NOVEMBER 2017

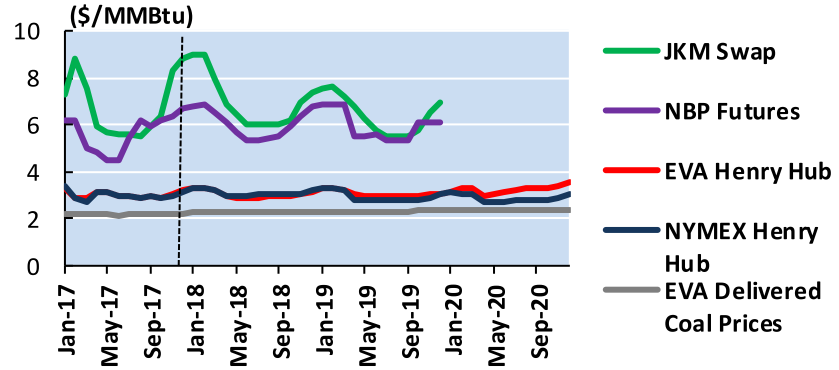
ENERGY VENTURES ANALYSIS
SHORT-TERM NATURAL GAS OUTLOOK

SUMMARY

- **PRODUCTION** dropped 0.6 BCFD month-over-month as rig counts slipped, Northeast storage continued to track record levels and Gulf production faltered. **Over 16.4 BCFD of new pipeline capacity is targeting to come into service by October 2018. 7.2 BCFD of this capacity is aiming to provide incremental production takeaway capacity.** However, EVA forecasts only 5.8 BCFD of production growth during the same time period (see feature on page 2).

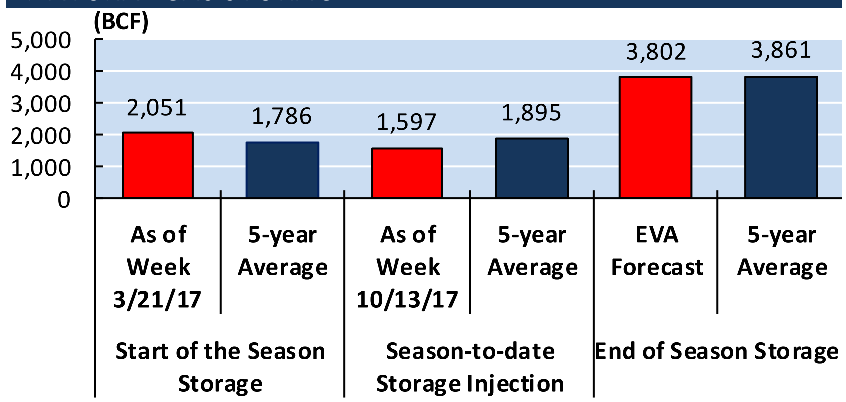
- EVA forecast winter gas prices to average **$3.18/MMBtu**, slightly more bullish than the NYMEX. EVA remains bearish for 2018 summer compared to the NYMEX as the production increase this winter is likely to pull down Gulf prices, but bullish compared to the curve towards 2019 to 2020 as S/D balances indicate production will need greater incentive to meet demand, especially when LNG trains start to come online towards the end of 2018.

PRICE OUTLOOK



Source: Bloomberg, EVA

NATURAL GAS STORAGE



Source: EIA, EVA

NATURAL GAS

Lower 48 (BCFD)	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter 2017-2018	Δ Winter-over-Winter
Dry Gas Production	73.9	75.0	75.6	76.0	76.4	76.8	77.2	76.0	5.5
Net Imports from Canada	5.3	5.1	5.3	5.9	5.8	5.5	5.2	5.5	(0.0)
LNG Sendout	0.2	0.3	0.3	0.4	0.3	0.2	0.2	0.3	(0.0)
Total Supply	79.4	80.4	81.2	82.3	82.5	82.5	82.6	81.8	5.5
Power Burn	25.0	23.9	23.4	22.2	21.1	21.8	22.0	22.5	1.5
Industrial	20.5	22.0	23.2	24.1	23.8	22.3	21.1	23.1	0.2
ResComm	13.9	28.4	39.3	46.8	43.5	29.2	18.2	37.4	3.7
Pipe loss and other	4.8	5.5	5.8	6.0	6.0	5.5	5.2	5.7	0.0
Net Exports to Mexico	4.1	4.5	4.5	4.5	4.5	4.5	4.8	4.5	0.5
LNG Exports	2.8	2.8	3.0	3.1	3.2	3.5	3.4	3.1	1.7
Total Demand	71.1	87.1	99.1	106.6	102.1	86.8	74.7	96.4	7.7
Month-end Storage (BCF)	3802	3600	3044	2290	1743	1607	1844		
EVA Henry Hub	$ 2.90	$ 3.01	$ 3.18	$ 3.28	$ 3.25	$ 3.20	$ 2.92	$ 3.18	$ 0.15
NYMEX as of Oct 25		$ 2.92	$ 3.08	$ 3.20	$ 3.21	$ 3.17	$ 2.97	$ 3.11	$ 0.08

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FEATURE

❖ PIPELINES

Over 7.2 BCFD of new production takeaway capacity is being targeted by the cumulative additions of natural gas pipelines that are slated for construction during the twelve months beginning October 2017. All of these pipelines are being developed in the Northeast and 5.94 BCFD of them have the certificates granted by FERC (see map below and table on page 3).

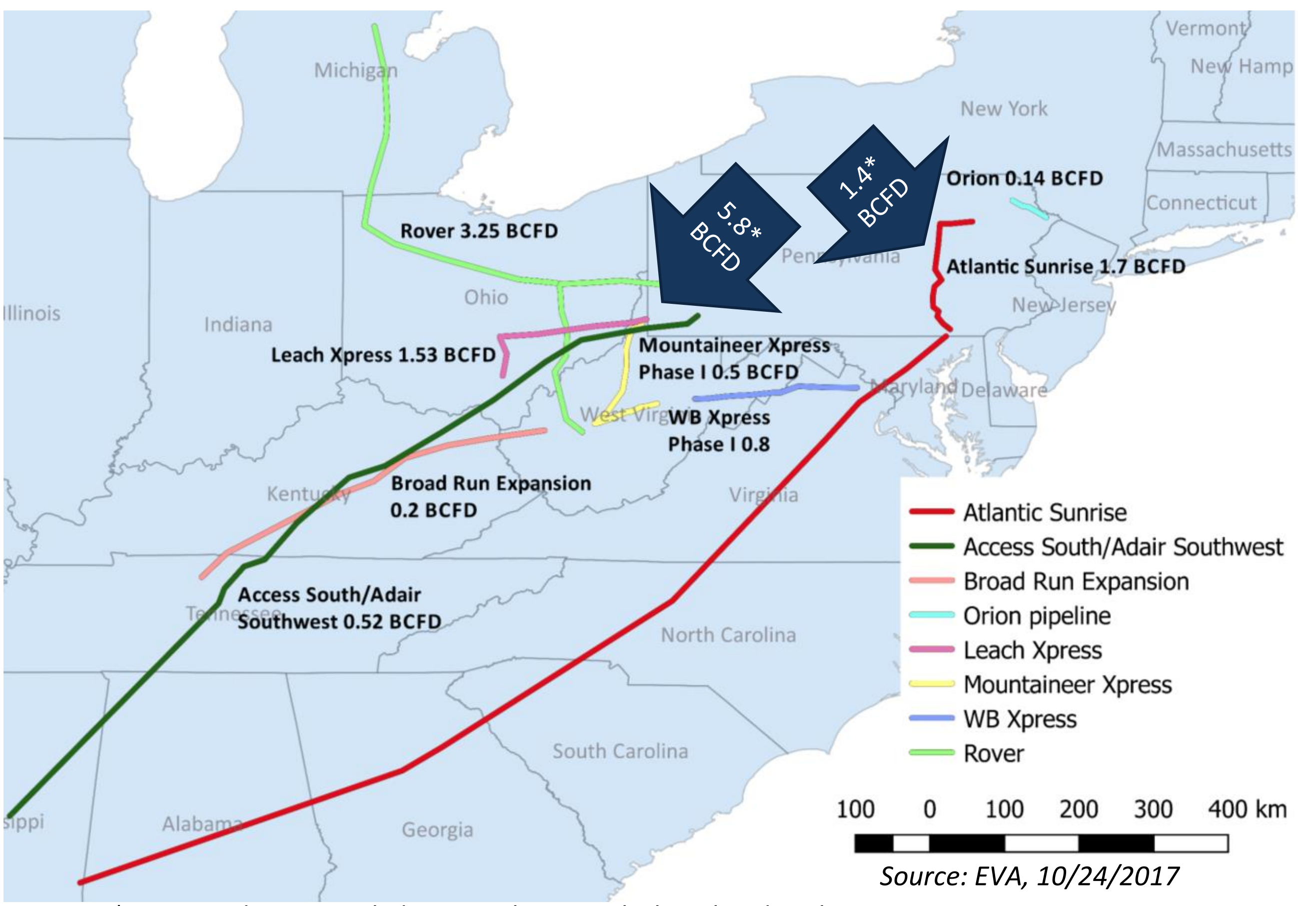
During the same time frame, 9.18 BCFD of market expansion pipelines are coming online, including 2.19 BCFD in the North and 6.98 BCFD in the South. 8.04 BCFD of these pipelines have certificates from FERC, with 1.63 BCFD in the North and 6.71 BCFD in the South respectively. While pipeline expansions in the North are being built mainly to serve LDCs and new CCGT plants, the expansions in the South are mostly targeting LNG terminals, as well as exports to Mexico (see tables on page 3 and page 4).

