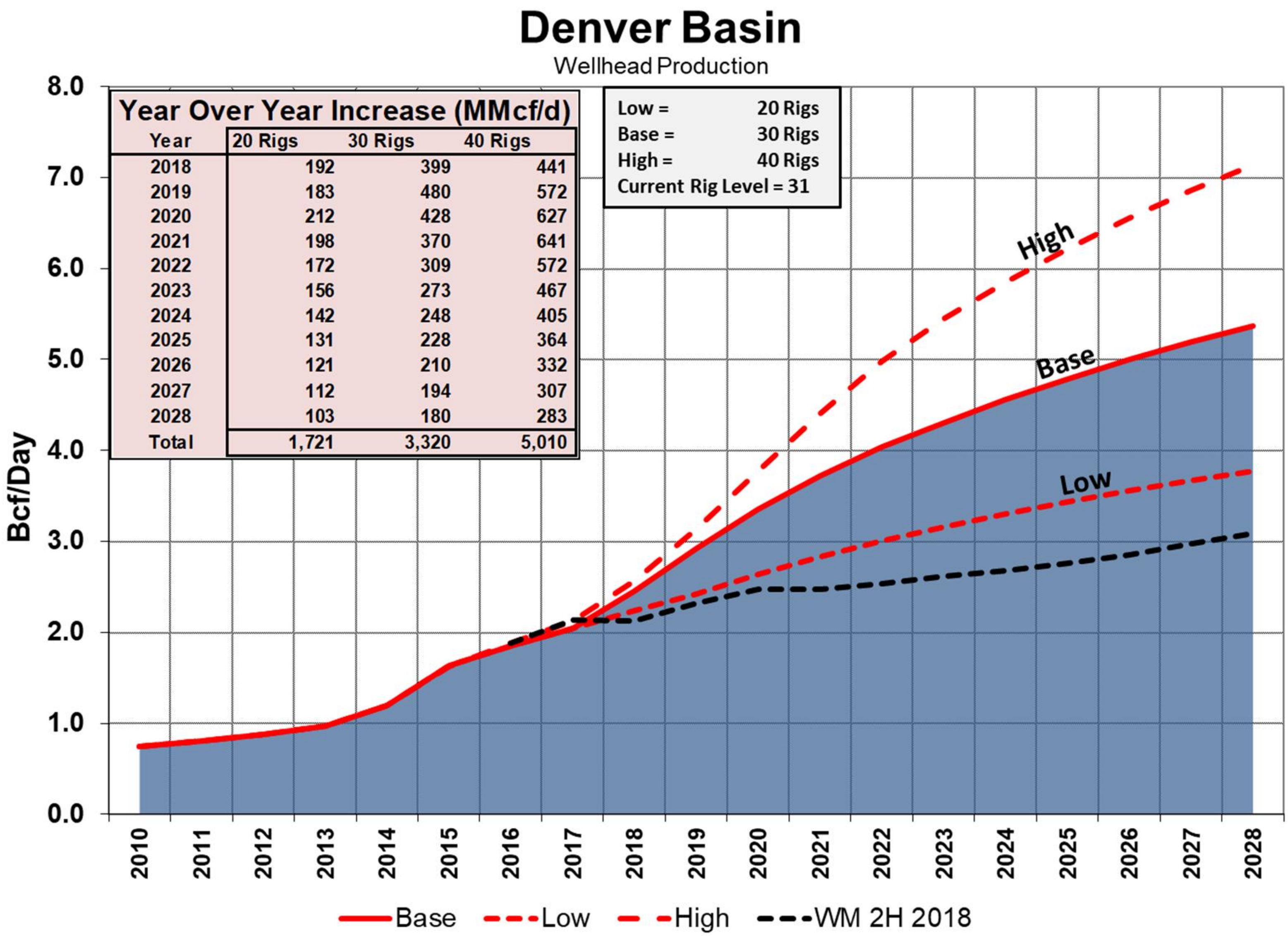
Source: ICF International and Kinder Morgan Analysis

Key Western Supply Update

Rockies Update



DJ Basin



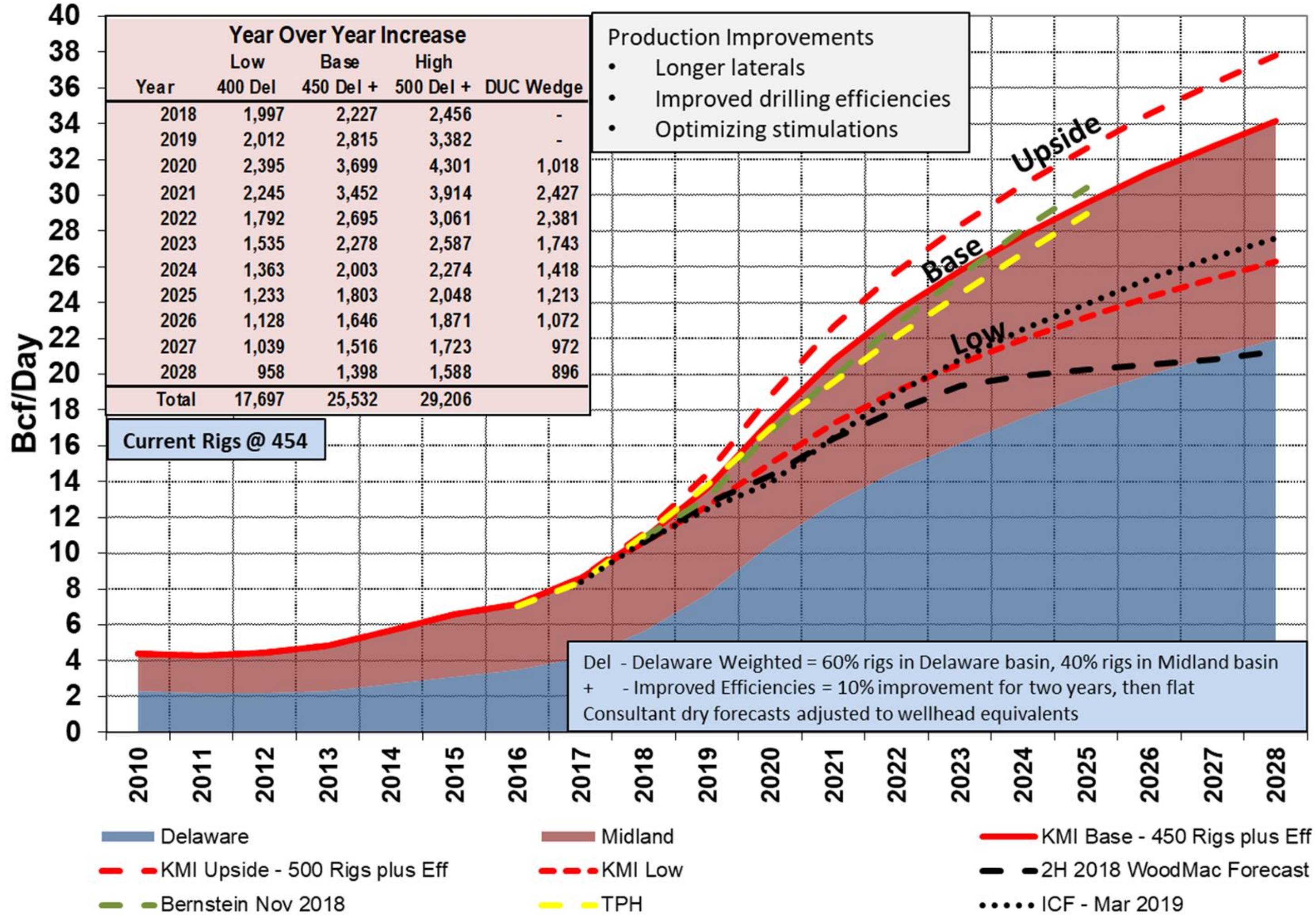
Year	20 Rigs	30 Rigs	40 Rigs
2018	192	399	441
2019	183	480	572
2020	212	428	627
2021	198	370	641
2022	172	309	572
2023	156	273	467
2024	142	248	405
2025	131	228	364
2026	121	210	332
2027	112	194	307
2028	103	180	283
Total	1,721	3,320	5,010

Permian Basin

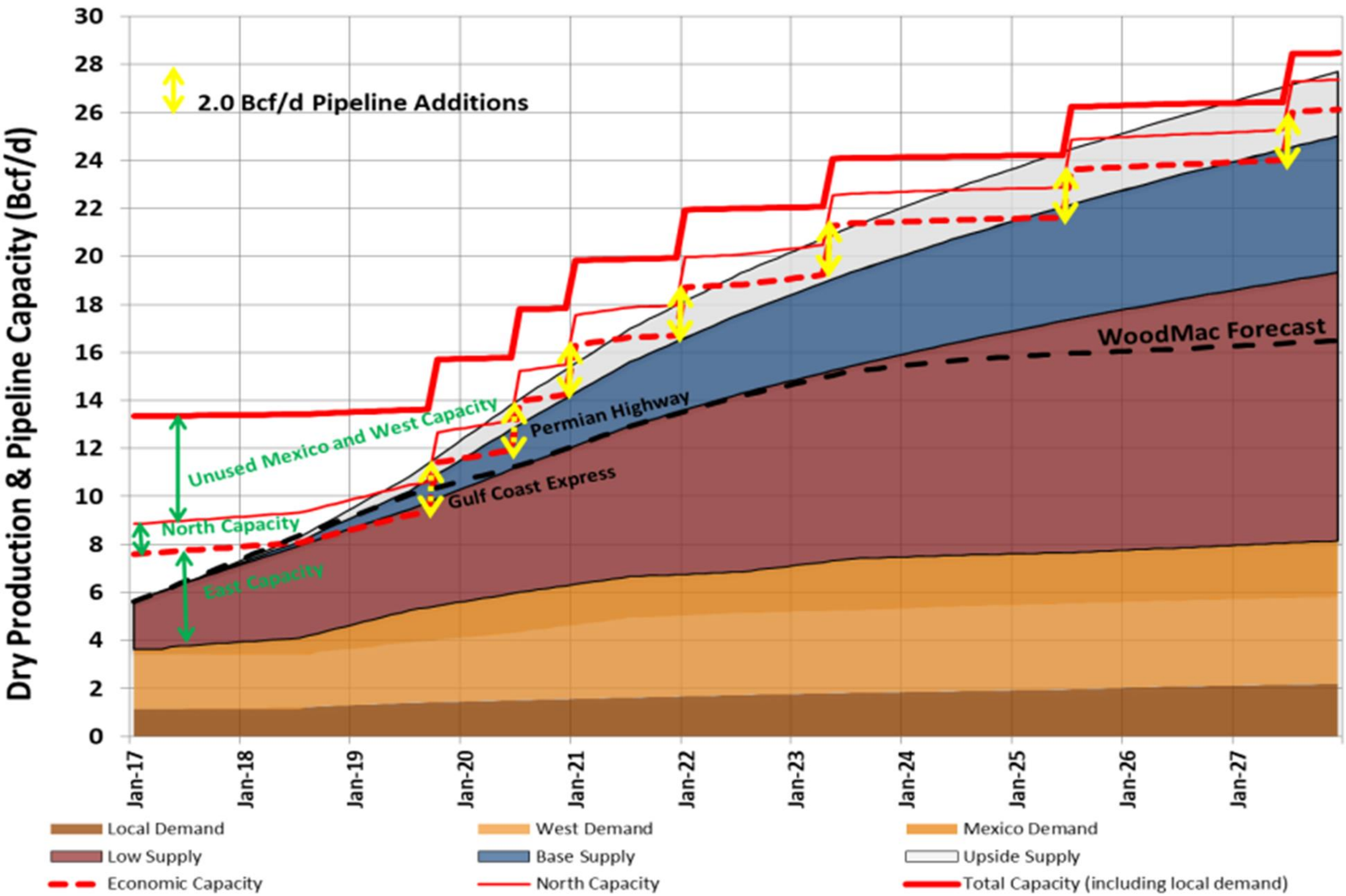
Permian Basin Wellhead Supply Forecast

Year	Low 400 Del	Base 450 Del +	High 500 Del +	DUC Wedge
2018	1,997	2,227	2,456	-
2019	2,012	2,815	3,382	-
2020	2,395	3,699	4,301	1,018
2021	2,245	3,452	3,914	2,427
2022	1,792	2,695	3,061	2,381
2023	1,535	2,278	2,587	1,743
2024	1,363	2,003	2,274	1,418
2025	1,233	1,803	2,048	1,213
2026	1,128	1,646	1,871	1,072
2027	1,039	1,516	1,723	972
2028	958	1,398	1,588	896
Total	17,697	25,532	29,206	

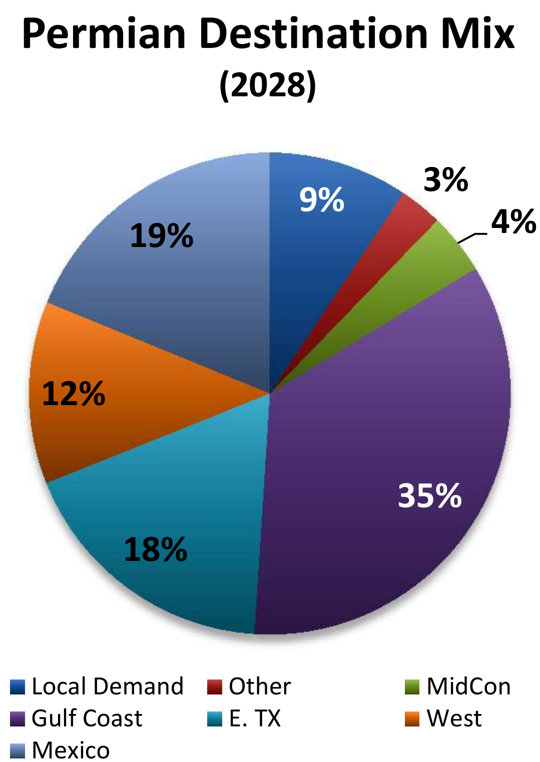
Year Over Year Increase

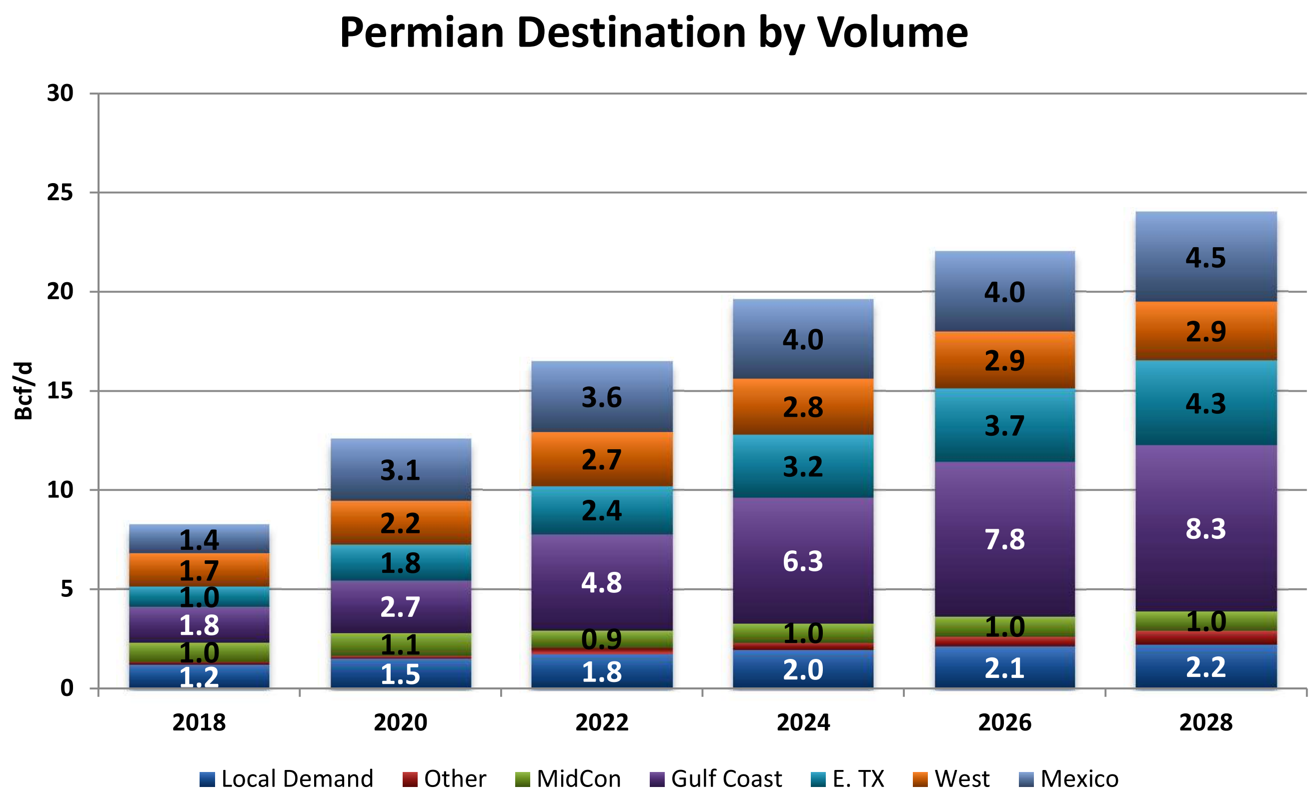


Production Forecast Supports a 3rd Pipe



Permian Gas Supply Destination



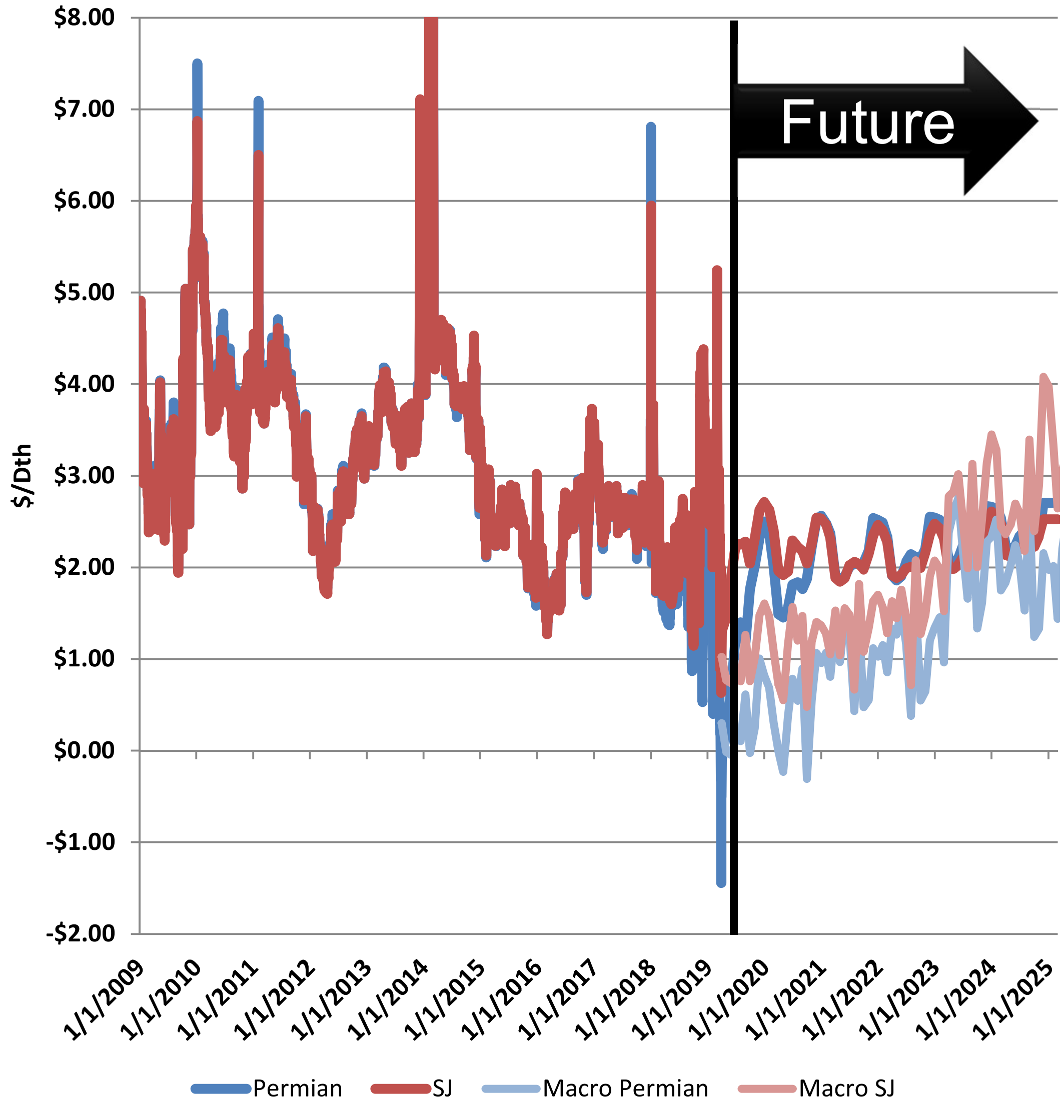


E. TX and Gulf Coast are the key growth destinations for Permian gas

West + Mexico are the highest value destinations for Permian supplies

Midcontinent is the least favorable destination requiring Permian prices to be low enough to compete with Rockies, MidCon, Canada, and Marcellus