❖ RISKS

The delay at FERC due to the lack of quorum for six months ending this past August is putting pressure on pipeline companies to meet their original in-service dates. For example, FERC approvals for WB Xpress and Mountaineer Xpress are still pending which makes the June 1, 2018 in-service dates appear challenging (see page 3 for details).

Pipelines associated with LNG could be delayed as a result of delays at a few LNG projects themselves. For example, Cameron LNG was originally scheduled for 2018, but has been substantially delayed to 2019. Therefore, the TGP Southwest Louisiana Supply Project is unlikely to come online in February 2018. Similarly, the Gulf South Coastal Bend Header Project and the FGT East-West Project, both associated with Freeport LNG, could be delayed due to revised schedules for that project though the risks are smaller as Freeport is still targeting a 2018 start (see page 4 for details).

INCREMENTAL PRODUCTION TAKEAWAY CAPACITY FROM OCT 2017 TO OCT 2018



Source: EVA, 10/24/2017

**5.8 BCFD does not include Rover Phase IA which is already online*
**1.4 BCFD does not include Atlantic Sunrise Phase IA which is already online*

Pipelines targeting exports to Mexico could be delayed due to the uncertainty over the buildout of downstream pipelines in Mexico. For example, the cross-border Impulsora pipeline has not yet started construction because the downstream Nueva Era pipeline in Mexico has been delayed to a possible Q1 2018 start. A similar situation exists for the Valley Crossing pipeline which is expected to connect with the Sur de Texas – Tuxpan pipeline in Mexico (see page 4 for details). Sur de Texas – Tuxpan will be built undersea ad the pure complexity of the project has fostered uncertainty over its timeline.

❖ PRODUCTION IMPACTS

EVA forecasts U.S. dry gas production to grow from 73.8 BCFD in October 2017 to 79.6 BCFD in October 2018, with most of the growth (2.9 BCFD) concentrated in this coming winter (see table below). The 5.8 BCFD growth is rather conservative given that there will be at least 5.94 BCFD of new takeaway capacity available. Also, production from the rest of the country can contribute to additional growth in 2018. The reason behind EVA's more conservative production forecast is that although new takeaway capacities are popping up in the Northeast, current rig counts suggest upstream activity is not sufficient to fill the pipelines to full capacity in the near term.

Another side of the equation is whether there is enough demand for the incremental production. Compared to the relatively large production takeaway pipelines, **the demand side pipeline expansions are more fragmented and smaller in size.** Most of them are brownfield upgrades or involve simply adding a new lateral to the mainline. Often times, there is a new power plant planned at the end of the lateral or increasing LDC demand. While demand of this nature is somewhat guaranteed, there could be significant lags with the pipelines targeting the LNG exports and exports to Mexico. Total incremental capacity targeting exports is about 6.6 BCFD. If delayed, it will limit demand growth, therefore, the production that is ultimately called for by the market.

❖ HUB IMPACTS

About 5.8 BCFD of capacity aims to take supply away from the intersection of Southwest PA, WV and OH, the overlapping section of Marcellus and Utica (see map on page 2). The availability of additional capacity could **boost Dominion South basis and narrow the spread between TCO Pool and Dominion South. In the South, the availability of cheap gas from the Northeast could pull outright prices down**, until Freeport and Elba Island come online in late 2018**.**

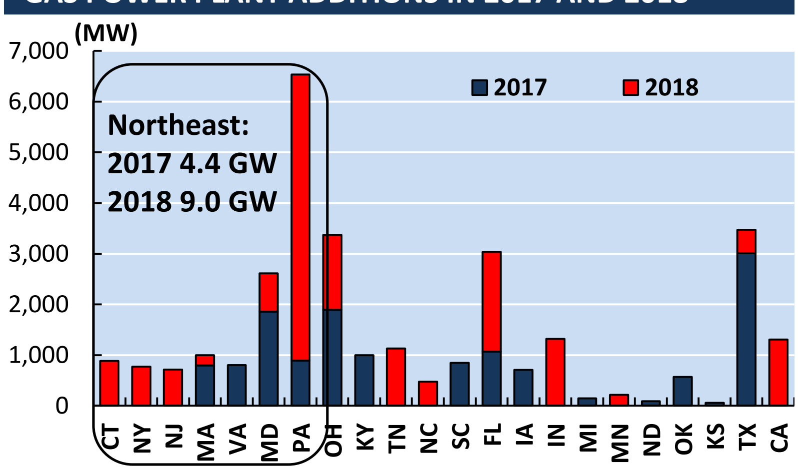
In contrast, only 1.8 BCFD of capacity aims to take supply away from Northeast PA to market. This could limit the growth in the Marcellus dry area in NE PA. Interestingly, most of the new gas power plants are in the New England and Mid-Atlantic regions (see chart below), pulling on supply from the dry Marcellus. 2.1 BCFD of market expansions are being developed in these regions to come online before October 2018. **With this new demand, Transco Leidy and TGP Zone 4 could see rising basis. In contrast, market areas that used to be constrained such as Algonquin City Gate, Transco NY and Transco Non-NY could see lower basis compared to the weather adjusted historical basis.**

CAPACITY ADDITIONS VS. U.S. DRY GAS PRODUCTION GROWTH

Time period	Capacity additions	Production growth
Oct 2017 - Mar 2018	5.1 BCFD	2.9 BCFD
Apr 2018 - June 2018	2.1 BCFD	1.2 BCFD
Jul 2018 - Oct 2018	0*	1.6 BCFD

**WB Xpress Phase I and Mountaineer Xpress Phase I could be delayed to this timeframe*

GAS POWER PLANT ADDITIONS IN 2017 AND 2018



Source: EVA

NEW PRODUCTION TAKEAWAY (through October 31, 2018)

Project	Capacity (BCFD)	Target In-service Date	EVA Comments
ETP Rover	3.25	Phase IA online Phase IB 12/2017 Phase II 03/2018	Related projects are Trunkline backhaul (750 MMCFD) and Panhandle Backhaul (750 MMCFD).
TCO Leach Xpress	1.53	11/2017	The project will connect to Rayne Express (1 BCFD) which will send gas to the Gulf.
TETCO Access South Adair Southwest	0.52	11/2017	Two of the three TETCO's expansion projects in 2017, Lebanon expansion (102 MMCFD) is already online.
Transco Atlantic Sunrise	1.70	Phase IA online Phase IB 11/2017 Phase II 01/2018 Phase III 06/2018	Taking supply from NE PA to Mid-Atlantic and Southeast. Mainly backed by Northeast producers but also has contracts with marketers in the South.
TGP Orion	0.14	06/2018	TGP's expansion to connect PA Susquehanna County production to TCO Zone 4 demand
TGP Broad Run Expansion	0.20	06/2018	TGP's expansion to take West Virginia supply through Kentucky and Tennessee to markets in the South
TCO WB Xpress	1.30	Phase I 06/2018 Phase II 11/2018	Westbound capacity (0.8 BCFD) interconnects with TGP to go to the Gulf; Eastbound capacity (0.5 BCFD) to serve the Mid-Atlantic markets and Cove Point LNG. FERC approval pending, could be delayed
TCO Mountaineer Xpress	2.70	Phase I 06/2018 Phase II 11/2018	The WB Capacity (0.5 BCFD) is targeting 06/2018 in-service date and the Header capacity (2.2 BCFD) is targeting 11/2018 in-service date. Still pending FERC approval. As it's a greenfield pipeline and the FERC decision is not in-time compared to the previously estimated timeline, it could be delayed. In 11/2018, it is supposed to connect to Gulf Xpress (pending FERC approval) which will transport 0.9 BCFD to the Gulf region.
Total	**7.24***		
FERC Approved	**5.94***		

**Not including Phase IA of Rover and Phase IA of Atlantic Sunrise which are already online, also not including Phase II of WB Xpress and Phase II of Mountaineer Xpress which are targeting Nov 2018*

MARKET EXPANSION (through October 31, 2018) North

Project	Capacity (BCFD)	Target In-service Date	EVA Comments
Northern Lights 2017 Expansion	0.076	In-service since 10/2017	Northern Natural Gas Company's project to provide incremental winter peak day firm service in Minnesota.
DTI Leidy South Project	0.155	In-service since 10/2017	Serve power demand in MD and VA.
Transco NY Bay Expansion Project	0.115	In-service since 10/2017	Serve National Grid NY's Brooklyn Union Gas Company in New York.
Portland Natural Gas Northern Lights 2017 Expansion	0.042	11/2017	Increasing imports/exports capacity to Canada. Serve Northern Utilities' customers in NH and ME. Likely delayed as no FERC order has been issued.
TGP Connecticut Expansion Project	0.072	11/2017	To serve LDCs in Connecticut including Connecticut Natural Gas, Southern Connecticut Gas, Yankee Gas Services.
DTI New Market Project	0.112	11/2017	To serve Brooklyn Union Gas Company and Niagara Mohawk Power Corporation.
AGT and Maritime and Northeast Atlantic Bridge Project	0.133	Partial in-service 11/2017 Full in-service 06/2018	To serve LDCs and power customers in the New England market.
TGP Triad Expansion	0.180	11/2017	To serve a new Invenergy CCGT power plant (1,480 MW) in Lackawanna County, Pennsylvania.
Transco Virginia Southside Expansion Project II	0.250	12/2017	To serve a CCGT power plant (1,580 MW) in Greensville County, VA.
Transco Garden State Expansion	0.180	Partial in-service 09/2017 Full in-service 05/2018	To serve New Jersey Natural Gas in NJ.
TETCO Bayway Lateral Project	0.300	06/2018	To serve Phillips 66 and Cogen Technologies in NJ.
Eastern Shore 2017 Expansion Project	0.061	07/2018	To serve LDC, power and industrial demand in DE and MD.
Millennium Eastern System Upgrade	0.223	09/2018	91% subscribed by LDCs and municipalities; water permit secured; no FERC order yet.
Dominion Cove Point LNG Eastern Market Access Project	0.294	09/2018	To serve Washington Gas and Mattawoman Power Plant (990 MW) in MD. No FERC order yet.
Total	**2.193**		
FERC Approved	**1.634**		

MARKET EXPANSION (through October 31, 2018) South

Project	Capacity (BCFD)	Target In-service Date	EVA Comments
ANR Collierville Expansion	0.200	11/2017	To serve TVA's Allen CC project (1,070 MW) in Tennessee.
Carolina Gas Transmission Transco to Charleston Project	0.080	12/2017	To serve South Carolina Electric and Gas.
SONAT Zone 3 Expansion Project	0.235	Partial in-service 09/2017 Full in-service 12/2017	Supply gas to Elba Island and Georgia and Florida utility and industrial customers.
Impulsora Pipeline	1.120	12/2017	The U.S. side of the Nueva Era pipeline that exports to Northeast Mexico. Construction has not began and is likely delayed.
TGP Southwest Louisiana Supply Project	0.900	02/2018	The pipeline has binding precedent agreements with shippers Mitsubishi Corporation and MMGS, Inc. However, it might be delayed as Cameron LNG is delayed to 2019.
Gulf South Coastal Bend Header Project	1.440	04/2018	To serve Freeport LNG, shippers include BP Energy, JERA Energy, Osaka and E.ON. It could be delayed as Freeport's timeline was pushed back to Sep/Oct 2018.
FGT East-West Project	0.275	09/2018	To serve gas to Port Arthur LNG and Freeport LNG. The pipeline has agreements with JERA Energy America and Shell Energy North America. FERC approval pending, likely delayed as Port Arthur has no FID. No FERC order yet.
Gulf South St. Charles Expansion Project	0.133	09/2018	To serve Entergy's natural gas-fired power plant in Montz, LA
Valley Crossing Pipeline	2.600	10/2018	Upstream pipelines include South Texas Expansion Project as well as the Pomelo Connect pipeline. The Valley Crossing pipeline is also called the Nueces-Brownsville pipeline which will export gas to Mexico. The anchor shipper on the pipeline is Mexico's Comisión Federal de Electricidad (CFE). It could be delayed due to the downstream Sur de Texas – Tuxpan pipeline.
Total	**6.983**		
FERC Approved	**6.708**		

FUNDAMENTALS

Supply

U.S. dry gas production declined in October to 73.8 BCFD, a 0.6 BCFD drop from September. The drop mostly happened in the Marcellus (-0.5 BCFD) and the Gulf of Mexico (-0.4 BCFD). While the former was a result of pipeline maintenance as well as Northeast storage getting full, the latter was a result of the Hurricanes. Offshore rig counts which fell during Hurricanes have recovered to 20 but have not yet reached the pre-Harvey levels (24 rigs). Noticeably, Permian gas production also declined by 0.1 BCFD, bucking the growth trend for the past ten months (see page 8). As the withdrawal season begins and winter demand starts rolling in, production is forecast to see recovery, aided by the new pipelines coming online in November, namely Leach Xpress, Adair and Access South, Phase IB and Phase II of Rover, and Phase IB and Phase II of Atlantic Sunrise.

Total oil and gas rig counts have been declining since the end of July. Oil rigs dropped by 30 since the end of July and gas rigs dropped by 15. Haynesville gas rigs dropped by 4 and Bakken gas rigs dropped by 9, indicating that drilling activities in these areas have slowed down.

Flows on Rover have grown to 0.96 BCFD after the mainline compressor station 1 was brought online, sending gas to the ANR and Panhandle pipelines. FERC has granted Rover resumption of drilling at two additional locations as Rover marches towards the in-service of Phase IB (from Seneca to Cadiz) by the end of the year and Phase II by the first quarter of 2018. Production is forecast to grow by 2.9 BCFD from now to the end of winter.

Net imports from Canada remain low compared to last year; 0.4 BCFD lower than last October. Net imports are forecast to climb going into winter. Last winter Western Canadian gas flowed through the U.S. Midwest on its way to Eastern Canada as TransCanada's mainline rates were prohibitively high. That rate has since been reduced, and this year Eastern Canada's winter demand will mainly be met by flows on TransCanada's mainline. This will cut some exports from the Midwest to Eastern Canada and as a result, keep more Western Canadian and Midcon gas in the U.S. The net effect could be a slight increase in Canadian imports winter over winter.

Demand

Power burn averaged 25.6 BCFD in October, 1.9 BCFD higher than October 2017 as CDDs were above five-year normal. EVA's weather-adjusted natural gas power burn is showing strength. October's power burn actualized 0.3 BCFD higher than weather normalized power burn levels (see page 11). Power burn is forecast to be 1.45 BCFD higher winter over winter, mainly due to infrastructure changes. By the end of 2017, 12 GW of natural gas capacity would have been added since the end of 2016, with another 14 GW of gas capacity is coming online in 2018 (see page 11). Concurrently, 11 GW of coal capacity is set to retire in 2018.

Other demand in October averaged 1 BCFD lower than the same time last year, mostly due to a 1.1 BCFD drop in ResComm demand due to lower HDDs. October industrial demand saw a 0.1 BCFD growth year over year. Industrial indexes and capacity utilization look slightly healthier than in 2016. According to the newly released EIA manufacturing energy consumption survey, natural gas consumption for manufacturing rose to 5.9 quadrillion Btu in 2014, or 39% of the total fuel use in manufacturing, compared with 37% in 2010.

Although we have revised winter ResComm demand up compared to the previous forecast, there remains upside risks as the current weather forecast is showing above-normal HDDs for the first half of winter. ResComm demand is forecast to be 3.7 BCFD higher winter over winter, which accounts for 49% of total demand growth.

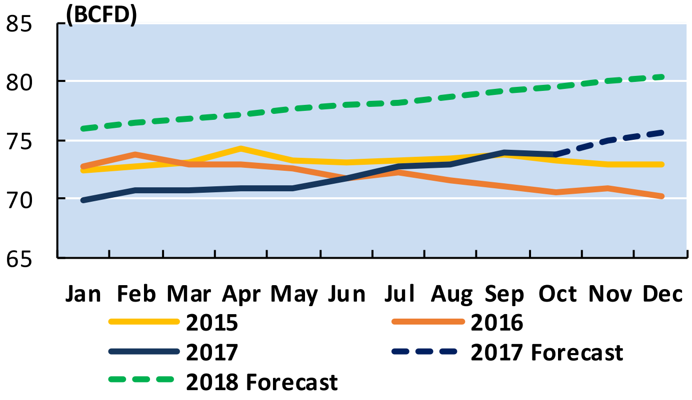
Exports

U.S. LNG exports have flowed at record levels this month as Sabine Pass train 4 began full commercial operation. LNG feedgas demand set a record as October's demand averaged 2.77 BCFD. Cover Point is getting ready to begin exporting, yet still only taking 20 MMCFD as of October. Flows will hold steady through the first half of 2018, as the next two trains Freeport T1 (0.6 BCFD) and Elba Island (0.2 BCFD) are not coming online until Sep/Oct 2018.

Exports to Mexico averaged 4.1 BCFD in September, 0.3 BCFD lower than peak levels. The Impulsora pipeline, the upstream feed to the Nueva Era pipeline, has not started construction yet, which indicates potential delays for incremental exports. EVA will adjust down its forecast for exports to Mexico if the project does not start construction by the end of November.