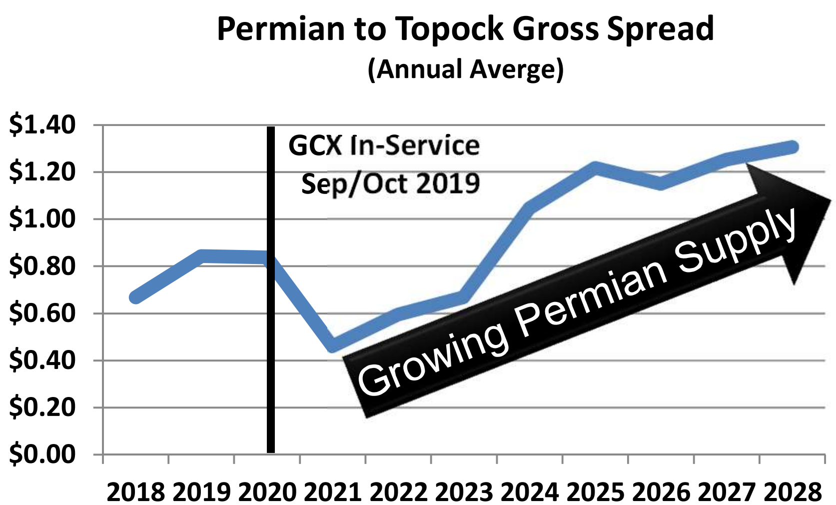
San Juan – Permian Prices

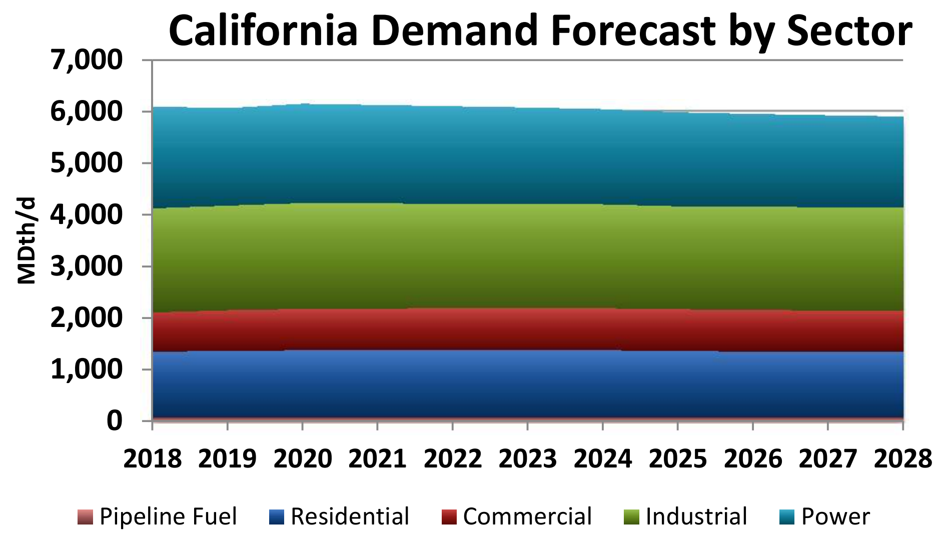


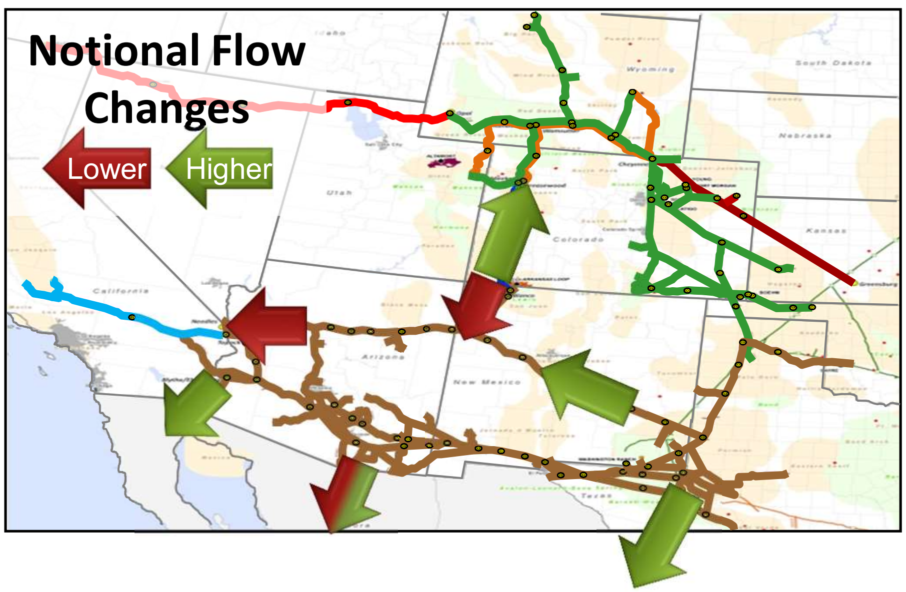
Historically, Permian and San Juan prices are highly correlated. Recent supply growth has constrained capacity out of the Permian and caused Permian to trade well below San Juan

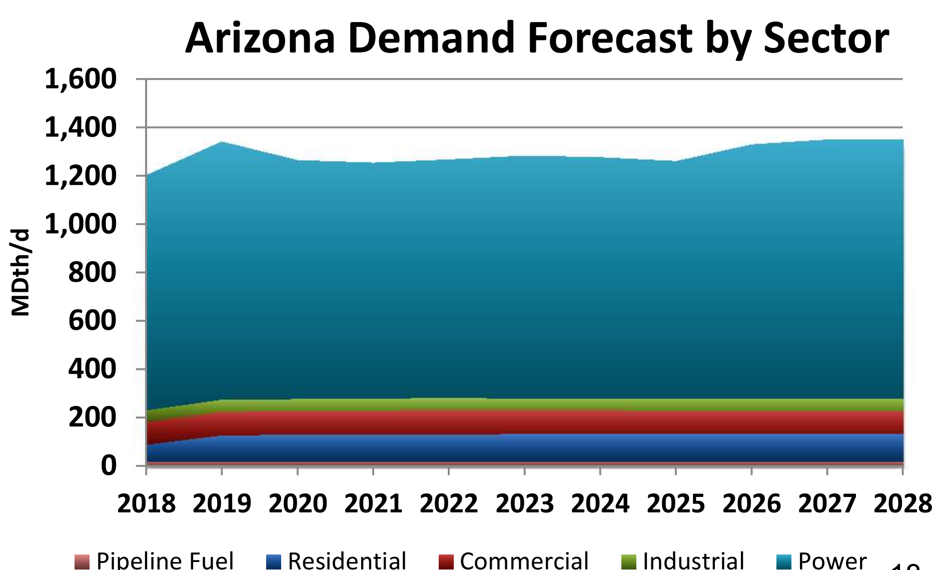
Permian and San Juan prices will remain correlated for the foreseeable future and the growth in Permian supply will continue to keep Rockies and San Juan prices low

Desert Southwest

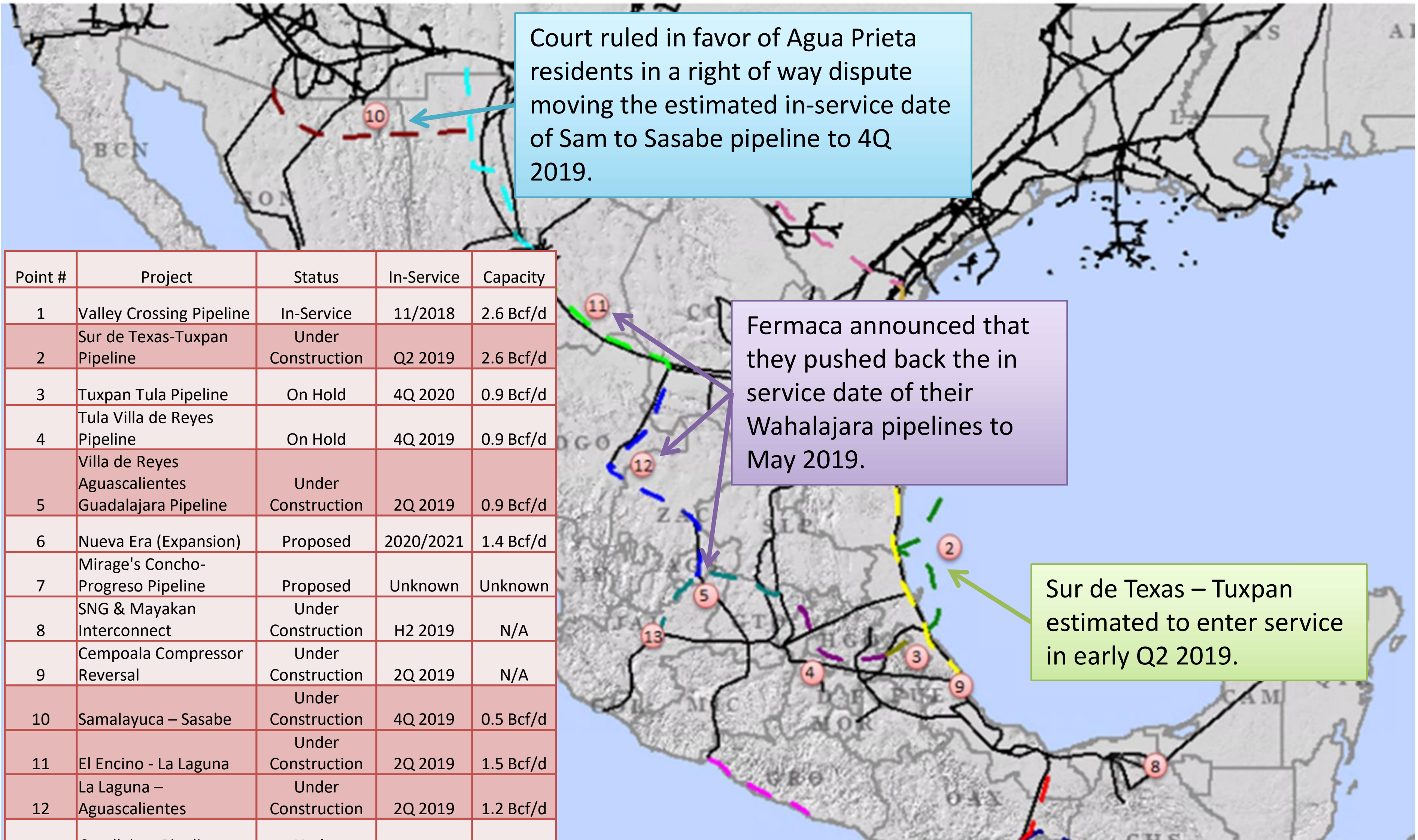








Mexican Pipeline Update



Point #	Project	Status	In-Service	Capacity
1	Valley Crossing Pipeline	In-Service	11/2018	2.6 Bcf/d
2	Sur de Texas-Tuxpan Pipeline	Under Construction	Q2 2019	2.6 Bcf/d
3	Tuxpan Tula Pipeline	On Hold	4Q 2020	0.9 Bcf/d
4	Tula Villa de Reyes Pipeline	On Hold	4Q 2019	0.9 Bcf/d
5	Villa de Reyes Aguascalientes Guadalajara Pipeline	Under Construction	2Q 2019	0.9 Bcf/d
6	Nueva Era (Expansion)	Proposed	2020/2021	1.4 Bcf/d
7	Mirage's Concho-Progreso Pipeline	Proposed	Unknown	Unknown
8	SNG & Mayakan Interconnect	Under Construction	H2 2019	N/A
9	Cempoala Compressor Reversal	Under Construction	2Q 2019	N/A
10	Samalayuca – Sasabe	Under Construction	4Q 2019	0.5 Bcf/d
11	El Encino - La Laguna	Under Construction	2Q 2019	1.5 Bcf/d
12	La Laguna – Aguascalientes	Under Construction	2Q 2019	1.2 Bcf/d
13	Guadlajara Pipeline (Make Bi-Directional)	Under Construction	2019	N/A

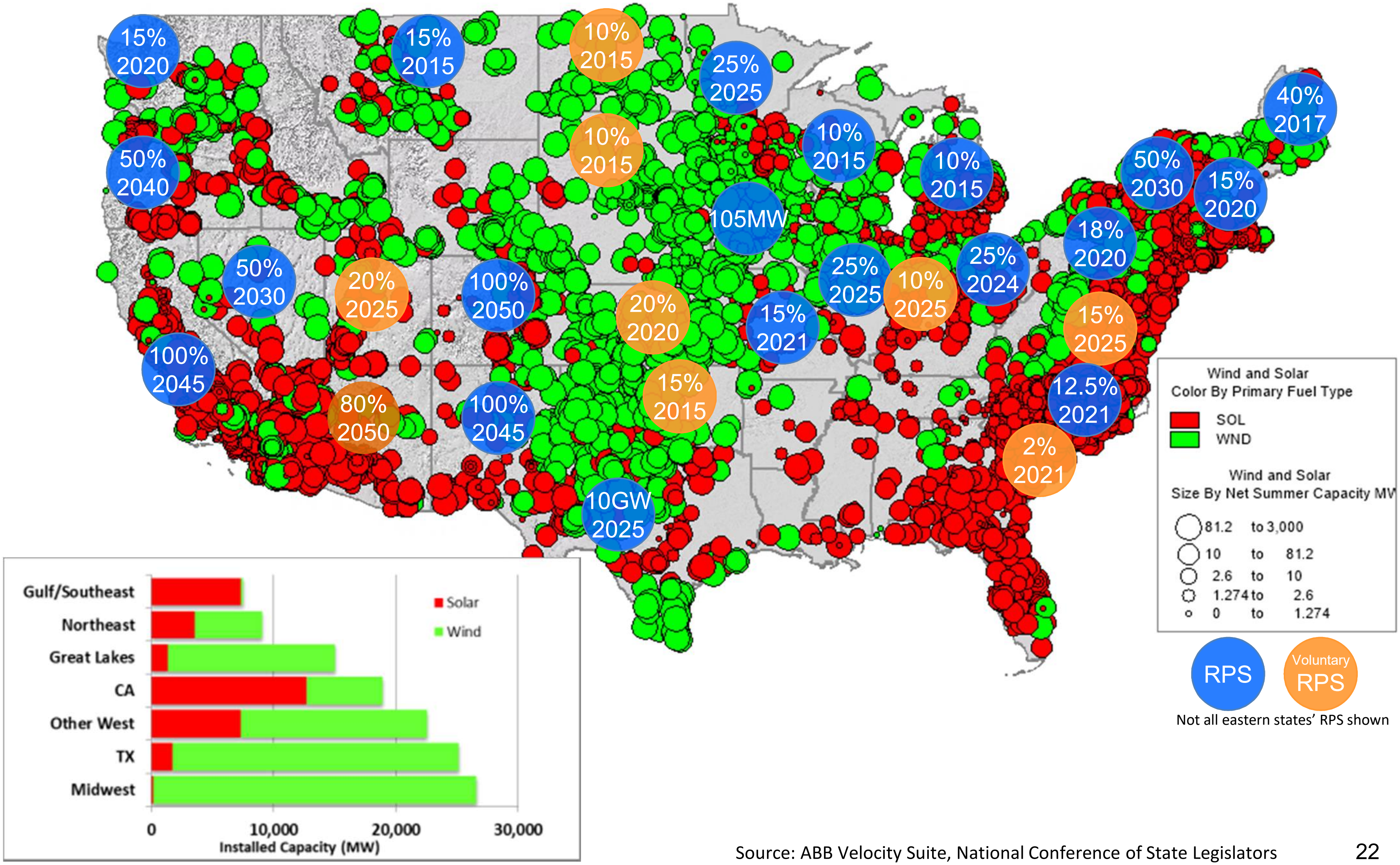
Clean Energy Impacts

Regulatory Update

- National Trends
  - Investment Tax Credit (ITC) Phase-out
    - Solar phases out in 2022
    - Large wind phases out in 2019
  - Production Tax Credit (PTC) Phase-out
    - 2019 is the last year for wind PTC
  - FERC considering Grid Resiliency Rules Supporting Coal-Fired and Nuclear Generation
- Regional (West) Trends
  - Expanding “Clean Energy“ Targets
    - CA approved SB100 revising 2030 RPS to 40% and 100% goal by 2045
    - NM approved SB489 (100% clean energy by 2045) but rejected SB459 (fracking moratorium)
    - NV 50% RPS by 2030 ballot initiative passed
    - NM & CO’s Xcel Energy to reach 100% carbon-free electricity by 2040
    - Idaho Power targeting 100% clean energy by 2045
    - ACC (AZ Modernization Plan) proposed 80% clean energy by 2050 target

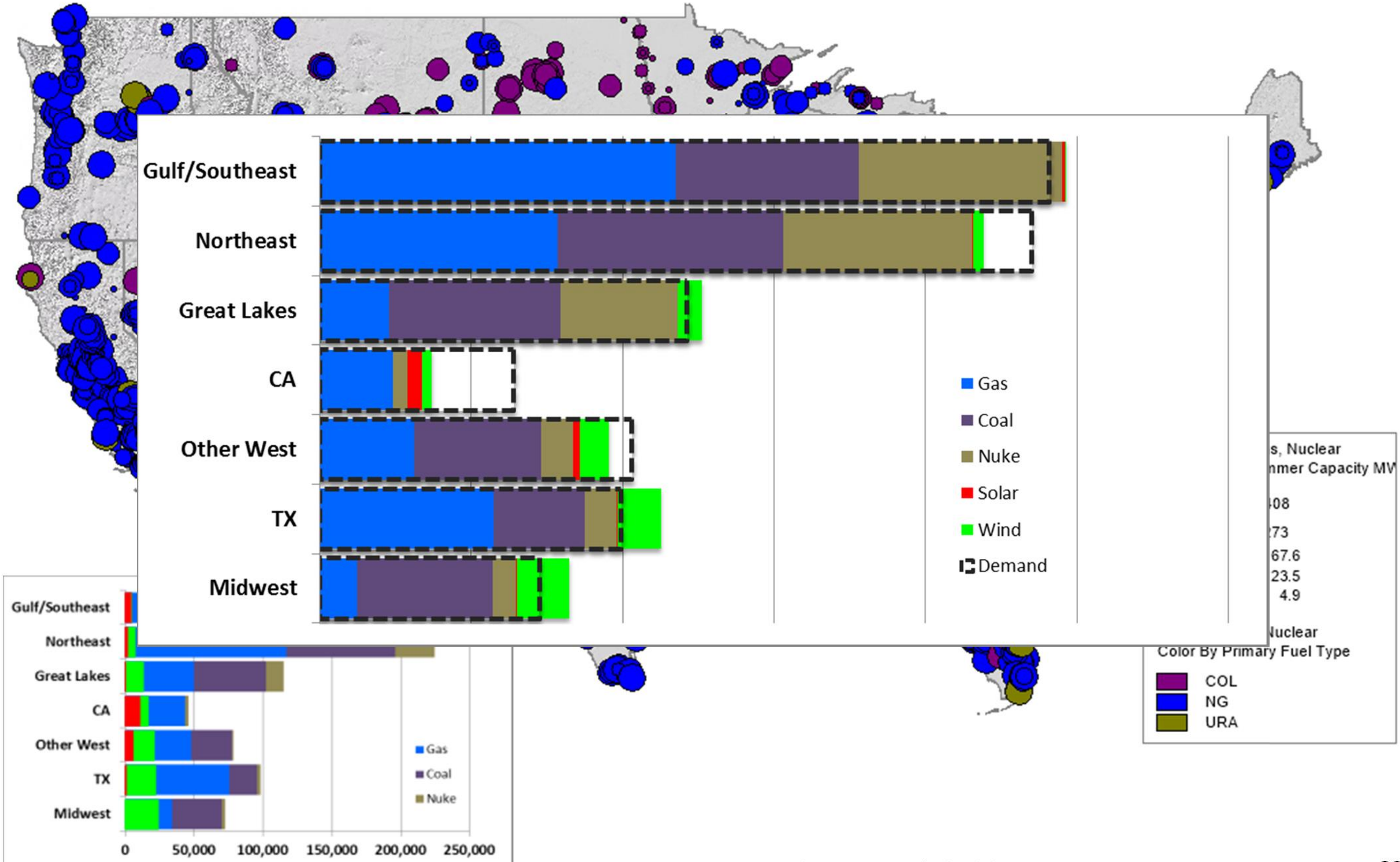
Uncertainty in federal and state regulatory landscape slowing investment, gas demand growth

Wind and Solar Generating Capacity



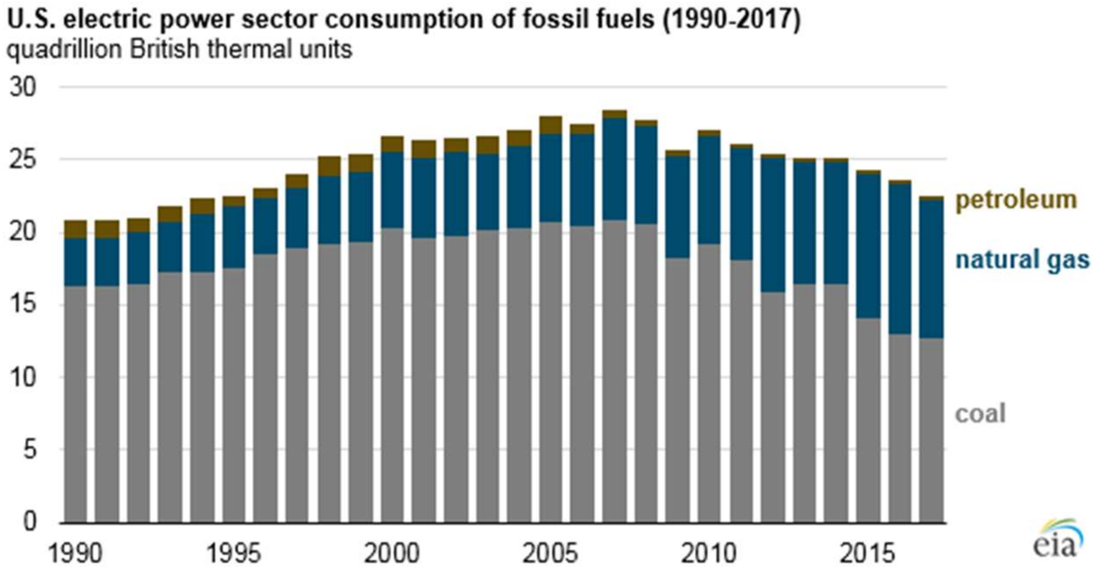
Source: ABB Velocity Suite, National Conference of State Legislators

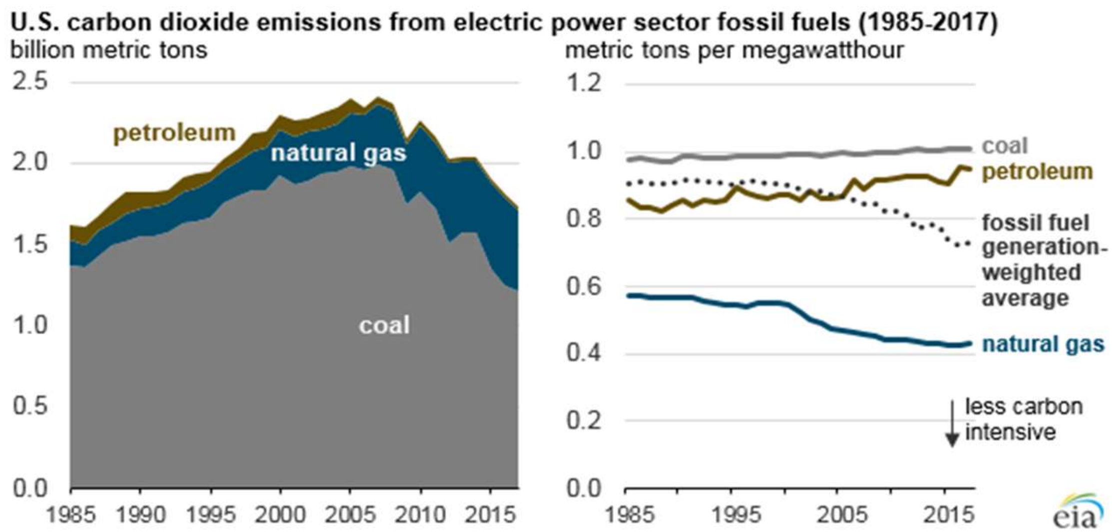
Gas, Coal, Nuke Generating Capacity



Source: ABB Velocity Suite, EIA

US Electric Power Sector Emissions Lowest Since 1987





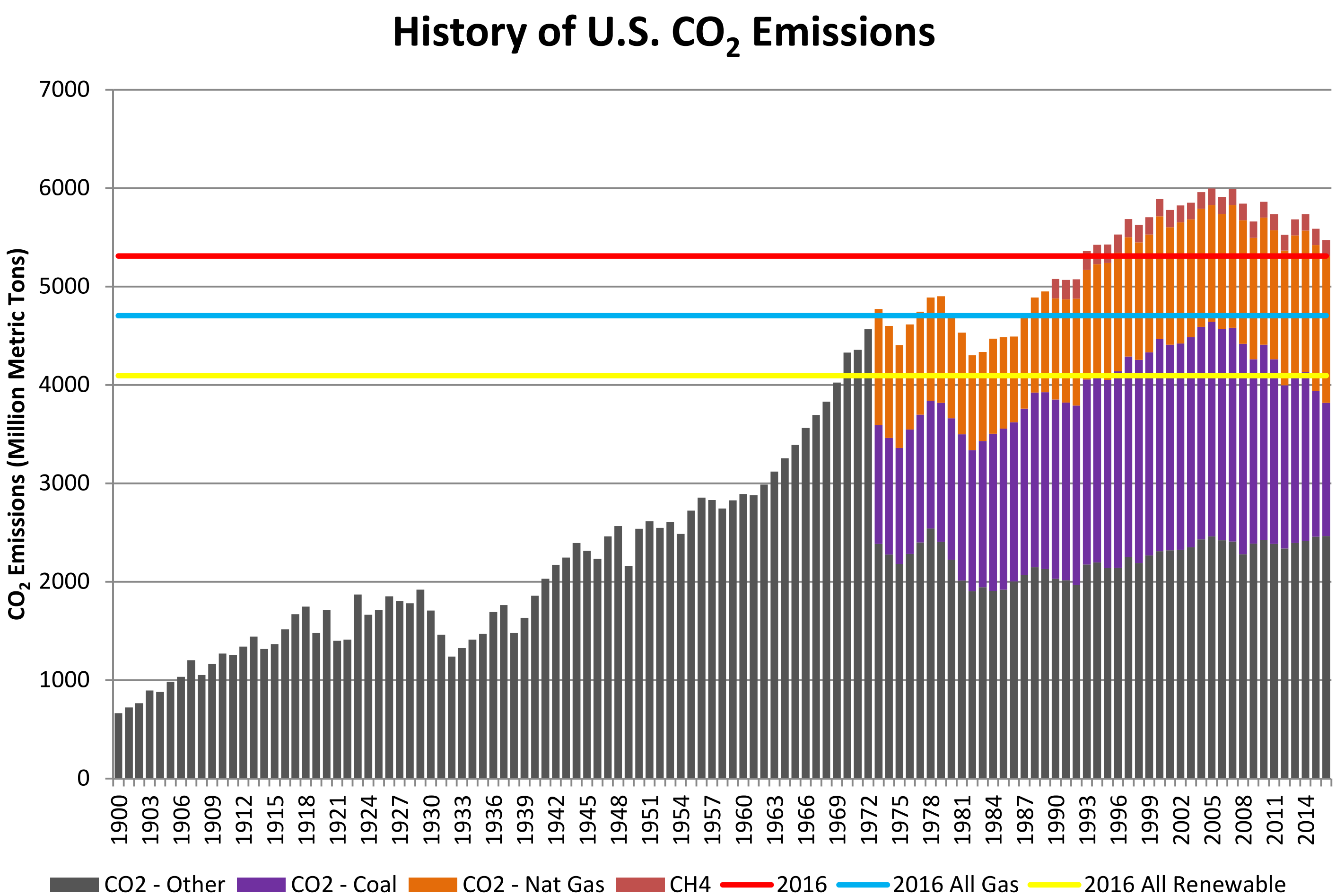
Coal combustion is much more carbon intensive than natural gas combustion, CO2 emissions from coal were more than double those from natural gas in 2017.

Technological advances in O&G production have lowered the cost of fossil fuels, which has altered the consumption of coal toward more clean and efficient burning natural gas. Hence, carbon dioxide (CO2) emissions from the electric power sector in 2017 were the lowest since 1987

The switch to natural gas, rather than growth in renewables, accounted for the majority of decline in emissions.

Source: US EIA, Monthly Energy Review, May 2018

CO_2 Emissions



Greater natural gas – fired generation has helped the U.S. reduce CO_2 emissions

Replacing all remaining coal generation with natural gas generation would reduce U.S. CO_2 emissions to pre-1973 levels

Replacing all remaining coal generation with renewables reduces emissions to pre-1969 levels

Reductions in coal-fired generation have been largely responsible for reductions in CO_2 emissions.

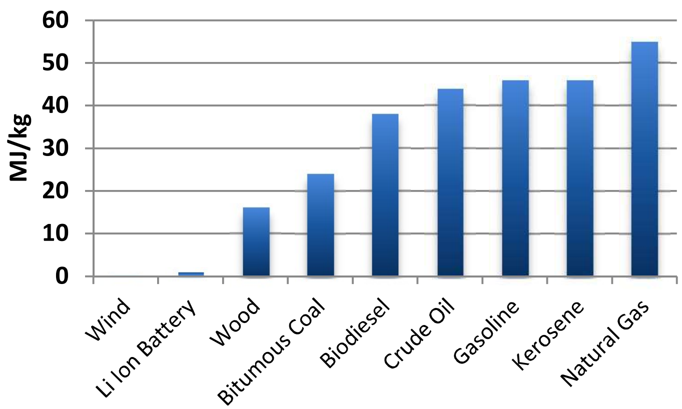
CO_2 emissions grew steadily though 2006 but have been falling as a result of the shale gas revolution and displacement and retirement of coal generation.

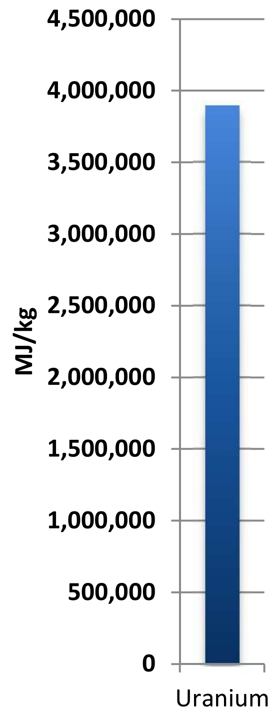
Source: EIA, EPA, Oak Ridge National Laboratory

Comparative Energy Densities

Energy Density

Source	MJ/kg
Wind	0.00006
Li Ion Battery	1
Wood	16
Bitumous Coal	24
Biodiesel	38
Crude Oil	44
Gasoline	46
Kerosene	46
Natural Gas	55
Uranium	3,900,000

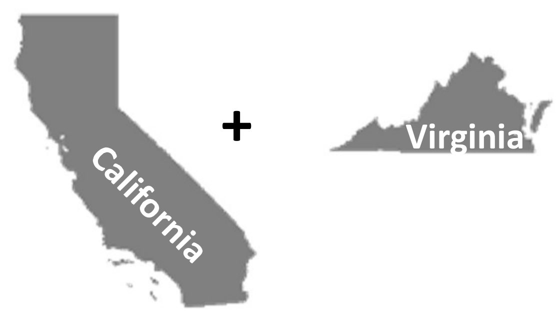




Energy Equivalent Land Area vs Typical Natural Gas Storage Facility

Solar =

Wind =



Natural Gas=

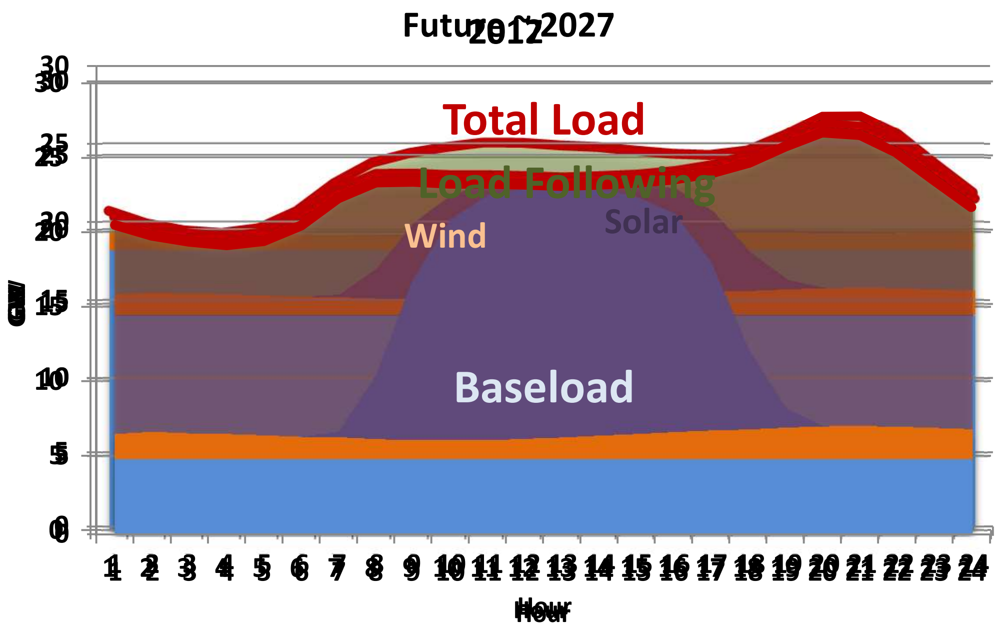
3

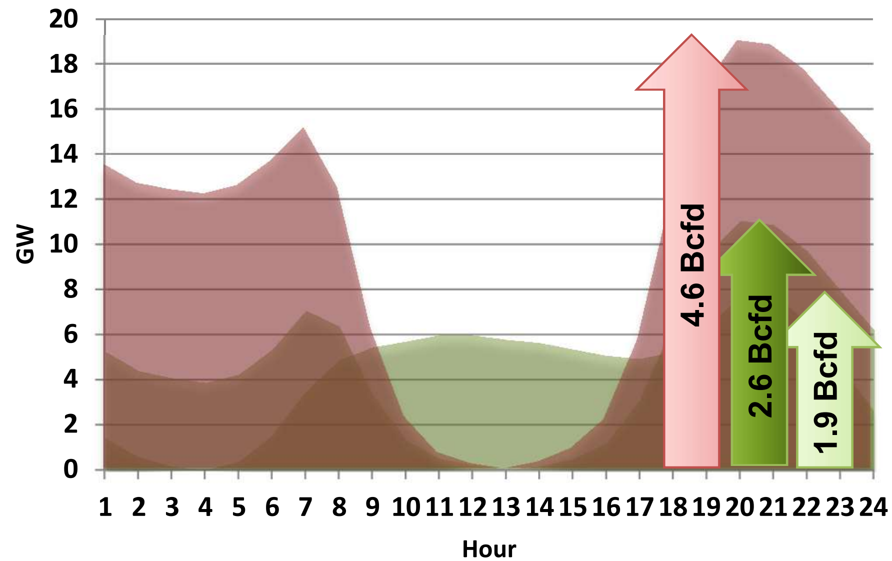
Note: Land Area for an equivalent productive energy capacity of a 1,000 Acre 10 Bcf Natural Gas Storage facility

Source: CHBC 2015; NREL 2013b; FCH Jun 2015

Renewable Impacts to Natural Gas

As renewable generation increases, pipeline deliverability becomes increasingly important to natural gas-fired generation for load following



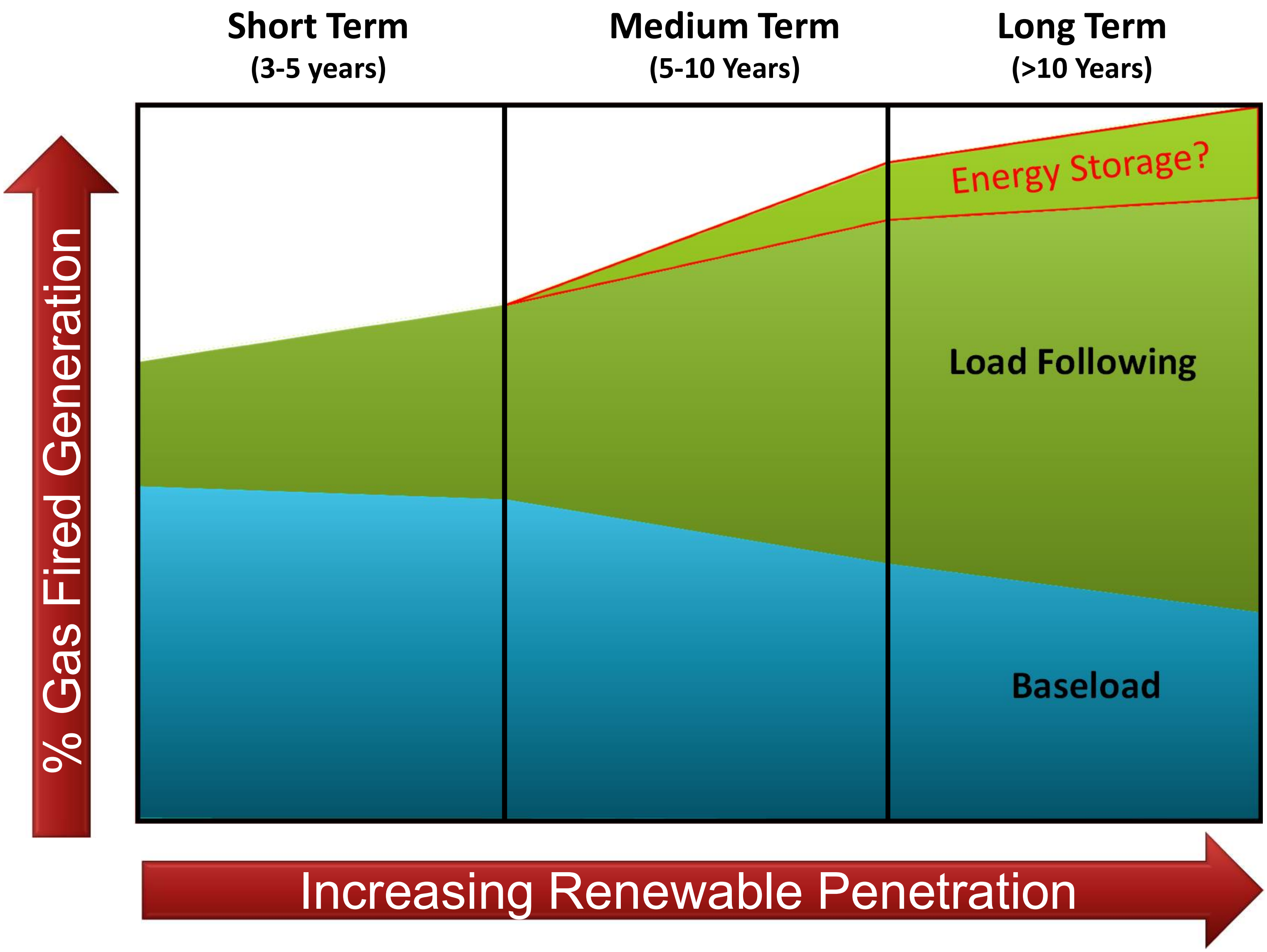


Reaching levels of renewable penetration > 50% requires excess renewable capacity, large transmission builds, AND significant energy storage capacity

Higher deliverability requires more capacity reservation (No-Notice, Hourly Services), more reliance on pipeline linepack, and/or market area storage

Future of Natural Gas In Power Generation

Impact of Renewable Trends



Renewables push out baseload generation (Coal, Nuke, Natural Gas).