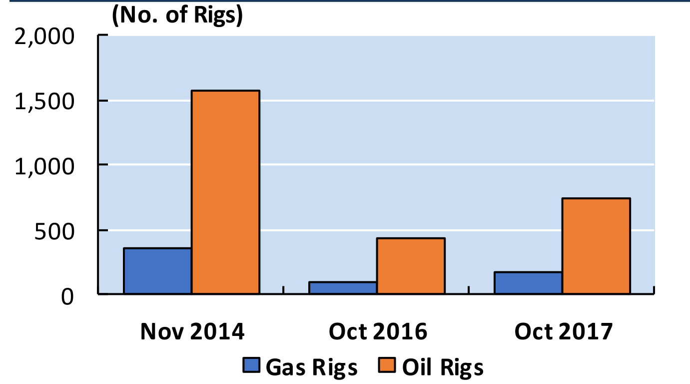
PRODUCTION AND LNG IMPORTS

DRY PRODUCTION HISTORICAL AND FORECAST



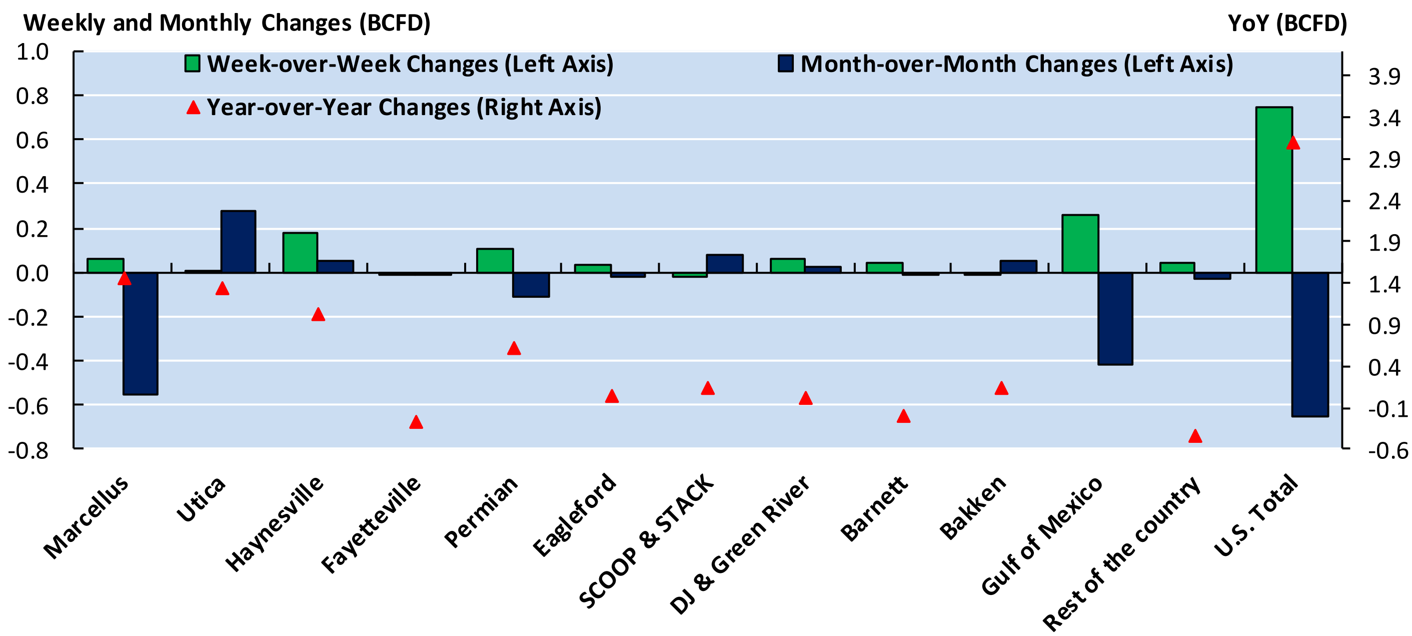
Source: EVA

U.S. RIG COUNT



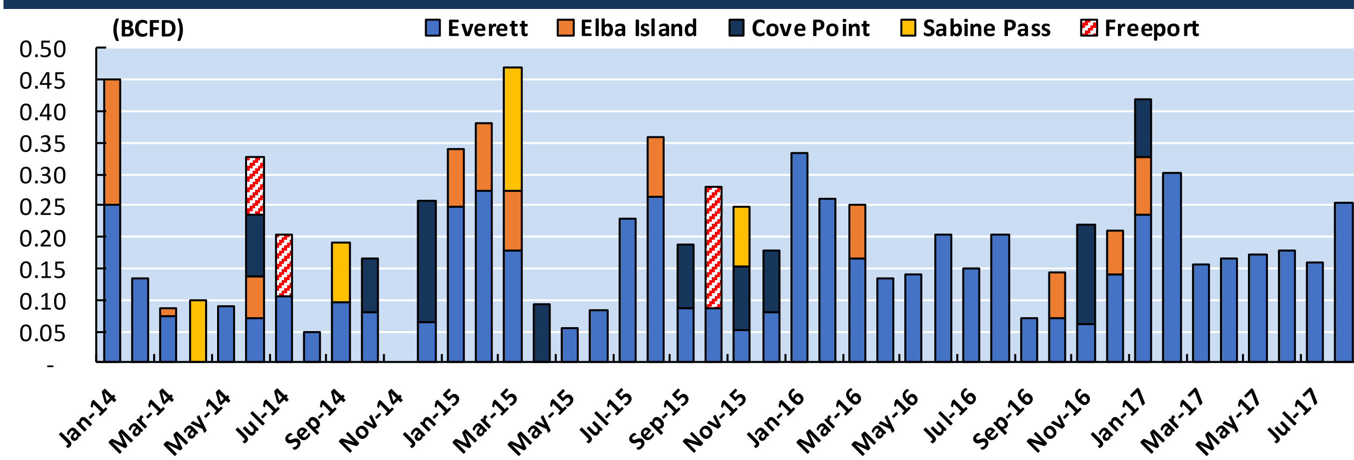
Source: Baker Hughes, EVA

PRODUCTION TRENDS BY PLAY



Source: PointLogic, EVA

MONTHLY LNG IMPORTS BY TERMINAL



Source: DOE, EVA

NET IMPORTS FROM CANADA

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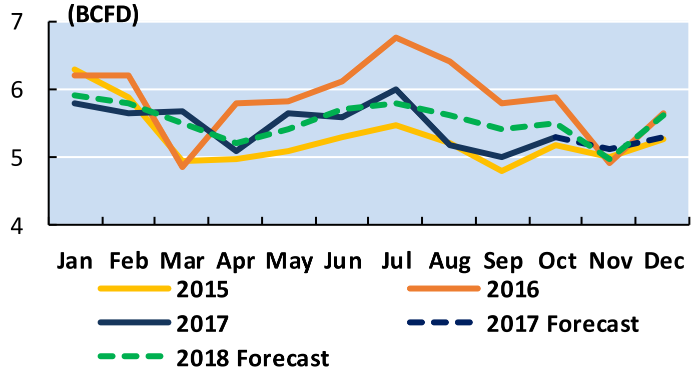
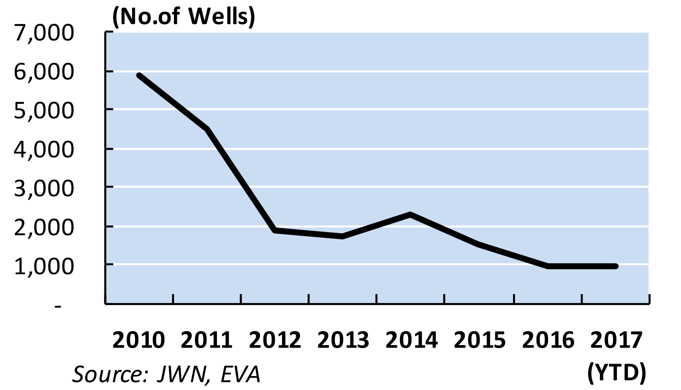