However, this increases the requirement for more a more flexible resource (Load Following) such as natural gas generation.

As Energy Storage cost fall (e.g. Batteries) they will erode the need for natural gas load following

In Summary…

- Renewables are impacting gross natural gas demand and deliverability needs
  - As renewable penetration increases, natural gas pipeline capacity becomes increasingly valuable
  - Storage and pipeline constraints in California and DSW may exacerbate the trend
- Utilities and Power Generators must assess their natural gas deliverability needs
  - Will existing contract levels be enough as renewables grow?
  - What is the risk exposure with insufficient deliverability?

Additional gas infrastructure (market area storage) and natural gas pipeline services are needed

Break

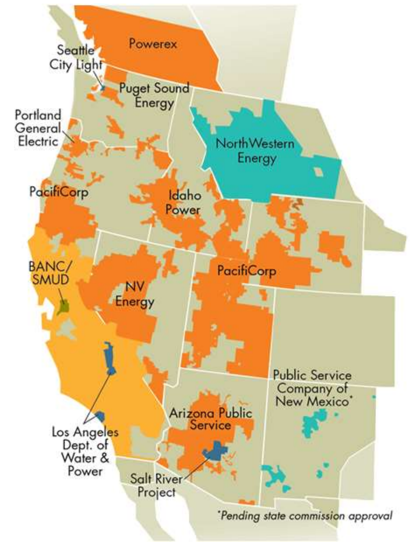
Evolving Role and Challenges for Integrating Natural Gas Infrastructure and Services with Renewables

Kinder-Morgan West Region Gas Pipeline Customer Meeting - April 29-30, 2019

Dennis Peters – External Affairs Manager

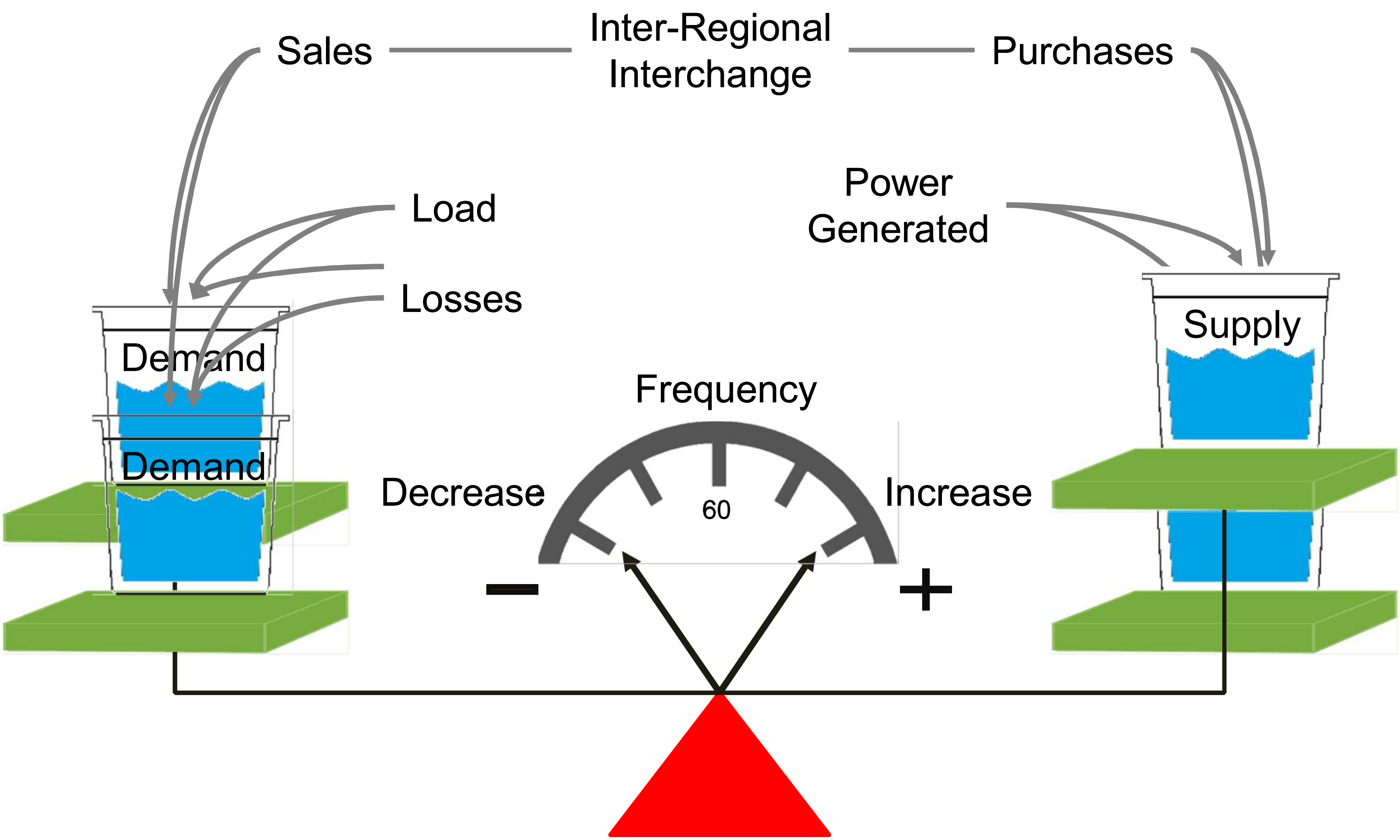
The California Independent System Operator (CAISO)

- **Nonprofit** public benefit corporation
  - ➢created by CA statute
  - ➢regulated by the Federal Energy Regulatory Commission (FERC)
  - ➢not a government agency
- **One of 38** balancing authorities in the western interconnection
- **50,270 MW** record peak demand (7/24/2006)
- **Serving 80%** of CA & bit of NV
- **31,000 daily** market transactions
- **$9.3 billion** market
- **30 million** people served



California ISO

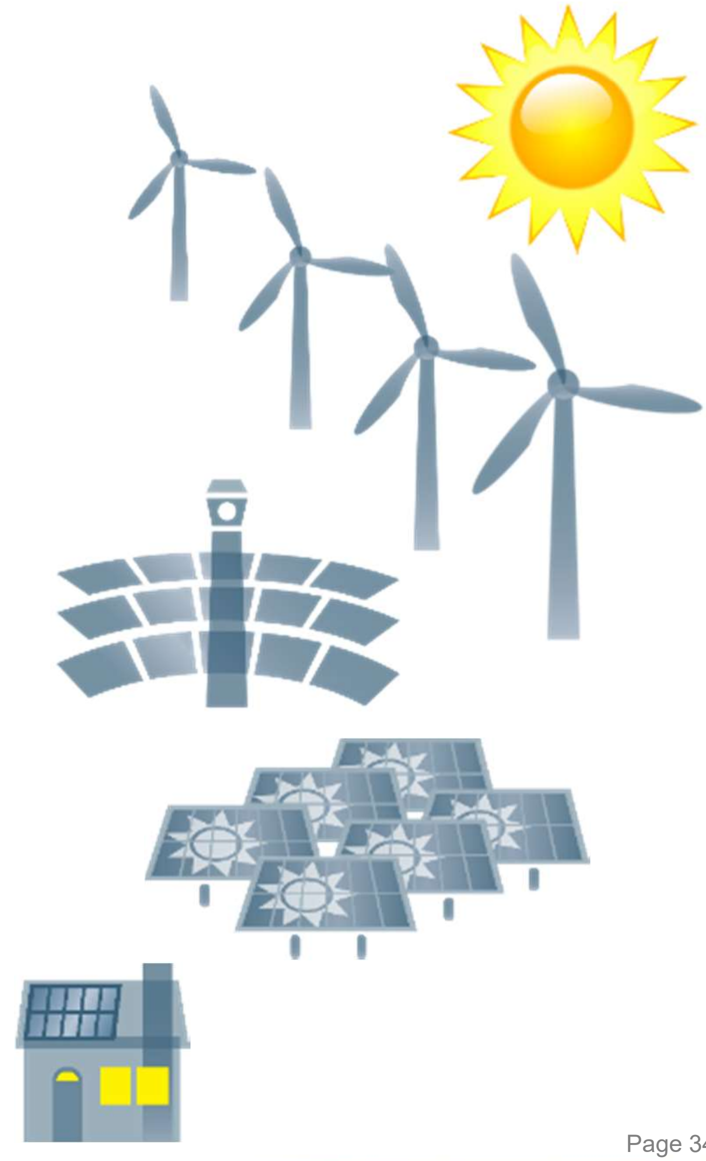
The balancing of supply and demand



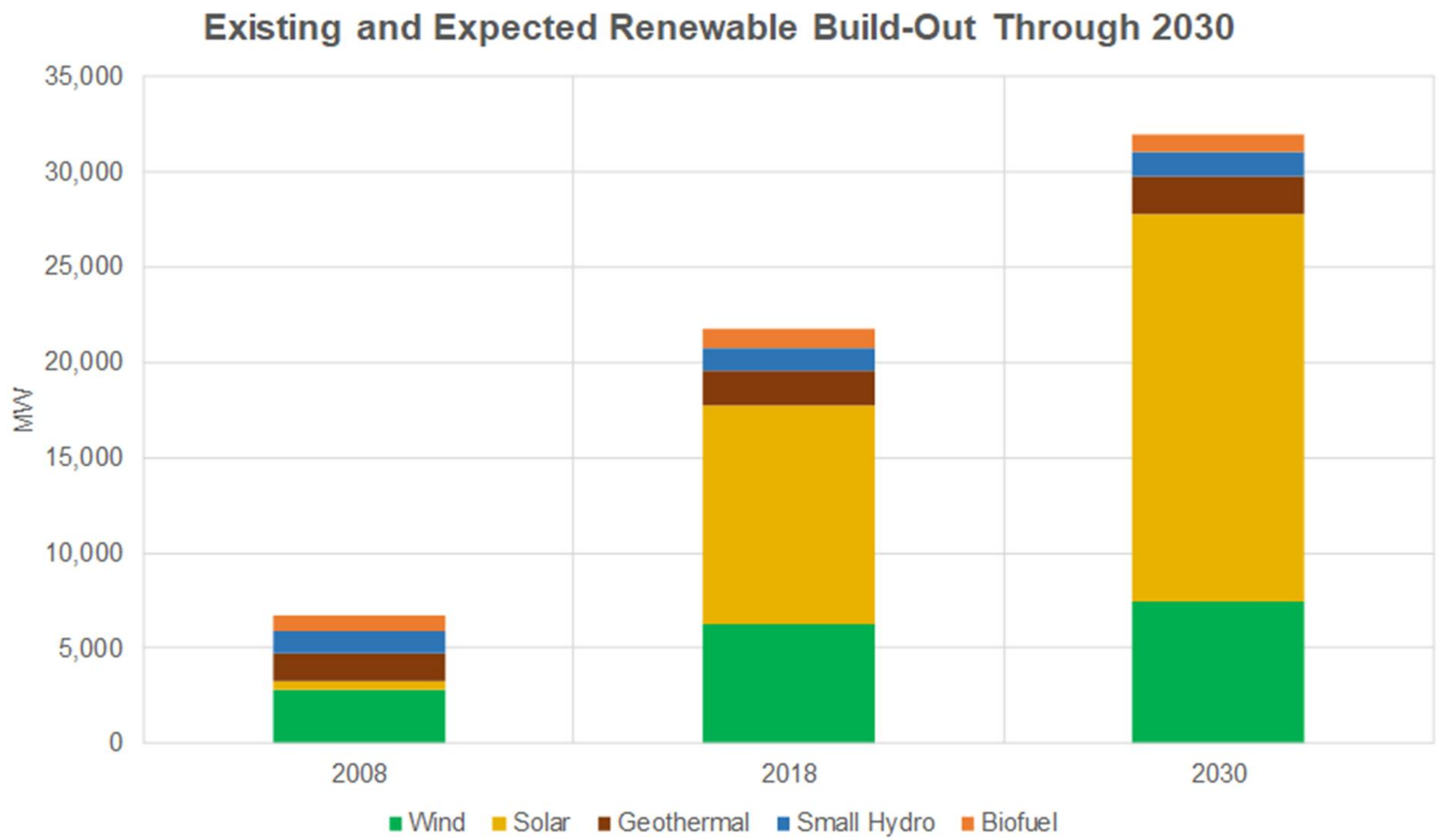
Major progress on meeting CA's renewable goals

- 2020 Policies
  - Greenhouse gas reductions to 1990 levels
  - 33% of load served by renewable generation
  - 12,000 MW of distributed generation
  - Ban on use of once-through cooling in coastal power plants

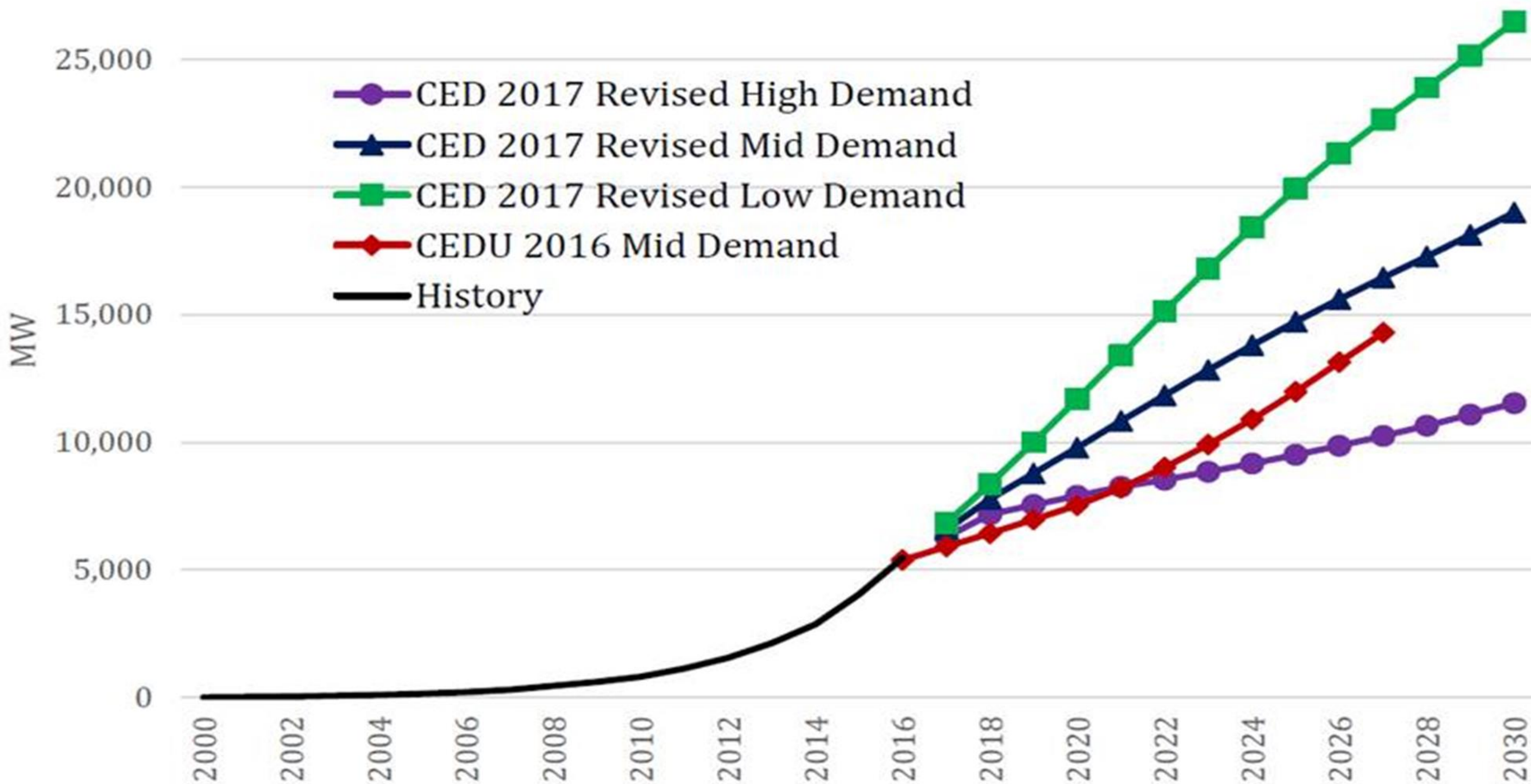
- 2030 Policy Goals
  - 60% of load served by renewable generation by 2030; 100% carbon-free resources by 2045
  - Double energy efficiency existing buildings
  - Greenhouse gas reductions to 40% below 1990 levels