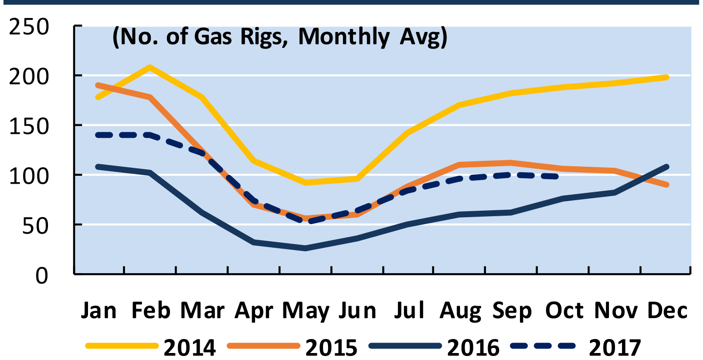
Source: EVA

CANADIAN GAS WELL COMPlETIONS



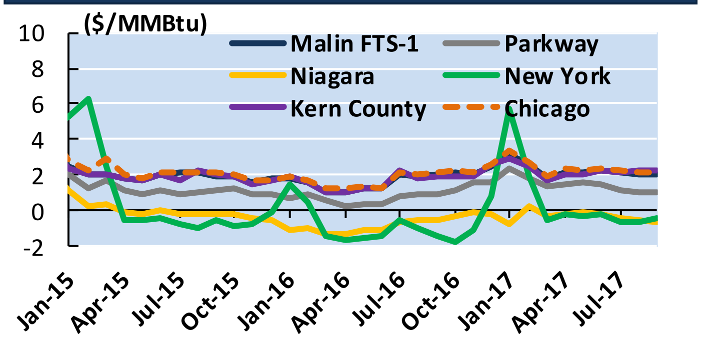
Source: JWN, EVA

CANADA GAS RIG COUNT



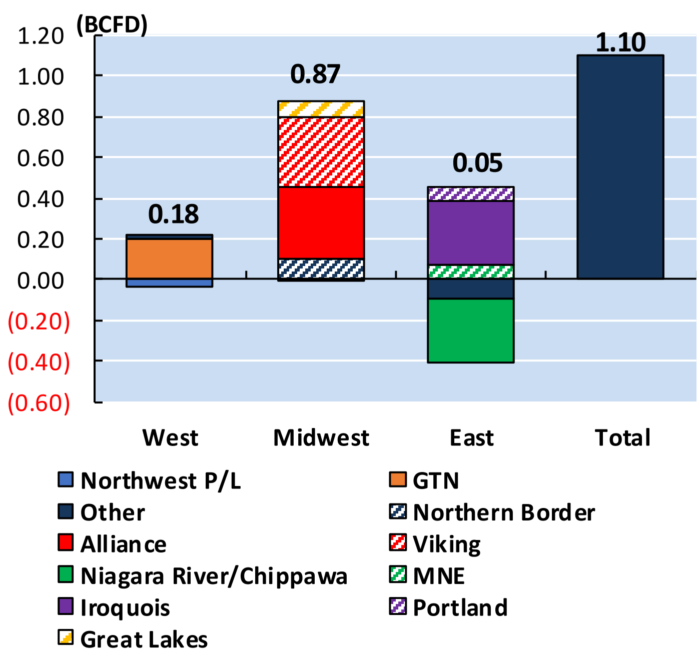
Source: Baker Hughes, EVA

INTRA-ALBERTA NETBACK FROM MARKETS



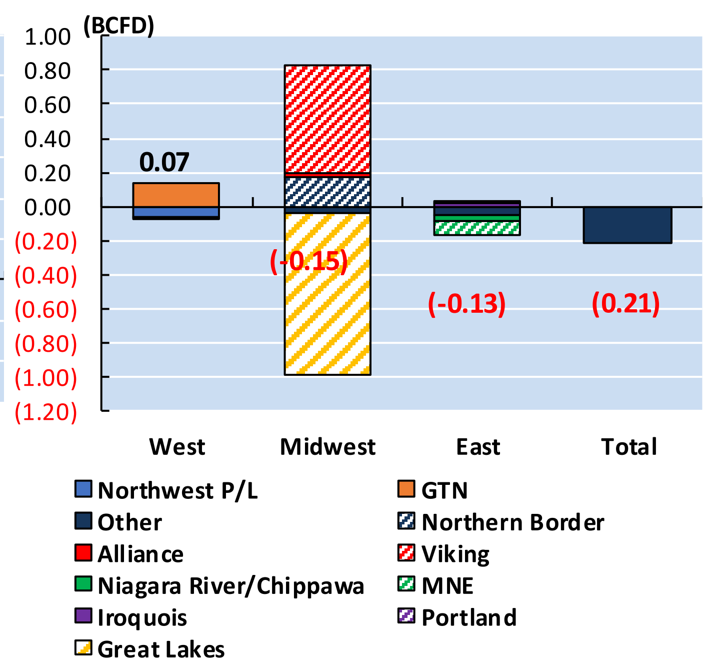
Source: GLJ Energy, EVA.
Netback = market area prices less full filed transportation charges

SUMMER 2015 to SUMMER 2016 CHANGE



Source: EIA, EVA
Note: Data labels are net volumes for the region

15/16 WINTER TO 16/17 WINTER CHANGE

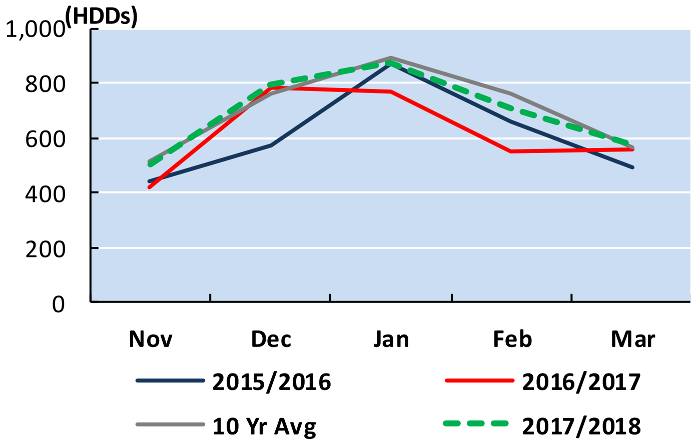


Source: EIA, EVA
Note: Data labels are net volumes for the region

WEATHER

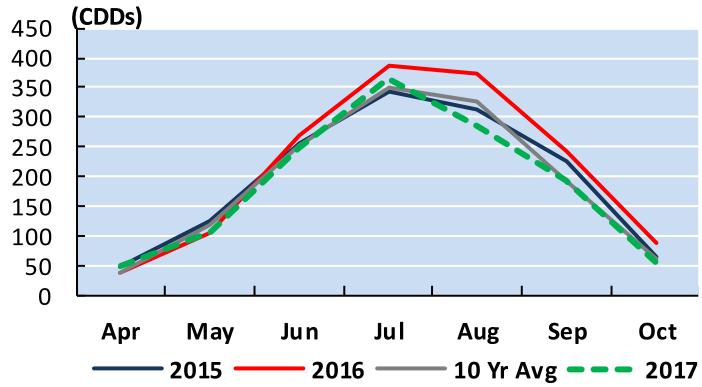
Normal winter is expected for 2017-2018 according to NOAA's forecast compared to 10-year average

WINTER HEATING DEGREE DAYS



Source: NOAA, EVA

SUMMER COOLING DEGREE DAYS

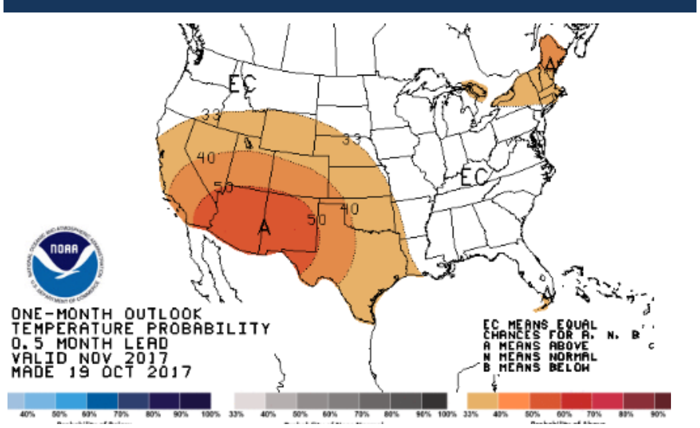


Source: NOAA, EVA

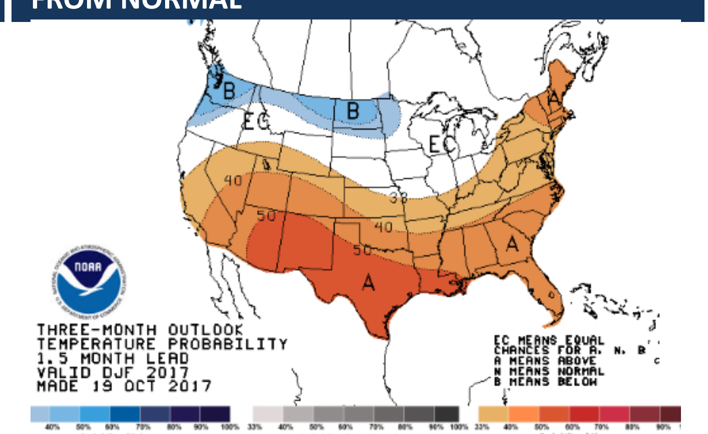
Year Range	Total HDDs	Δ from Rolling 10y Avg	
		HDDs	Percent
10 Year Avg	3497	-	-
2015/2016	3042	-455	-13%
2016/2017	3074	-423	-12%
2017/2018 Fcst	3467	-46	-1%

Year Range	Total CDDs	Δ from Rolling 10y Avg	
		CDDs	Percent
10 Year Avg	1334		
2015	1373	60	5%
2016	1503	169	13%
2017 Fcst	1303	-31	-2%

NOVEMBER TEMP DEVIATION FROM NORMAL



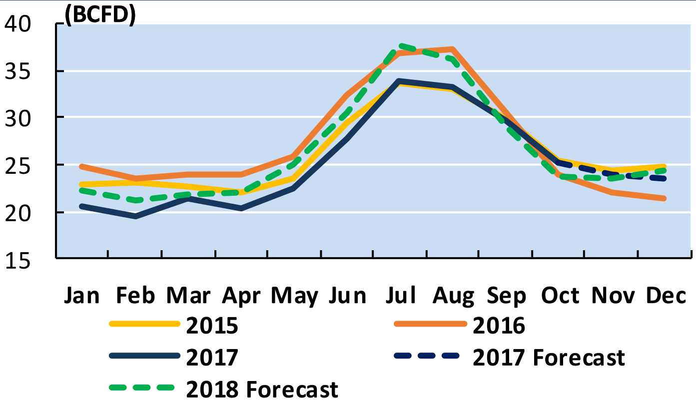
DECEMBER-JANUARY-FEBRUARY TEMP DEVIATION FROM NORMAL