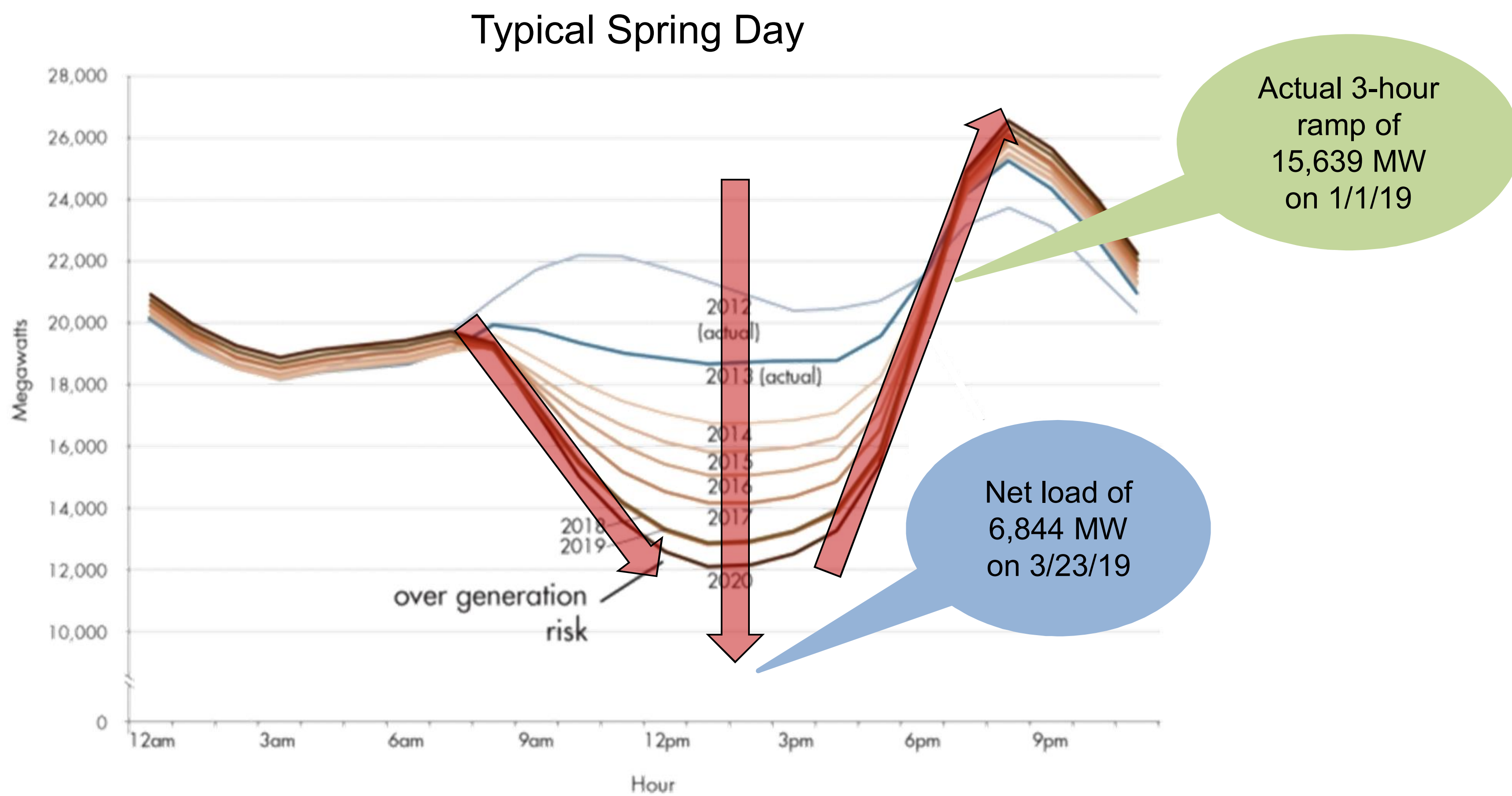
Growth of renewables to achieve 60% by 2030 is expected to be largely solar



Behind the meter solar is expected to grow by approximately 15,000 MW by 2030

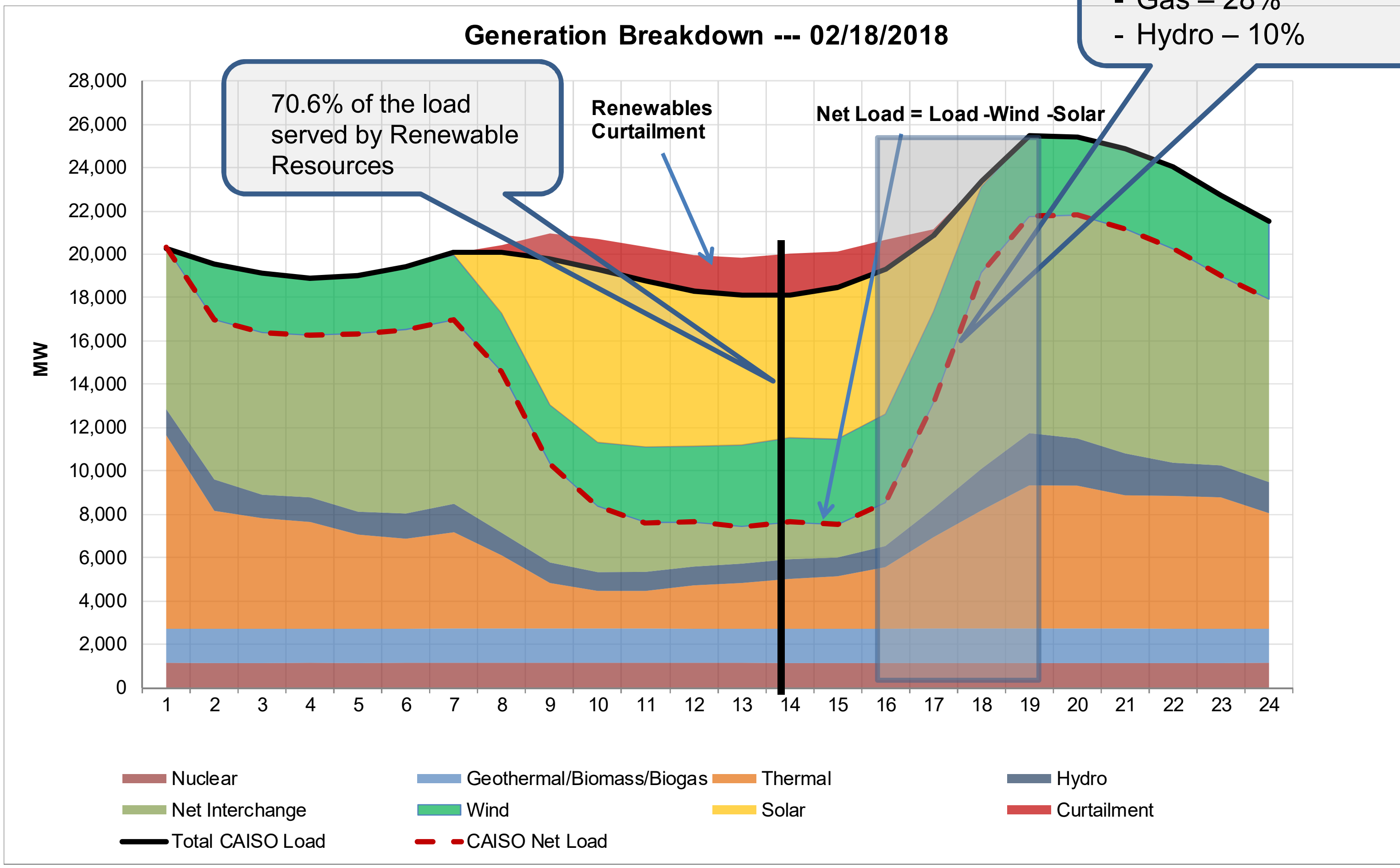


The actual net load and 3-hour ramps are about four years ahead of the ISO's original estimate primarily due to under forecasting rooftop solar PV installation



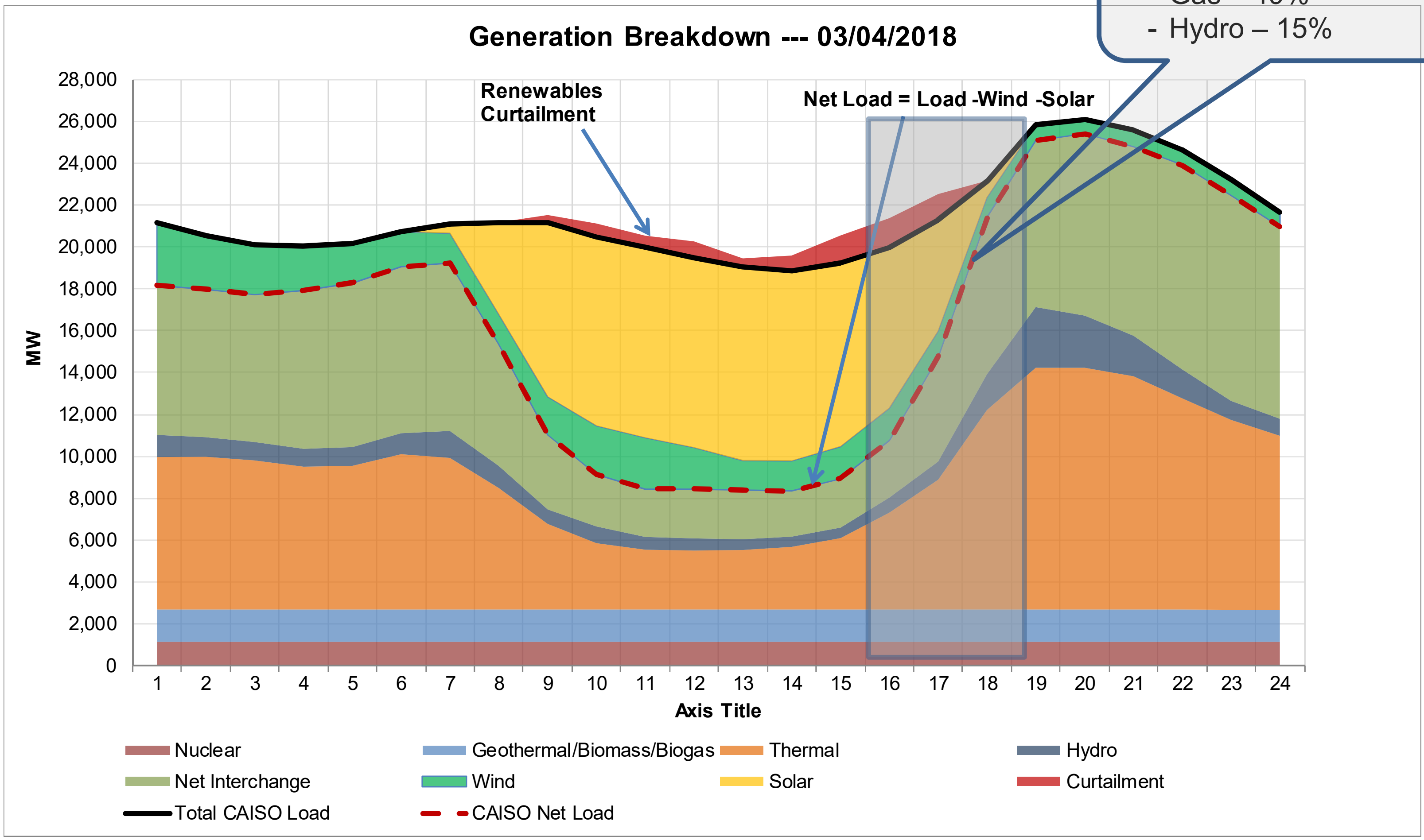
On Sunday, February 18, 2018 the CAISO experienced a minimum net-load of 7,149 MW @ 14:06

3-hr, 13,597 MW ramp met by:
- Import ~ 62%
- Gas – 28%
- Hydro – 10%

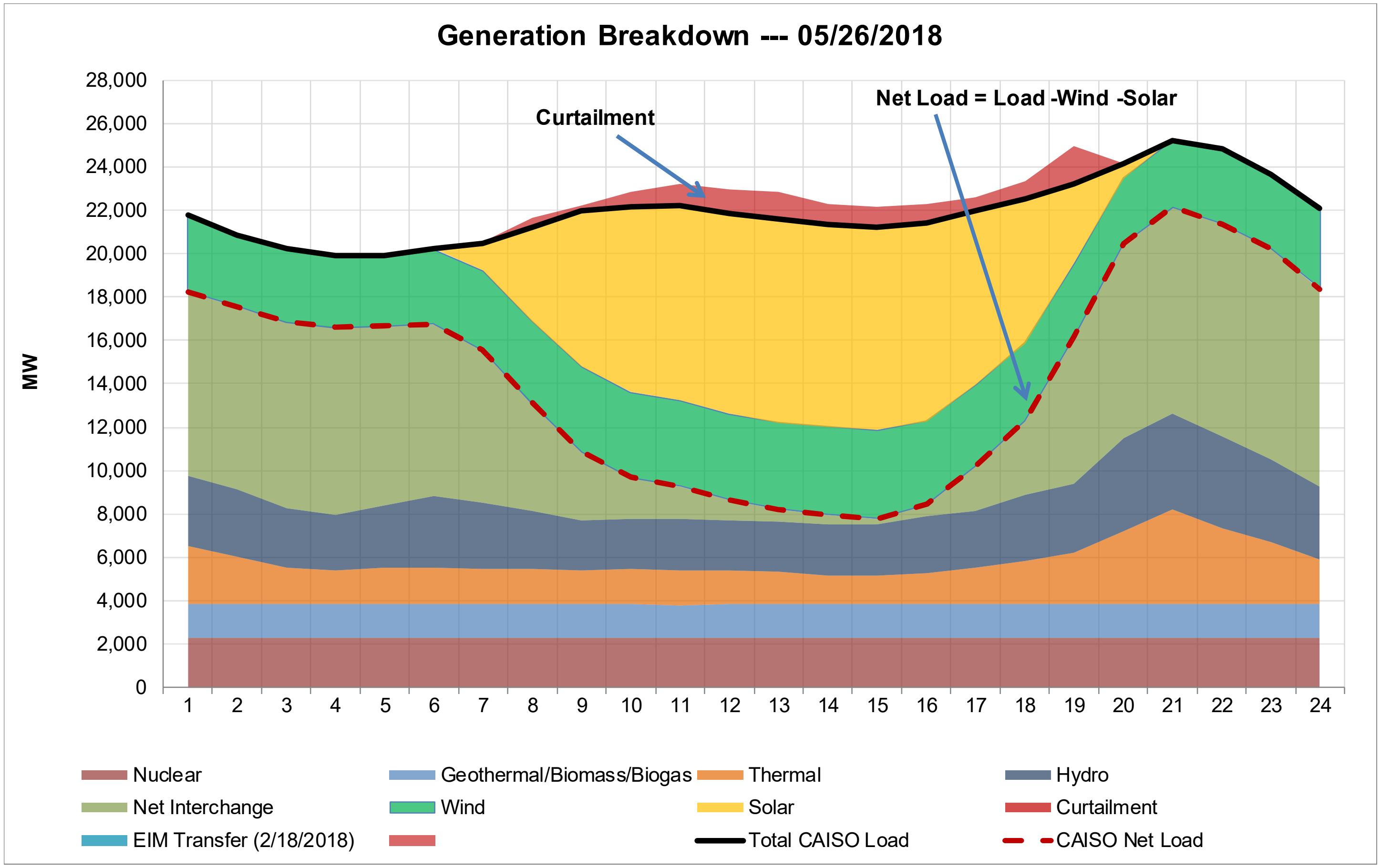


On Sunday, March 4, 2018 the maximum 3-hour upward ramp was 14,777 MW

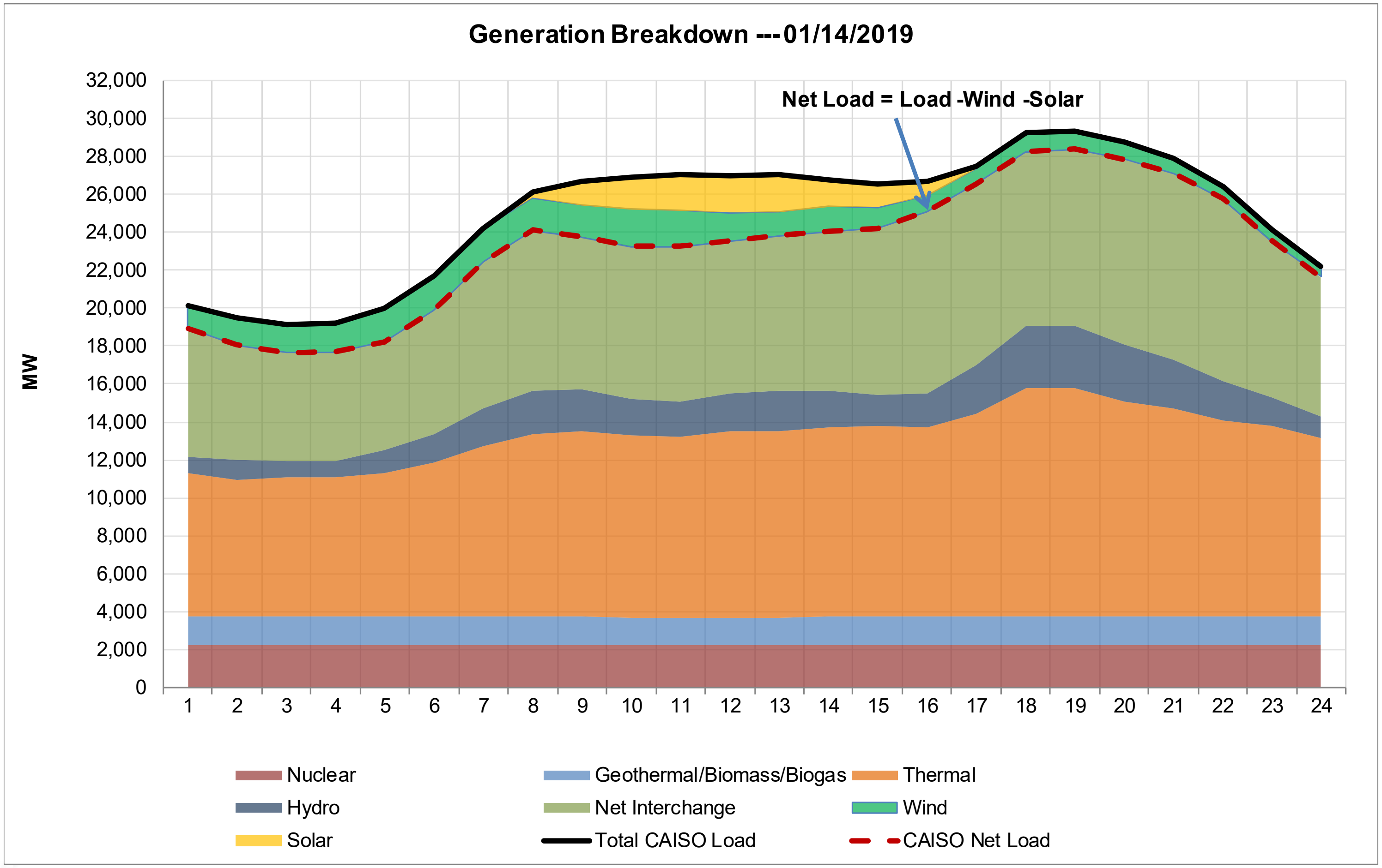
3-hr, 14,777MW ramp met by:
- Import ~ 36%
- Gas – 49%
- Hydro – 15%



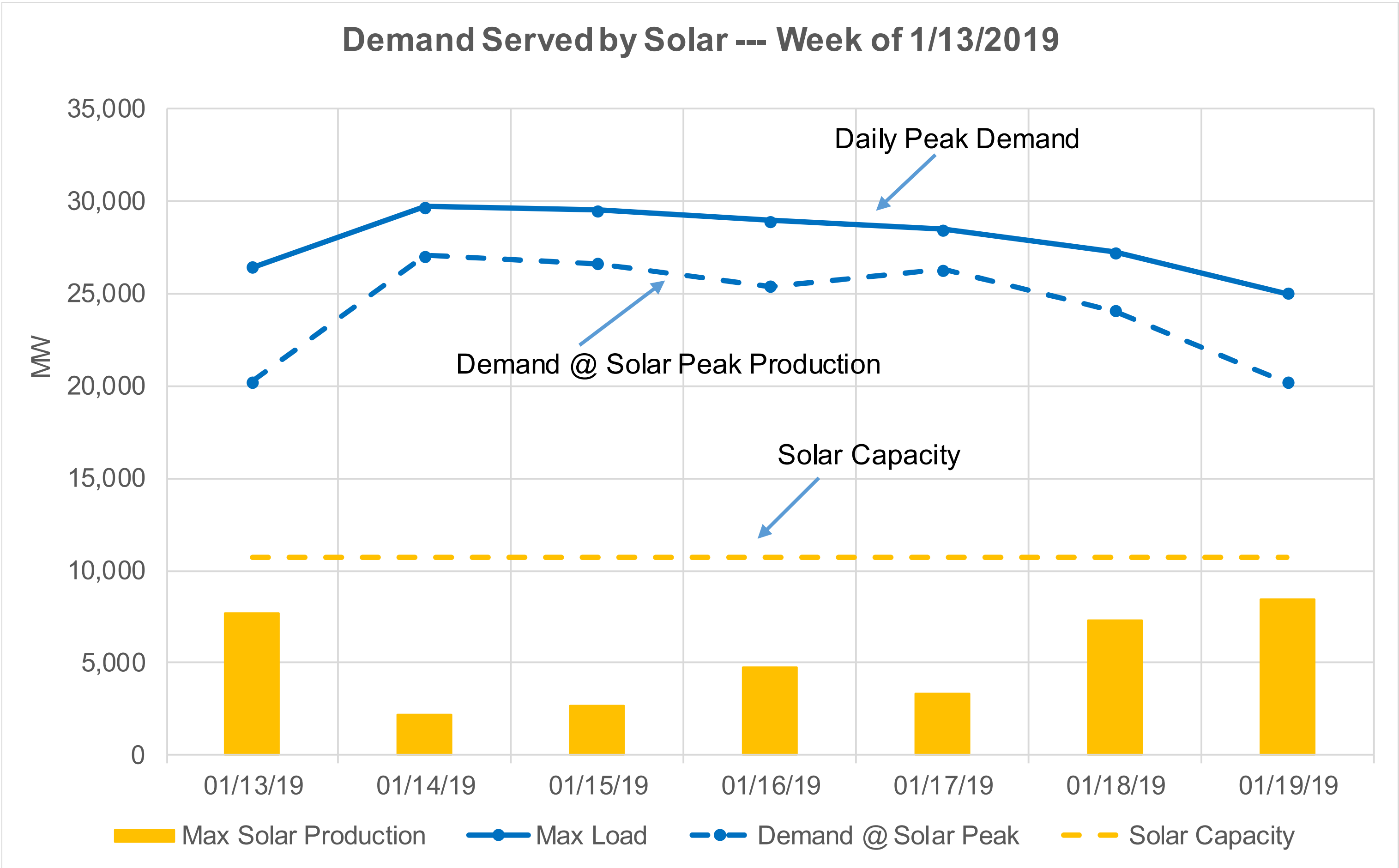
On May 26, 2018 the CAISO served 65% of it's demand from wind & solar resources and 93% of its demand from carbon free resources



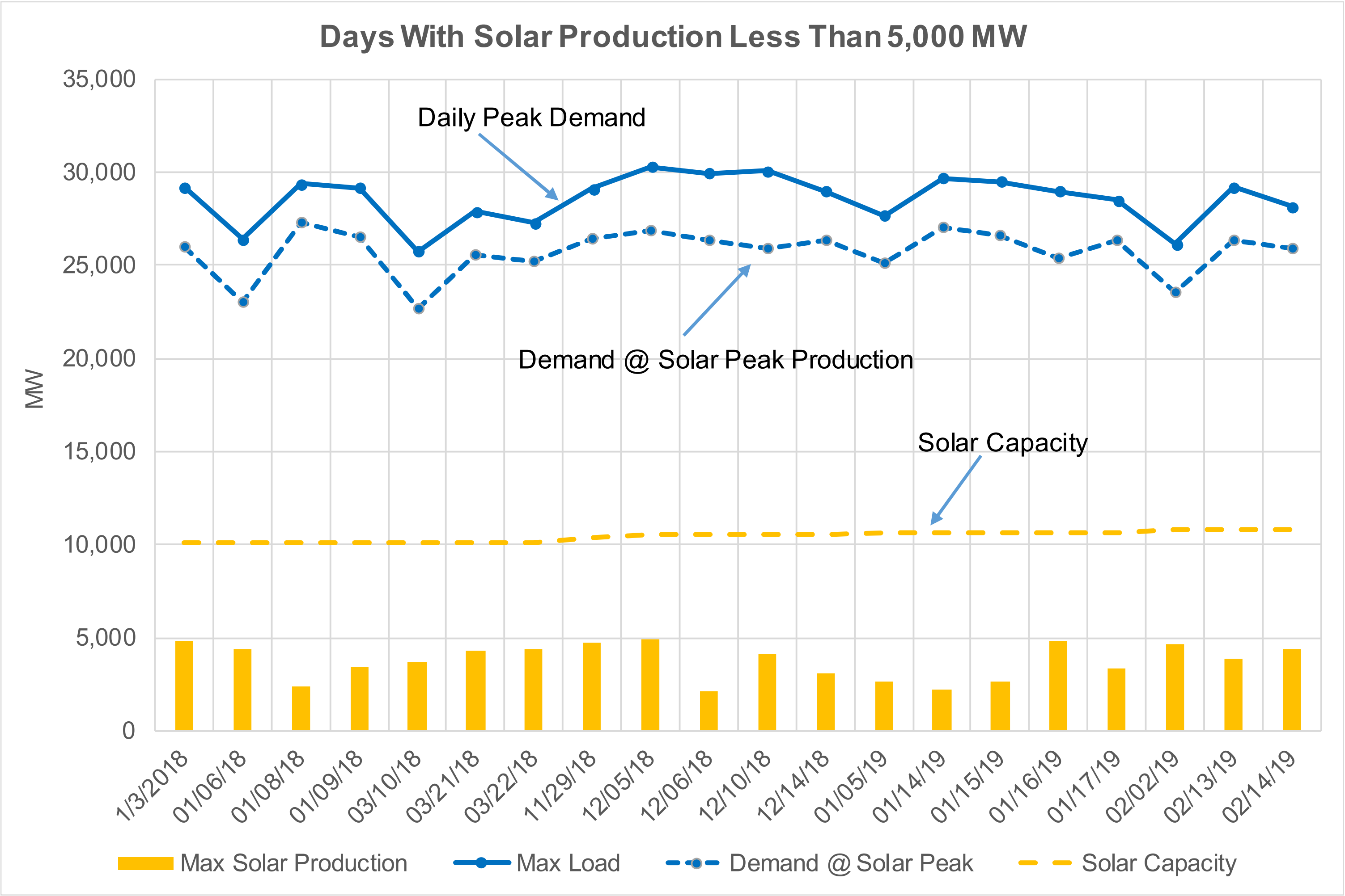
On January 14, 2019 the CAISO served 15% of it's demand from wind & solar resources and 36% of its demand from carbon free resources



Demand served by solar during the week of January 13, 2019



Days with solar production less than 5,000 MW



Aliso Canyon Supports ~9,800 megawatts
40% LADWP/ 60% in CAISO

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SoCalGas Summer 2019 Technical Assessment

- SoCalGas will be able to meet forecast peak day demand under a “best case” and “worst case” scenario with the use of Aliso Canyon
- Pipeline outages continue to impact the sendout capacity of the SoCalGas system
- There will likely be the need to use gas stored at Aliso Canyon this summer
- Sendout capacity may fall short of supporting all customer demand during extreme temperature conditions, without the use of Aliso Canyon

A suite of solutions are necessary

Storage – increase the effective participation by energy storage resources.

Western EIM expansion – expand the western Energy Imbalance Market.

Demand response – enable adjustments in consumer demand, both up and down, when warranted by grid conditions.

Regional coordination – offers more diversified set of clean energy resources through a cost effective and reliable regional market.

Time-of-use rates – implement time-of-use rates that match consumption with efficient use of clean energy supplies.

Electric vehicles – incorporate electric vehicle charging systems that are responsive to changing grid conditions.

Renewable portfolio diversity – explore procurement strategies to achieve a more diverse renewable portfolio.

Flexible resources – invest in fast-responding resources that can follow sudden increases and decreases in demand.

Summary

- California has a diverse set of resources, and the mix is evolving with the most significant change being the rise of renewable energy.
- We are making significant progress toward meeting the state's climate goals.
- A suite of solutions are necessary to support the shift to a greener grid.
- We must remain mindful of growing operational challenges.
- In the near term, natural gas resources continue to be needed when solar and wind resources are not producing.
- In the long term, we will need to deploy other technologies including energy storage or repurpose the gas fleet to use renewable gas or other zero carbon fuel supply.


NMOGA
Ryan Flynn
Executive Director
April 29, 2019
Colorado Springs, CO

Political Landscape

Political Landscape

2018	2019
R Governor	**D** Governor
R Land Commissioner	**D** Land Commissioner
D Legislature	**D** Legislature

Political Landscape

Political Landscape

- Major political shift to the left.
- Shifting political climate for oil and natural gas industry, other business interests.
- Progressive political infrastructure responsible for 2018 shift heavily influenced and supported by environmental opponents and activists.

Political Landscape

- Industry largely escaped the recent legislative session without major disruptions, but challenges will persist.

✓ Energy Transition Act

✓ Produced Water

✓ Penalties

✗ Fracking Ban

✗ Methane Regulations

✗ Increased Taxes or Royalties

Looking Ahead

Looking Ahead

Key Areas of Concern

1. Methane methane methane!
2. Water
3. Regulatory Issues
   - Upstream environmental issues
   - Fracking

Methane

- Methane has emerged as the top issue in New Mexico for anti-fossil fuel activists and organizations.
- Even in the midst of a legislative session, methane was still a significant issue, despite not being on the docket.
- Opponents are well-organized on this issue, maintaining a steady drumbeat of opposition.

Water

- Water and water scarcity is an emerging topic of conversation among environmental activists.
- How the industry uses water for fracking and completing wells, in addition to disposal, will attract greater scrutiny as Permian continues to grow.
- Local ordinances aimed at "water protection" a constant threat in population centers.

Regulatory

- Regulators and other elected officials now offer opponents and activists new avenues to oppose industry, or share negative points of view.
- Upstream environmental issues will be a focus of regulators and opponents in the future.
- Risk of fracking ban, or restrictions, consistently in the background.


NMOGA

Challenges in Colorado

Colorado Oil & Gas Association

Dan Haley

@danhaleyCO | @ColoradoOilGas | #COGA2019

COLORADO OIL & GAS ASSOCIATION

10 Years Ago

- Colorado's demographics were changing
  - One-third Rs, Ds and UAFs
- Colorado's population was growing, housing was up
- Colorado's oil and natural gas industry was growing
  - Hydraulic fracturing/horizontal drilling
- Our industry was caught flat-footed

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Things Have Changed

What have we witnessed since 2014?

- Population growth and voter registration has been overwhelming
  - 326,475 new registered voters since 2014
- Population demographics are changing
- From 2014 to 2018:
  - 82,208 increase in Democrats
  - 21,189 increase in Republicans
  - 268,887 increase in unaffiliated voters
  - Unaffiliated voters now Colorado's largest voting bloc
- Growth is an issue and it impacts understanding of the industry's history in Colorado

<u>Colorado Population</u>

5.6 million

<u>Registered Voters in Colorado</u>

3.977 million, 3.379 million active

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The Mission

"This is going to be a bar fight. This is a street fight. This is a back-alley fight. And you've got to fight it any way you can, any tool you can use. Whether it's bans on drilling, whether it's local regulations, whether it's severance taxes, you have got to put up as many obstacles, you have to make it as difficult as possible to develop."

- Josh Joswick, Earthworks (2010), Former La Plata County Commissioner

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History

2012 – 2013

- Permanent bans or long-term moratoria in Loveland, Longmont, Fort Collins, Broomfield, and Boulder

Industry response

- Lawsuits – Colorado Supreme Court – Bans & indefinite moratoria are illegal

Industry and Business Community Response: How do we educate/win hearts and minds?

- CRED & Protect Colorado
- Vital for Colorado
- Steering Committees
- Amplified local government outreach

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DON'T SET
COLORADO BACK
VOTE NO
ON 112
GENIUS
DON'T SET
COLORADO BACK
VOTE NO ON 112
JOBS MATTER
VOTE NO
ON 112
JOBS MATTER
VOTE NO ON 112

Campaign Implementation

NO ON PROP 112

- Direct Mail
- Text
- Phone Calls
- TV/Radio
- Canvassing
- Digital
  - Social Media
  - Video
  - Web

- Trainings & Events
  - Call to Arms
    - Northern Colorado
  - Rallies
    - State Capitol
    - Northern Colorado
  - Speaking Engagements & Presentations
    - Elected Officials
    - Industry Employees
    - Vendors
    - Local groups

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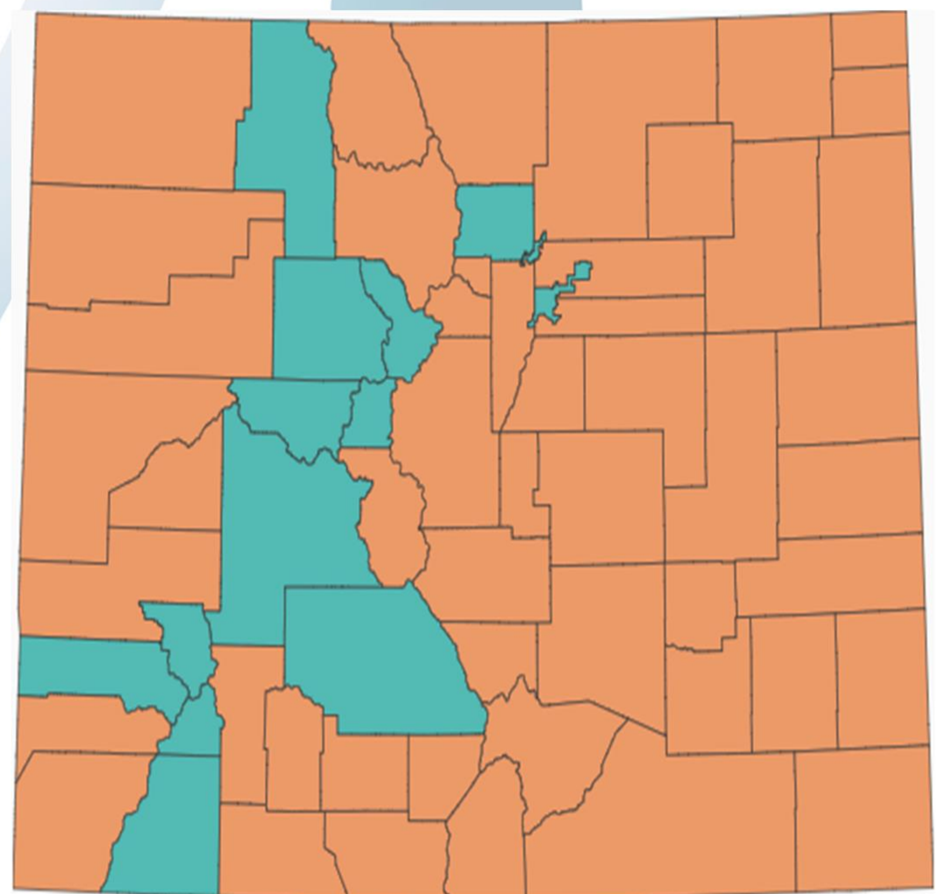
Proposition 112

Coloradans Vote Decisively Against Ban/Setbacks in November 2018

55% to 45%

Proposition 112 Performance Information

- Most number of votes cast compared to any other statewide ballot measure on ballot in 2018—2,488,022
- 37,040 less votes cast than for Governor
- 13,625 MORE votes cast than for State Treasurer



Bucked the Trends of 2018

Despite the "blue wave," the oil and natural gas industry triumphed.

Every statewide office, the state senate, state house, and a multitude of municipal offices are now under Democratic control.

Even with this electoral surge, Proposition 112 was defeated due to the efforts of the oil and gas industry and allies.


THE DENVER POST

Polis makes history

Drilling setbacks fall short

Dems take House control; GOP will keep U.S. Senate

Lessons Learned

NO ON PROP 112

- Ongoing research is necessary
- Message and channel variation
- Radio works for reaching the base
- Coordination makes a difference
- Build your support network now
- Health and safety issue require industry focus

**Employee and community engagement is imperative.

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2019 Political Uncertainty

- One party legislature
  - Partisan overreach
- Local Regulatory Developments
  - What comes after state legislation?
  - Moratoria?
- 2019-2020 Ballot Initiatives?
  - Severance tax hike
  - SB 181 reversal
  - What else???

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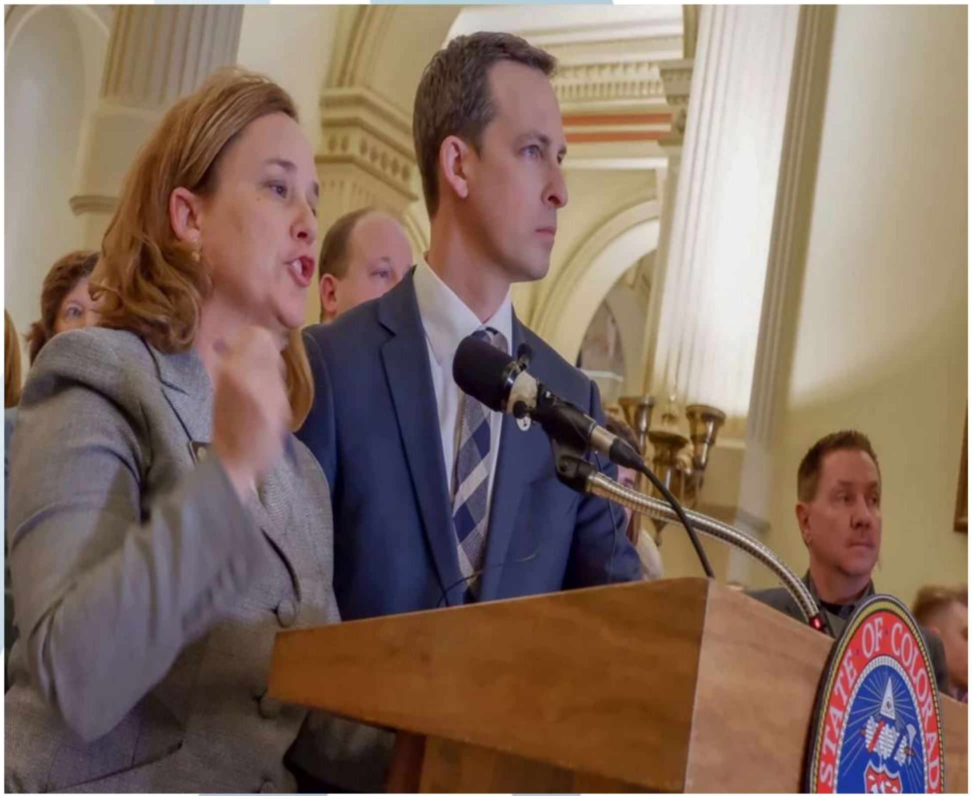
SB 181: Sweeping and Comprehensive

- Local Control
  - Subjective Rules
  - Setbacks
- Unlimited Fees, Fines, Financial Assurance
- Statutory Pooling
- Health, Safety, Environment
- Oil & Gas Conservation Act
  - To Regulate & Protect
- COGCC
  - Removes Expertise – Engineering & Geology
  - Potential Permitting Moratoria
  - Nine Rulemakings



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Capitol Rally

Hundreds rally for and against oil and gas bill at Colorado Capitol

POSTED 6:53 PM, MARCH 5, 2019, BY JOE ST. GEORGE

COGALEAD

COGA LEAD is a program dedicated to increasing our outreach to state and local elected officials. Activities include:

- New Legislator Reception – Congratulating and welcoming incoming legislators;
- Day at the Capitol – COGA members visit with Colorado state legislators to strengthen relationships;
- Education & Site Tours – Specifically designed to provide elected officials and staff with latest information, studies, site tours, and news about the oil and gas industry;

You're Invited to attend a COGALEAD

Rig Tour at PDC Energy's Evans, Colorado Facility

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COGA LEAD

- Legislative Seminars – Monthly educational seminars hosted during the legislative session for legislators;
- End of Session Legislative Review – A bipartisan panel to discuss the previous session;
- Legislator Q&A – An Energy Summit program designed to provide COGA members with access to our elected officials;
- LEAD Connect – Engagement program pairing COGA Executive Board members with state legislators.