Source: NOAA

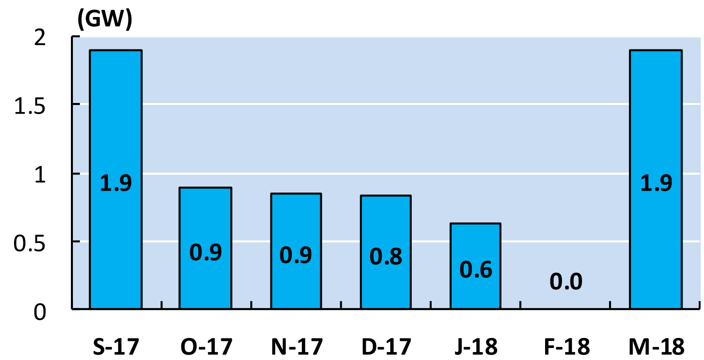
POWER BURN

POWER BURN



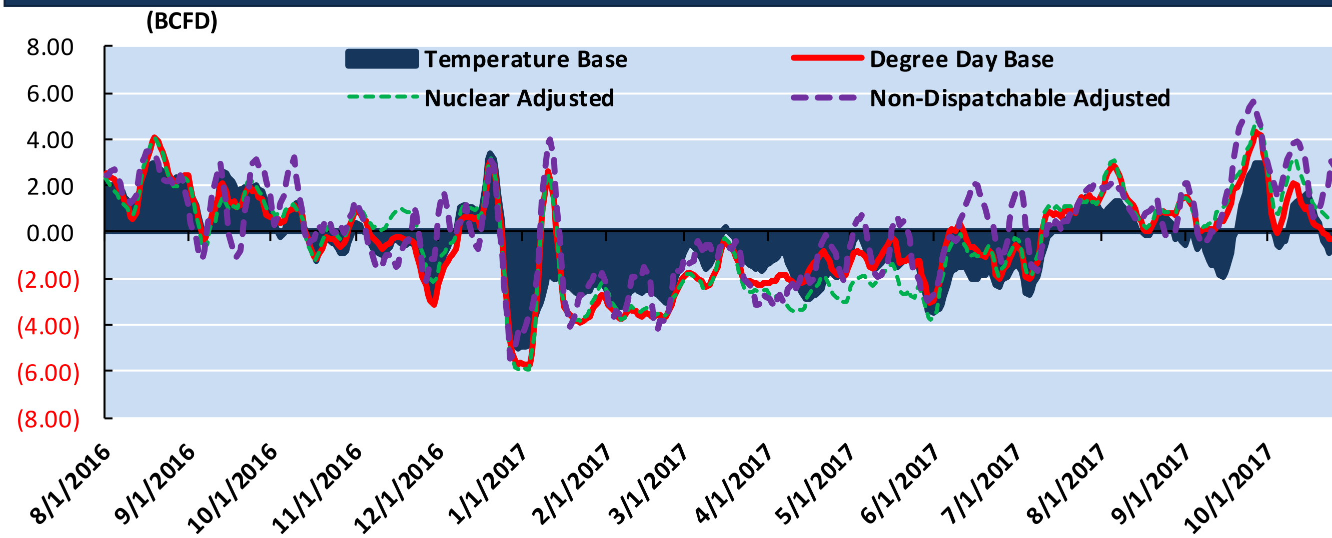
Source: EVA

NATUAL GAS POWER CAPACITY ADDITIONS



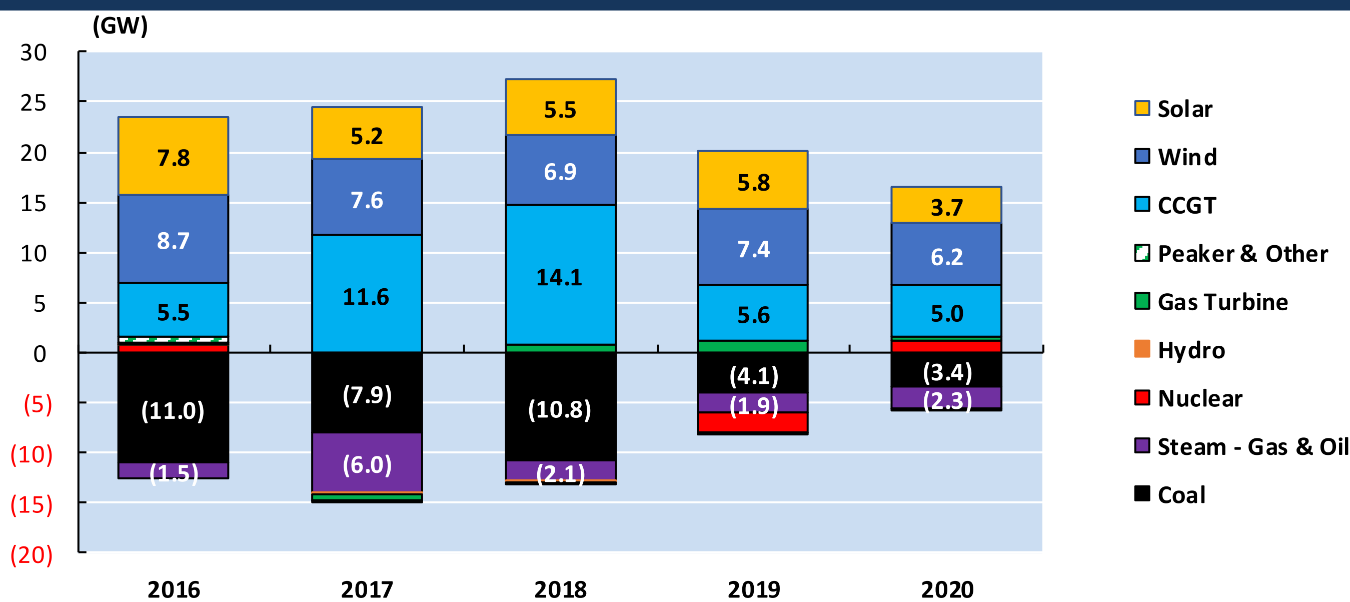
Source: EVA

WEATHER ADJUSTED POWER BURN DIFFERENTIALS - YoY DEGREE DAYS AND TEMPERATURE BASES



Source: EVA

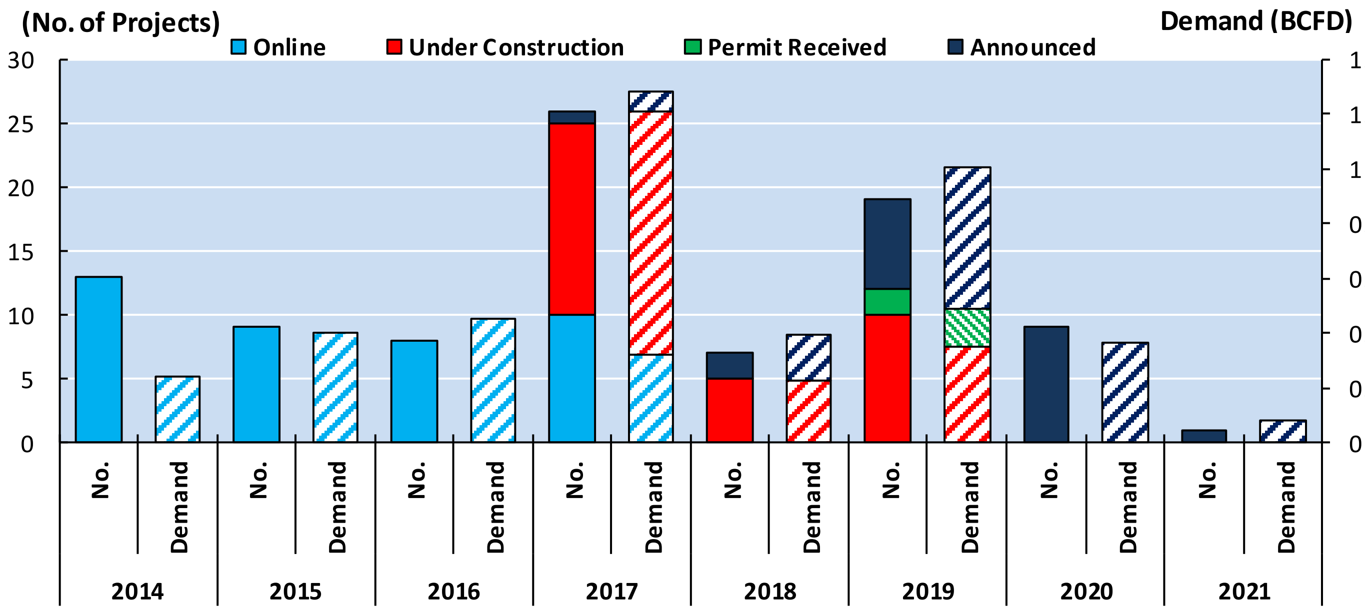
NET POWER CAPACITY ADDITIONS/RETIREMENTS