COGA Day at the Capitol

- Third Annual
- Bipartisan Speakers
- Record Crowd
- First Energy Advocate Training

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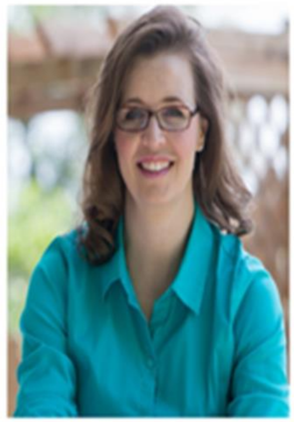
Energy Advocate

Join us for an Energy Advocate training on how you can testify in a legislative committee!

Did you know that any individual can testify before a legislative committee on a piece of legislation that is being considered? Our state lawmakers rely on the testimony provided by subject matter experts and everyday citizens to inform their votes. In this hands-on training, legislative and communications experts will give you the skills you need to tell your personal energy story and directly impact Colorado's energy policy. This legislature will soon introduce their bills to increase oil and gas regulations.

The future of our industry in Colorado depends on elected officials hearing your voice.

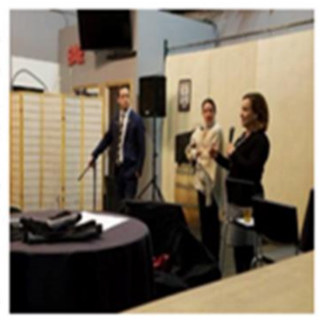
Upcoming Town Halls



Join Arvada Senator Rachel Zenzinger at her next 'What's Brewing at the Capitol' event at SomePlace Else Brewery, on Wednesday, February 20 at 6:30 pm.

Anti-energy activists have targeted this event to pressure Senator Zenzinger for their agenda. It's important that she hears the other side of the story from those who work in the energy industry everyday. So stop by, grab a beer and make your voice heard!

Boulder Democrats, **House Speaker KC Becker and Senate Majority Leader Steve Fenberg,** are leading the charge on the upcoming oil and gas omnibus bill, expected to dramatically increase regulations on Colorado's energy industry.



Attend their joint town hall this Thursday at the Boulder Elks Lodge from 6-8:00 pm and let them know what working in the energy industry means to you.

Find a Town Hall

ENERGY ADVOCATE

- Information
- Training
- Activation

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Employee Engagement

Show up, be seen, be heard

- "Activate" Energy Advocates to attend important local City Council & County Commissioner Meetings
- Provide resources to be informed
  - Fact Sheets
  - Talking Points
  - Trainings

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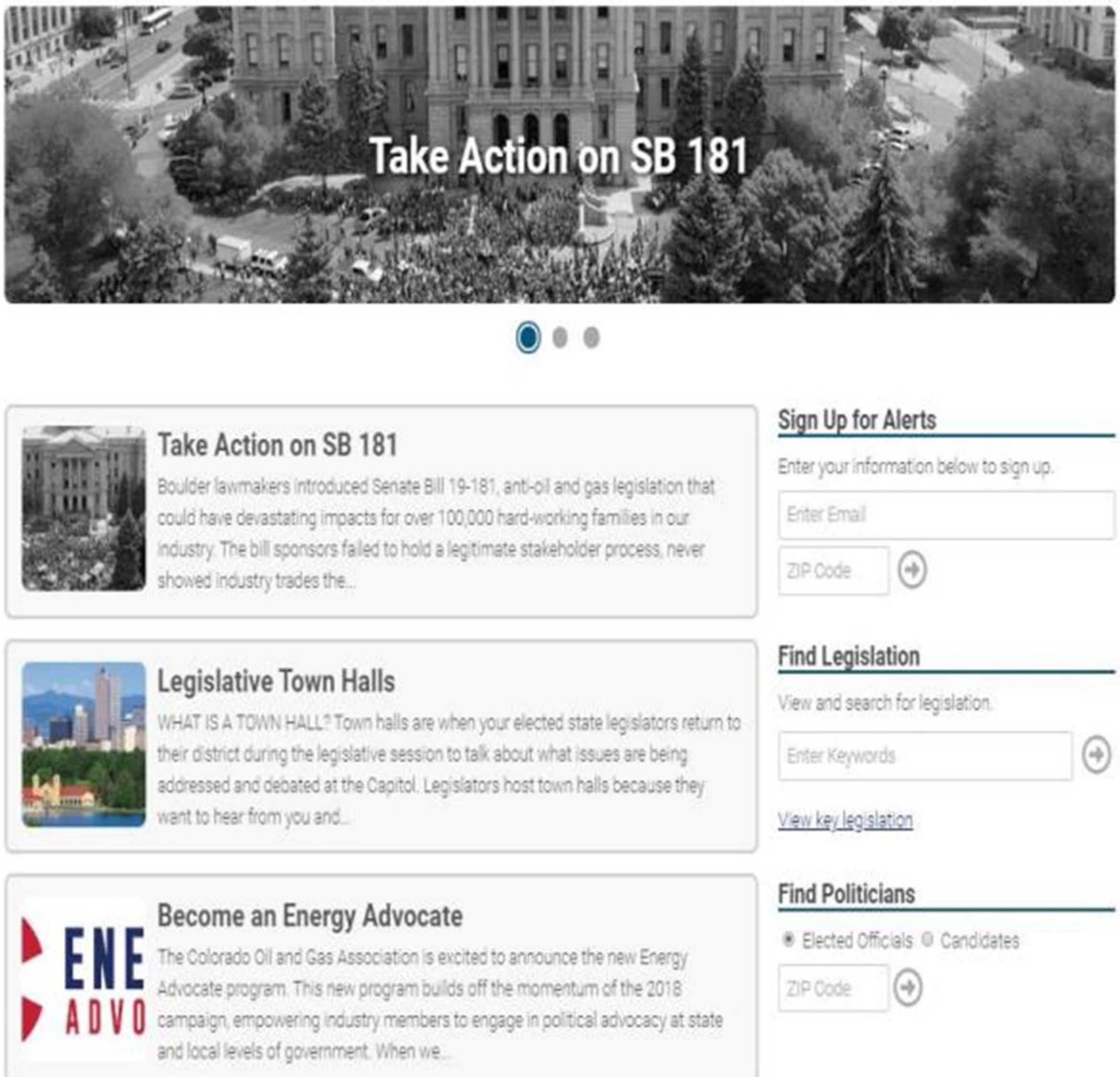
COGA Take Action



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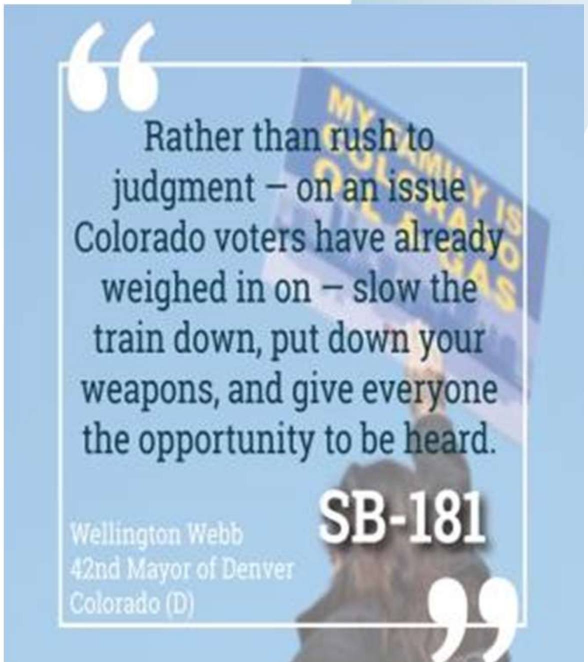
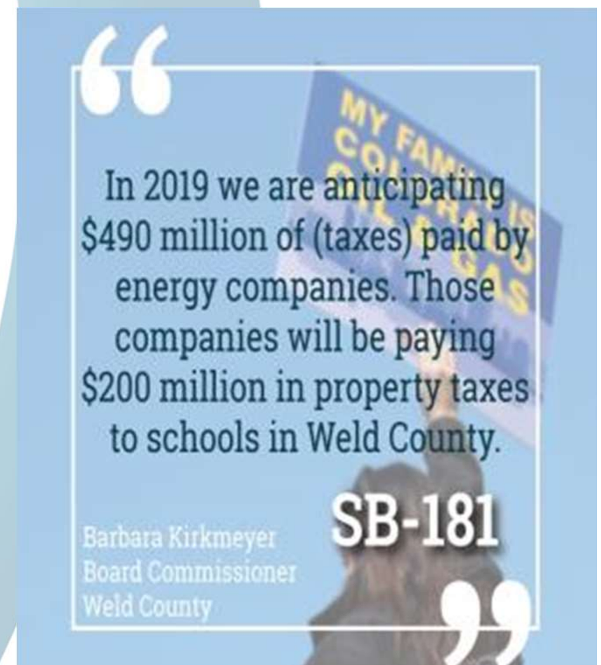
Op-Eds & Industry Supporters





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SB 181 Amendments that Mattered

Colorado oil and gas overhaul tips power toward local government. How that power is used will vary widely.

Towns and cities along the I-25 corridor, where drilling is closest to suburban neighborhoods, likely will be first to test the waters

APR 9, 2019 5:05AM MDT | ENERGY

Mark Jaffe @bymarkjaffe

Special to The Colorado Sun

More

- "Reasonable and necessary"
- "Delay instead of refuse"
- 45% instead of over 50 % before pooling can be requested
- Local regs limited to "surface uses"
- No extra territorial regulation

SB 181: Possible Effects to the State

- Likely slowdown in new wells
- Likely loss of revenue to the state
- Likely loss of revenue to schools
- Increase need for the state to backfill the school budget

Energy

Uncertainty reigns on Colorado's new legal landscape for oil and gas

Apr 4, 2019

Parachute fears losing jobs, income

Colorado's revamped oil and gas law will have ripple effects throughout Larimer County

Jacy Marmaduke, Fort Collins Coloradoan Published 1:47 p.m. MT April 9, 2019 | Updated 5:17 p.m. MT April 9, 2019

Lafayette poised to push drilling moratorium further

By Anthony Hahn

Staff Writer

POSTED: 04/13/2019 10:08:27 AM MDT

POLITICS › COLORADO POLITICS

Adams County adopts new oil and gas moratorium over concerns state legislation will spark "rush" of applications

Bill to overhaul Colorado's regulation of oil and gas industry OK'd by Senate, moving through House

SB 181: What Industry Needs to Do

- Build Trust
- Change the Narrative
- Educate and Emote
  - Feelings Drive Decisions
  - Bring Passion for Safety/Community
- Redouble efforts to do right by our neighbors
- Empowers ourselves
  - Volunteer on local boards and commissions
  - Get elected
  - Be involved in local rulemakings
  - Show up to hearings – Make your voices heard!
- Companies need to encourage and trust their people to be involved

OPINION · OPINION COLUMNISTS

Dan Haley: There is no 90-day regulatory loophole on oil and gas emissions

Jeremy Papasso, Boulder Daily Camera

Schlumberger Oil Field Services employees work on a fracking site at the Woolley Becky Sosa location on June 28, 2017 in Erie.

By DAN HALEY | Guest Commentary

PUBLISHED: April 15, 2019 at 2:18 pm | UPDATED: April 15, 2019 at 2:19 pm

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Questions?

www.coga.org
dan.haley@coga.org
@ColoradoOilGas

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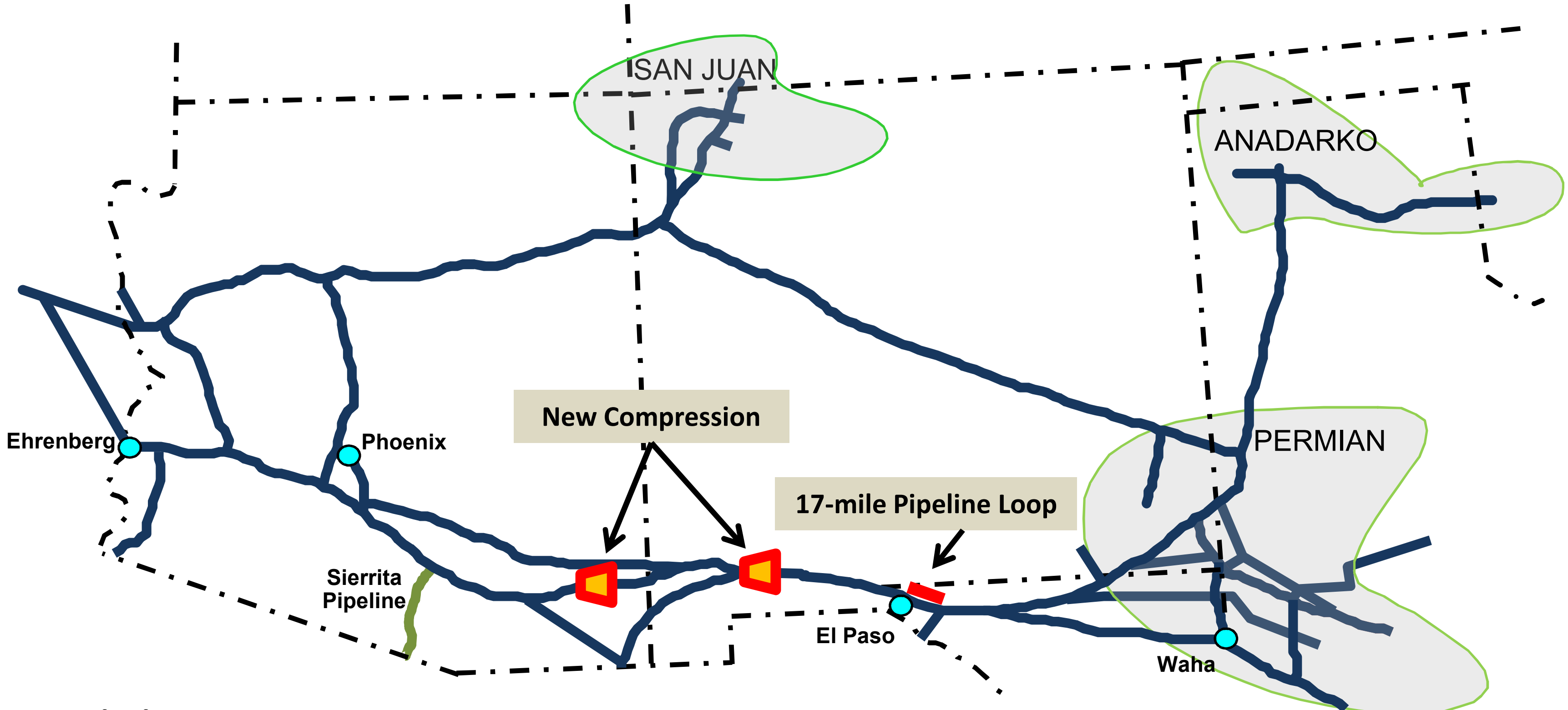
Break

Business Development Updates

Greg Ruben
V.P. Business Development

EPNG South Mainline Expansion



Description

- South Mainline Expansion replaces Havasu Expansion
- Provides additional westbound capacity to AZ and CA; ~200MDth/d increase, depending on segment

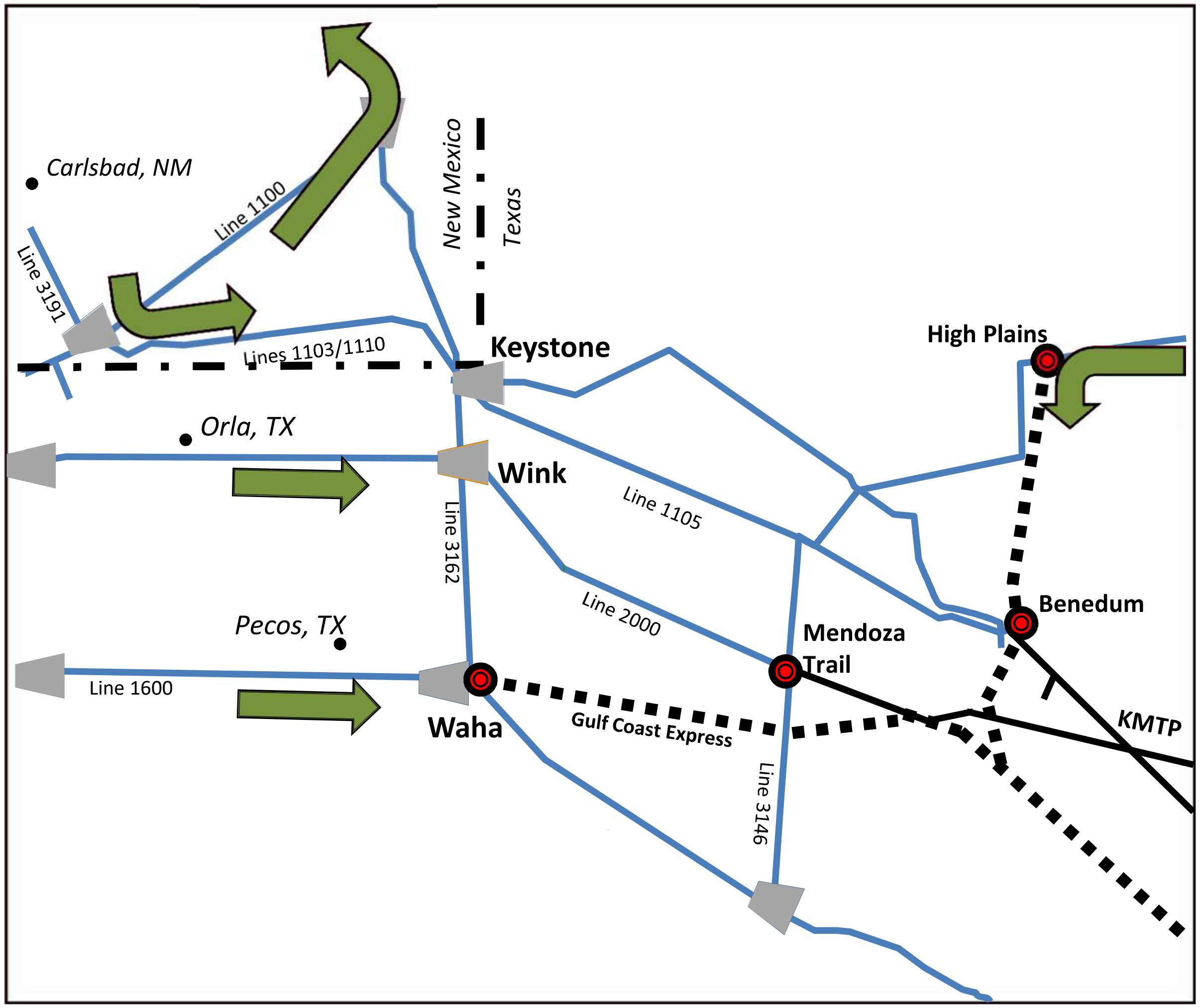
Facilities

- Compression near Deming, NM and Willcox, AZ
- 17-miles of 30" line loop (Hueco towards El Paso)

Status

- Open Seasons: June 2016, May 2017 and July 2018
- FERC 7c application filed in April 2018
- FERC Environmental Assessment issuance: November 2018
- Targeting July 2020 in-service date

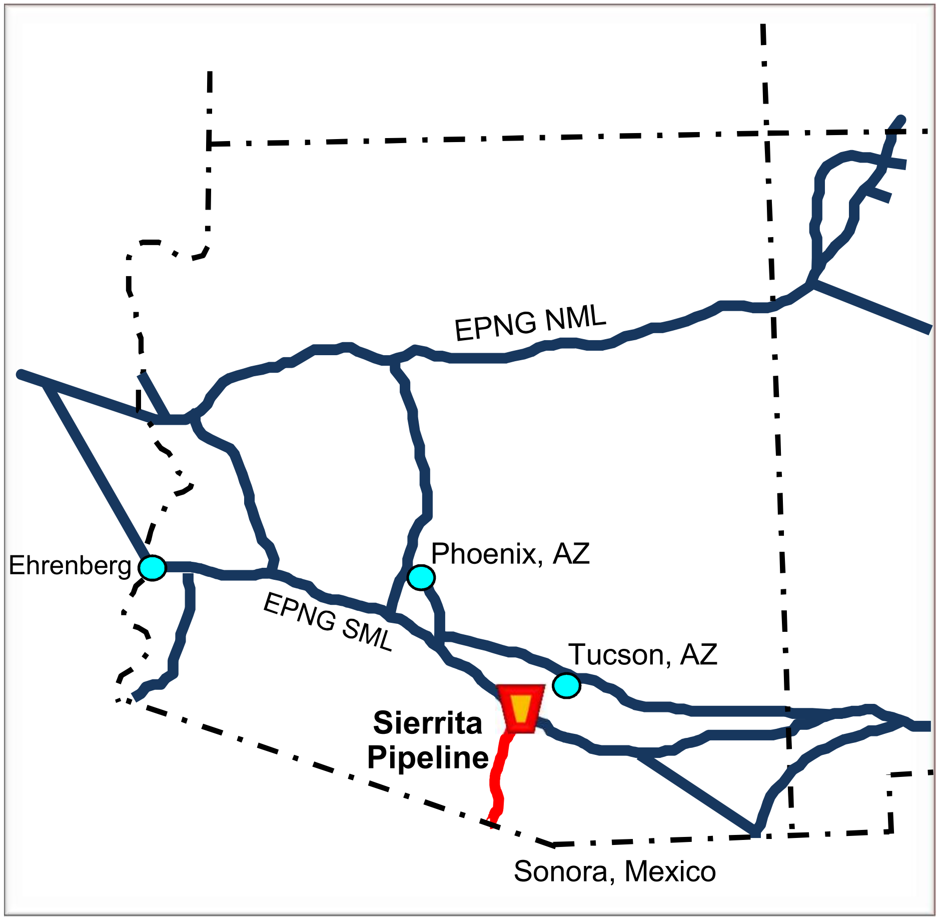
EPNG Permian Expansions



Description:

- Over 1,200 MDth/d Permian Basin expansions completed or underway since 2017
  - Intra-basin expansions and Permian North project
- Targeting completion of pending projects by October 1, 2019; Northern Delaware Basin expansion, L1600 Phase 2 and High Plains to GCX
- Permian Basin delivery points, including Gulf Coast Express
- Utilizes combination of existing capacity and modifications/expansions to EPNG's system in Texas

Sierrita Gas Pipeline Expansion



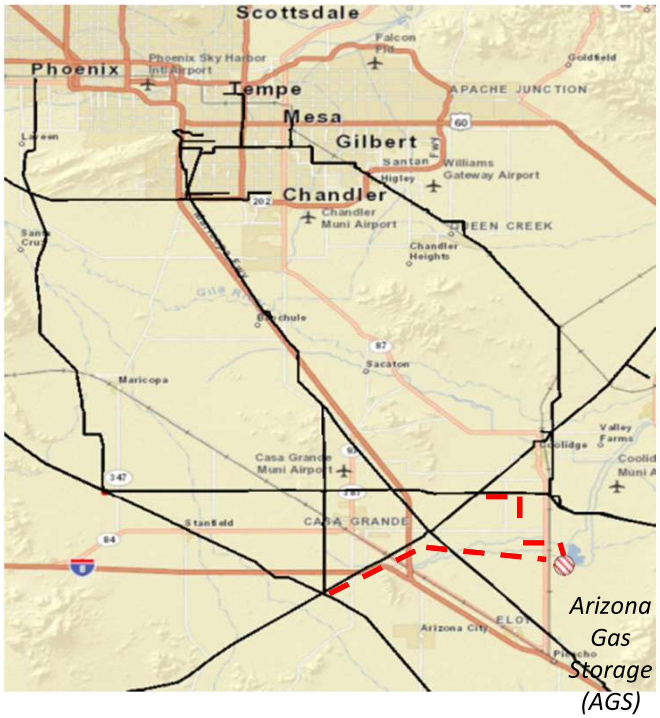
Expansion Description

- Expand Sierrita by 323 MDth (523.6 MDth total revised capacity); increase delivery pressure to 750 psig
- Facilities: Greenfield compressor station (15,900 HP) at milepost 6.5

Status

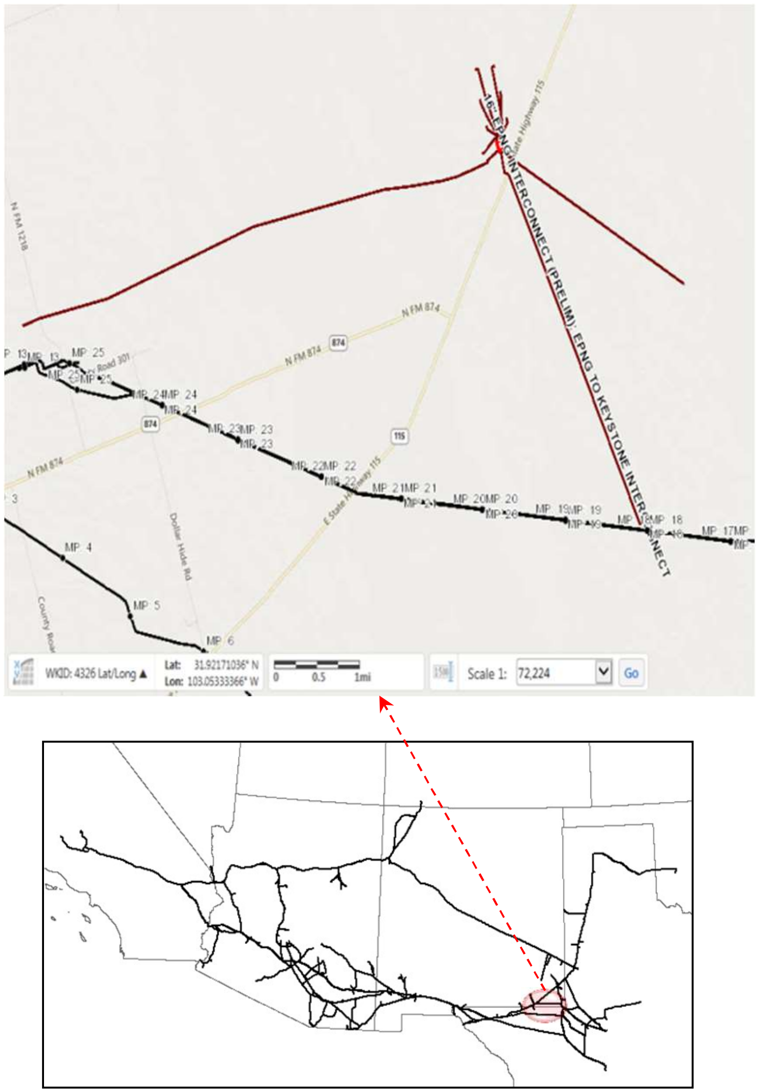
- FERC 7c and Presidential Permits issued October 2018
- Limited notice to proceed issued April 2019
- Full construction planned to commence mid-2019
- Targeting April 1, 2020 in-service date

Arizona Gas Storage



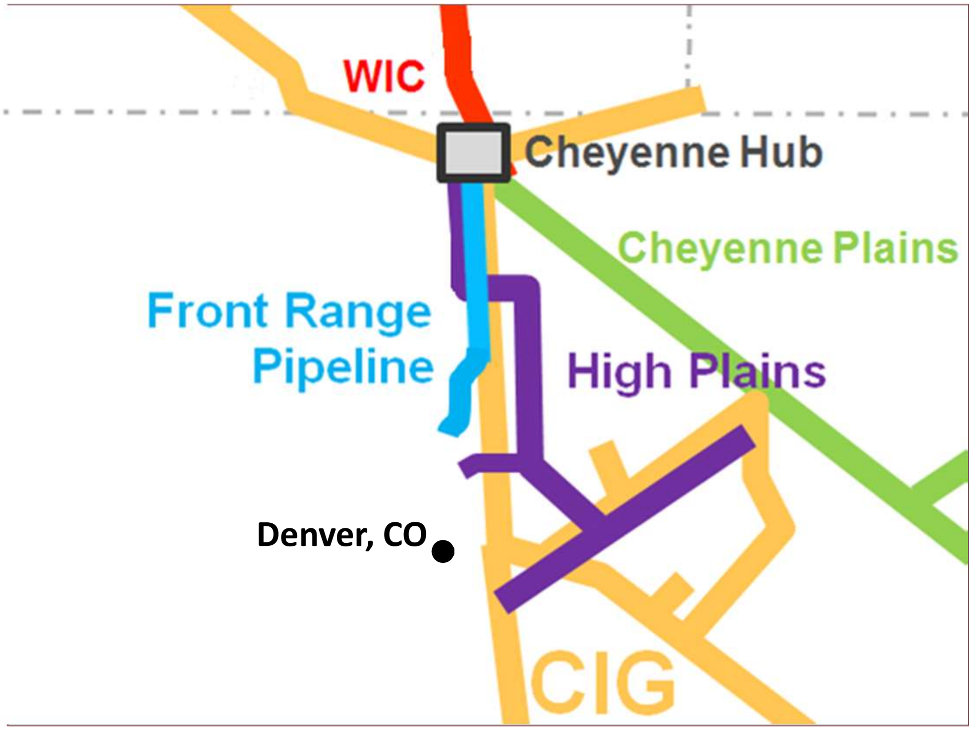
- **Description:**
  - Develop market area storage including no-notice transport service for Phoenix/Tucson Area
- **Facilities:**
  - 4 Cavern Bedded Salt Storage
  - 4 Bcf Working Capacity
  - 400 MM/D Withdrawal/183 MM/D Injection
  - 15,100 HP compression, 16.6 mile 24” lateral to tie into EPNG (1100 Lines), 12.3 mile 16” lateral to tie into EPNG 2000/1600 Lines
  - Additional EPNG facility upgrades to provide no-notice service
- **Status:**
  - On January 30, 2018 ACC Commissioner Tobin issued a letter outlining an Energy Modernization Plan for the State of Arizona
    - On February 22, 2018 ACC issued Notice of Inquiry for comments regarding Modernization Plan. Comment period closed April 23, 2018.
    - February 5, 2019 – ACC Open Meeting to address ACC Commissioner Tobin’s 2018 letter regarding AGS and storage security

Winkler Gas Storage



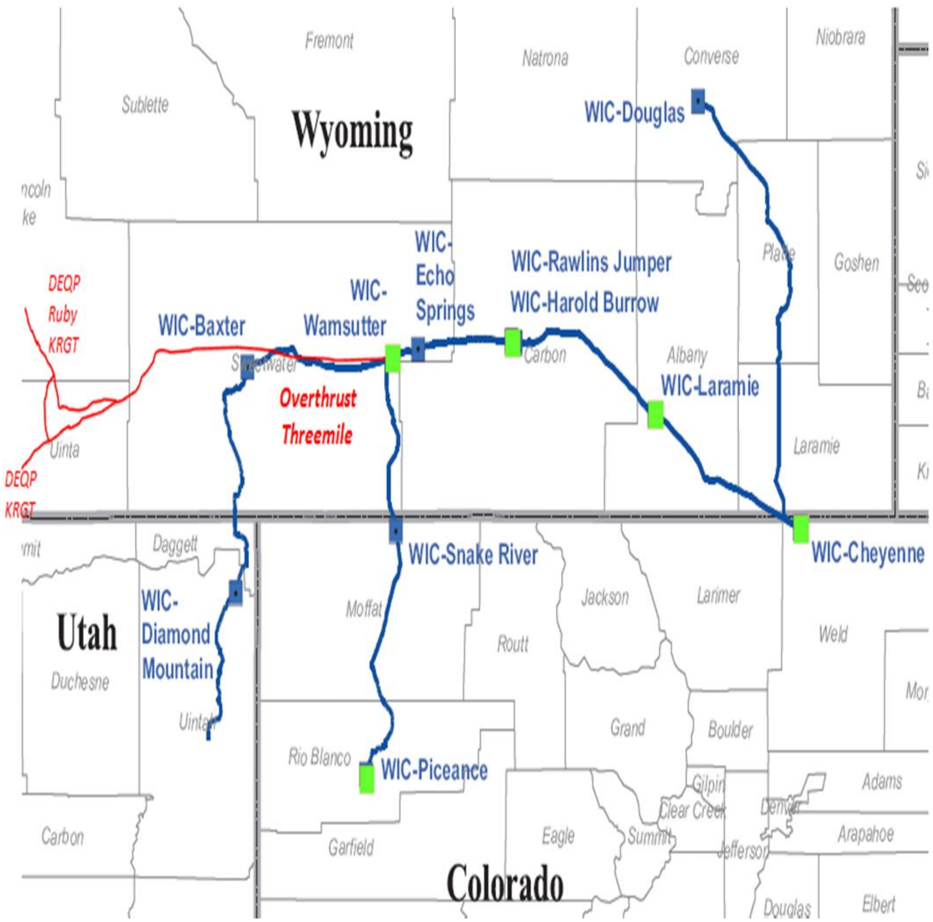
- **Description:**
  - Develop additional production area storage to address need in the Permian Basin
- **Facilities:**
  - 3 new bedded salt caverns
  - 2.85 Bcf of working capacity
  - 240 MM/D Withdrawal/120 MM/D Injection
  - New compression and lateral to EPNG
- **Status:**
  - Storage could be in-service as early as 2022
  - Cavern development would be phased in
  - Developing market support

Rockies DJ Expansions



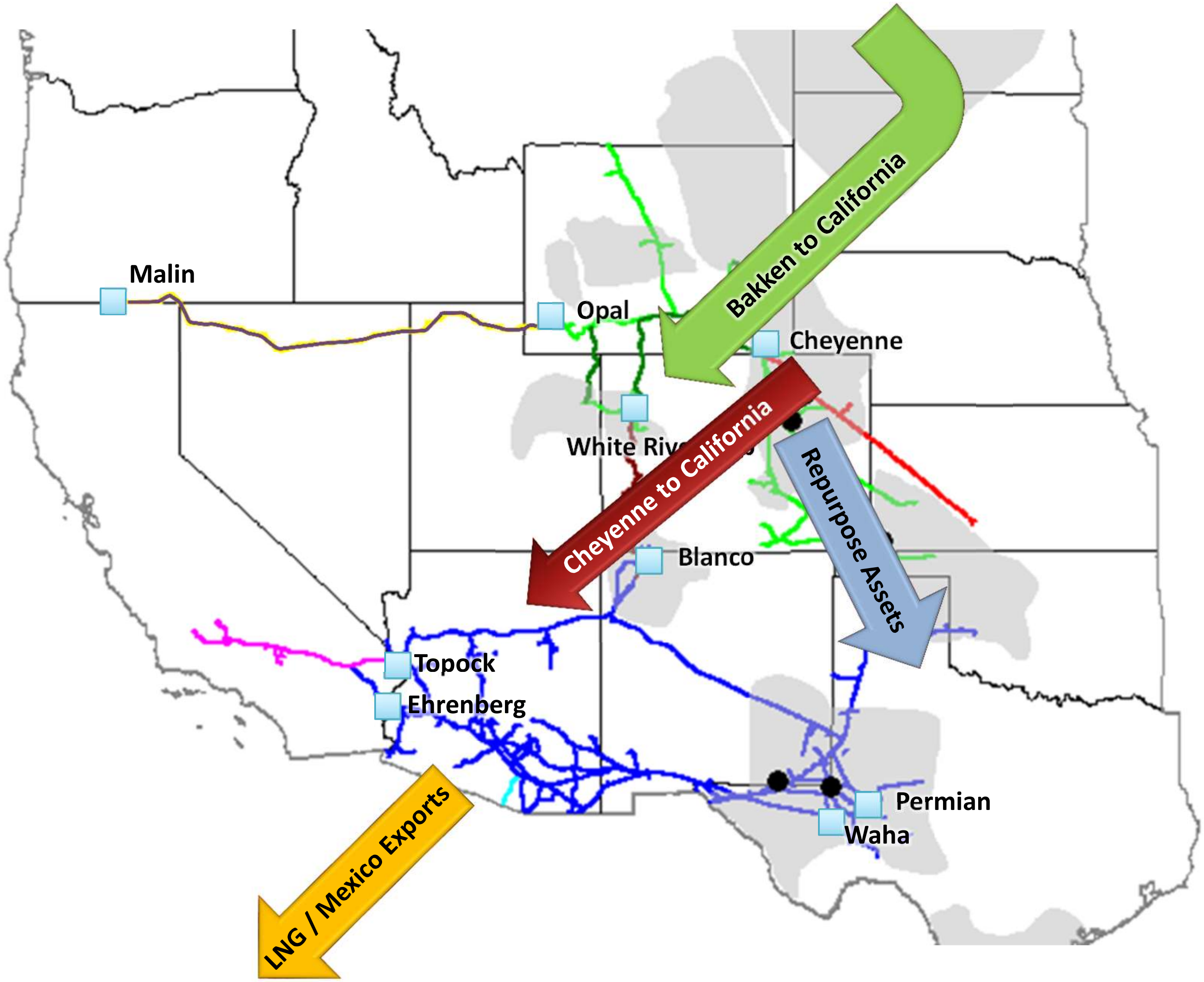
- Over 1,250 MDth/d of DJ Basin projects completed or underway on CIG, WIC and High Plains since 2014
- Ability to add an incremental 1,000+ MDth/d of expansion capacity without laying pipe
- Open Season expansions on CIG 5C for 143 Mdth/d (anticipated September ISD) and 142 Mdth/d (anticipated November ISD) and in progress
- Additional expansions on High Plains and/or Front Range with mid 2020 ISD

WIC Reversal Proposed Expansion



- **Description:**
  - Increase east to west capacity on WIC up to 353 MDT to provide access to market demand via TransColordo Gas Transmission, Dominion Energy Overthrust Pipeline, LLC, and Dominion Energy Questar Pipeline
- **Facilities:**
  - Compressor modifications on WIC
- **Status:**
  - Can be in-service by 2021
  - Project can be ramped into service to meet producers growth projections

Kinder Morgan West Region Opportunities



Tim Dorpinghaus - Logistics

- **Cocktails:** 6:00 pm Pompeiian Room
- **Dinner:** 6:30 pm Main Ballroom
- **Breakfast:** 6:30 – 8:30 am Donald Ross Room (Golf Club)
- **Activities:**
  - **Golf:** Damon McEnaney (719. 510.2219)
    - Tee times: 8:00 – 9:00 am
    - Driving Range: Opens at 7:30 am
  - **Mountain Biking**: Billy English (719.433.1467)
    - Main Entrance at 8:30 am
  - **Zipline Tour:** Tim Dorpinghaus (719.684.5165)
    - West Tower Lobby at 8:45 am
  - **Seven Falls:** John Driscoll (719.510.4655)
    - West Tower Lobby at 9:00 am – take Seven Falls shuttle

Thank You for your Business!