Source: EVA

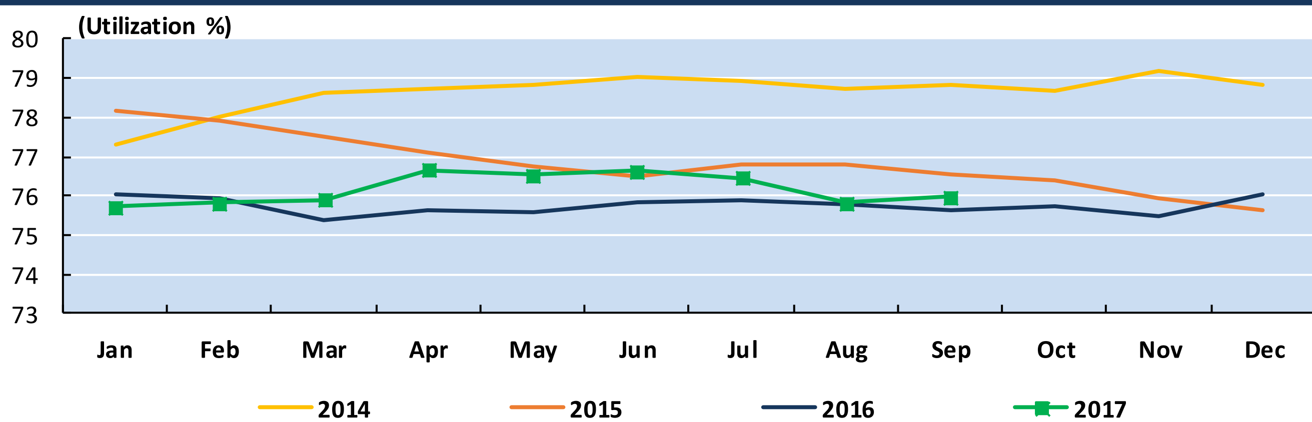
INDUSTRIAL

INDUSTRIAL PROJECTS AND GAS DEMAND



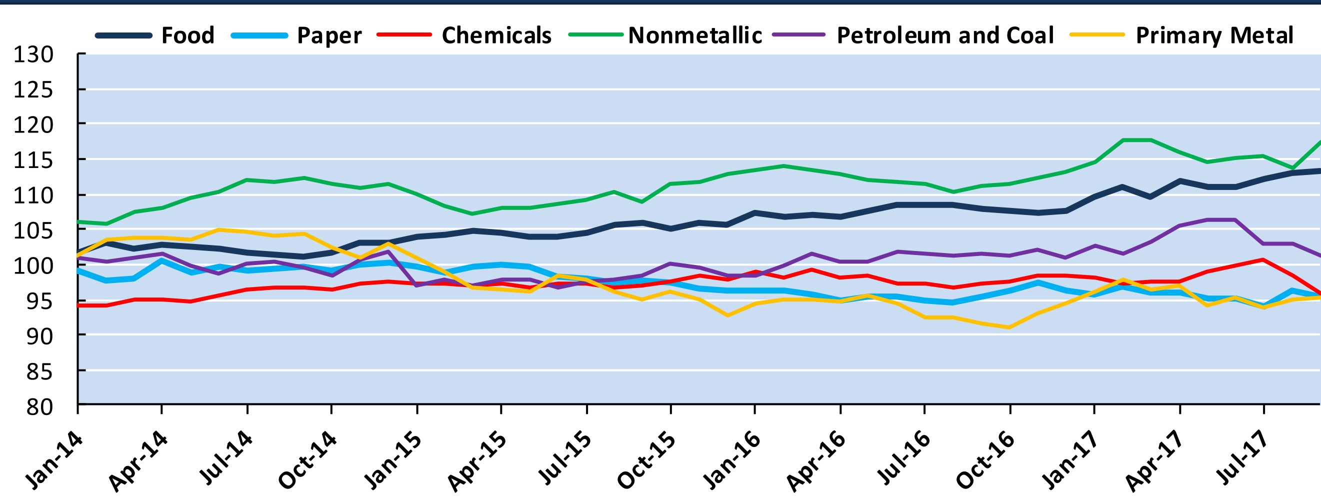
Source: EVA

INDUSTRIAL CAPACITY UTILIZATION



Source: U.S. Federal Reserve

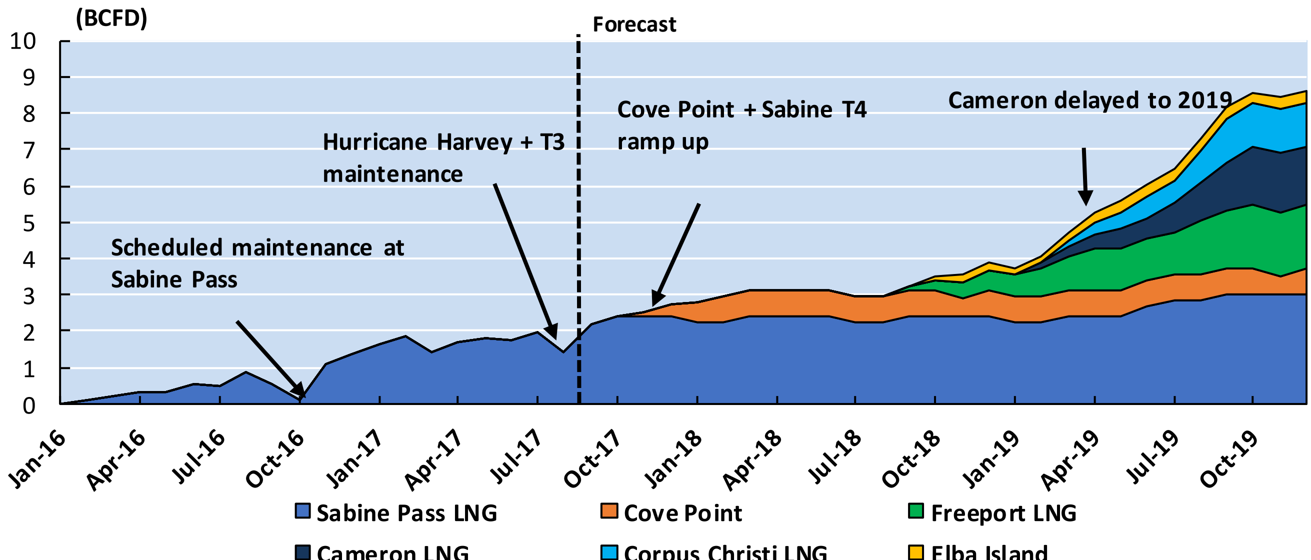
PERFORMANCE OF THE SIX ENERGY INTENSIVE INDUSTRIES (INDEX 2007 = 100)



Source: U.S. Federal Reserve

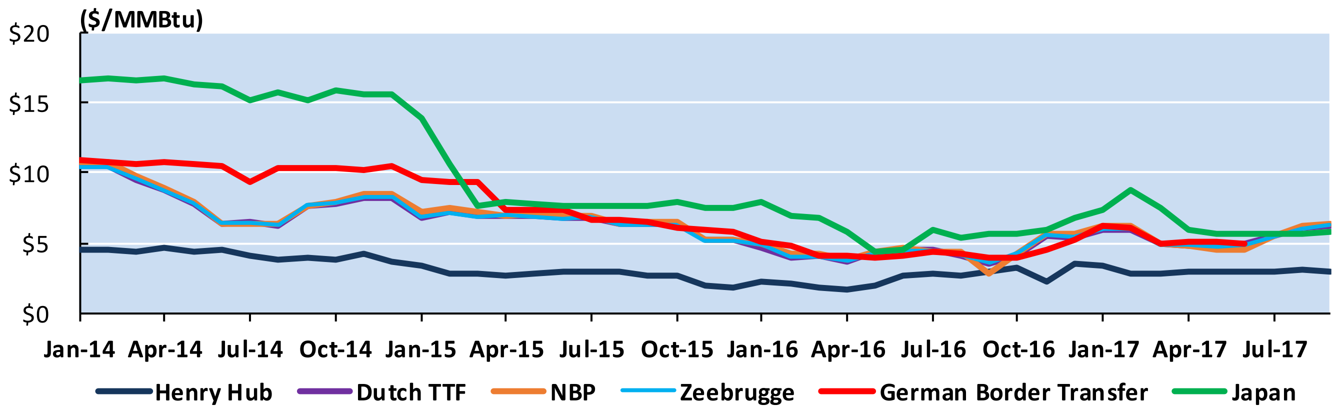
LNG EXPORTS

U.S. LNG EXPORTS BY PROJECT:2016-2019



Source: EVA

INTERNATIONAL GAS PRICES



Source: NGW, Ministry of Economy, Trade and Industry of Japan, EVA

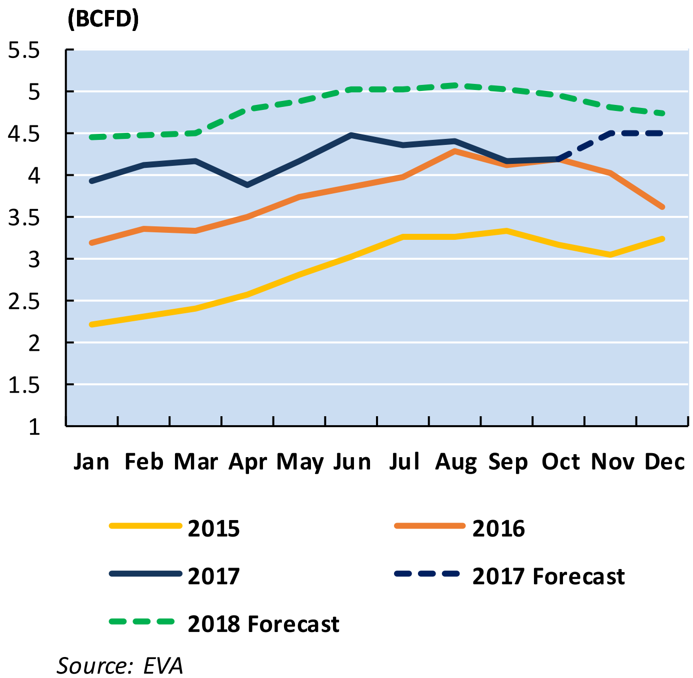
U.S. LNG PROFITABILITY

U.S. LNG COST STRUCTURE				MARGINS				
October ($/MMBTU)	**To Europe**	**To Asia**			**Variable Netback**		**Net Loss/Profit**	
				Henry Hub	**To Europe**	**To Asia**	**To Europe**	**To Asia**
Henry Hub	$2.87	$2.87						
15% Surcharge	$0.43	$0.43						
Tolling Fee	$2.89	$2.89	**August**	**$2.85**	**$2.15**	**$0.72**	**($0.74)**	**($2.17)**
Total FOB Cost	**$6.19**	**$6.19**	**September**	**$2.95**	**$1.76**	**$1.02**	**($1.13)**	**($1.87)**
Shipping and Regas	$0.75	$1.50	**October**	**$2.87**	**$2.16**	**$1.52**	**($0.73)**	**($1.37)**
Total Landed Cost	**$6.94**	**$7.69**	**November**	**$3.01**	**$2.15**	**$3.31**	**($0.74)**	**$0.42**
Avg. Regional Hub Price	$6.21	$6.32	**December**	**$3.18**	**$2.24**	**$3.66**	**($0.65)**	**$0.77**
Variable Netback	**$2.16**	**$1.52**	**January**	**$3.32**	**$2.23**	**$3.63**	**($0.66)**	**$0.74**
Fixed Costs	$2.89	$2.89	**February**	**$3.30**	**$2.29**	**$3.71**	**($0.60)**	**$0.82**
Net Loss	**($0.73)**	**($1.37)**	**March**	**$3.25**	**$2.05**	**$2.71**	**($0.84)**	**($0.18)**

Note : Represents the average structure of Cheniere's SPAs for Trains 1-4 at at Sabine Pass. Subsequent projects have slightly different contract structures. Shipping costs vary depending on specifications of the ship and charter deal.

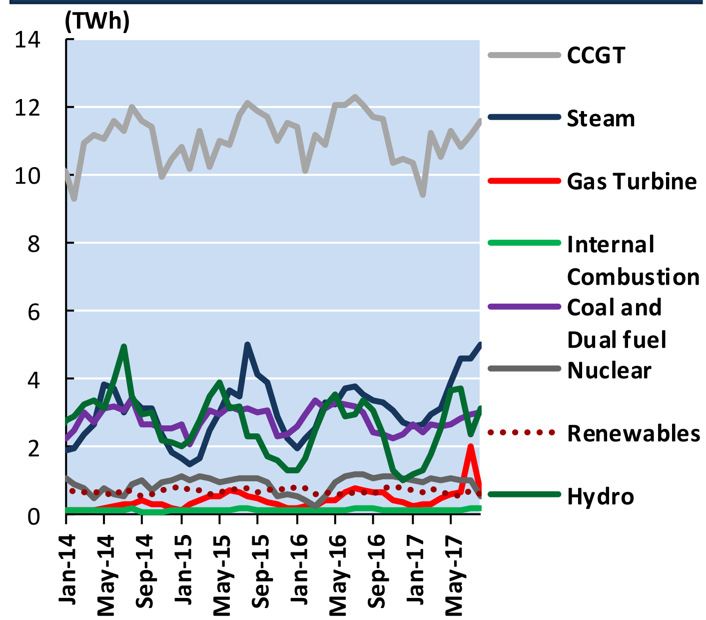
EXPORTS TO MEXICO

U.S. EXPORTS TO MEXICO



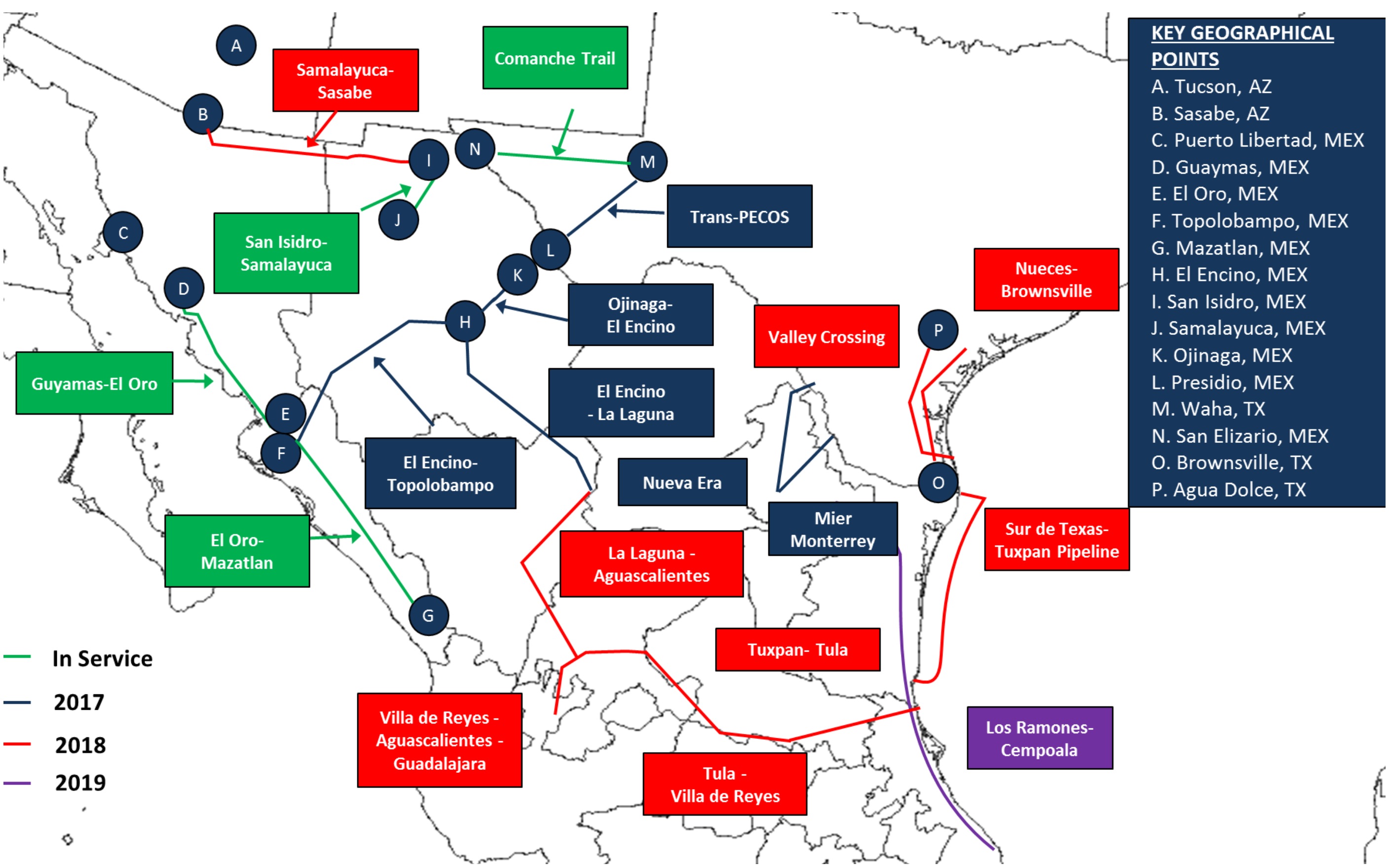
Source: EVA

MEXICO GENERATION BY TECHNOLOGY



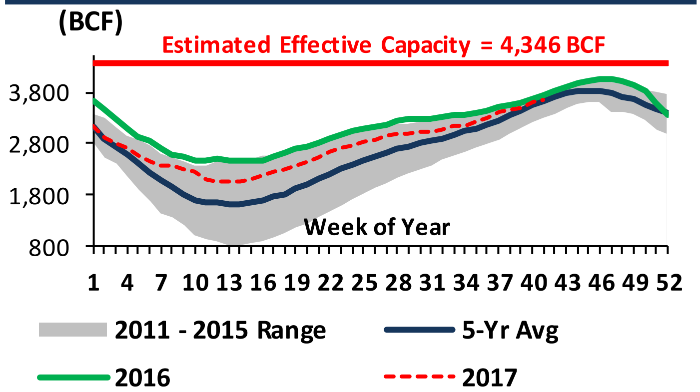
Source: Sistema de Información Energética

PIPELINES IN MEXICO

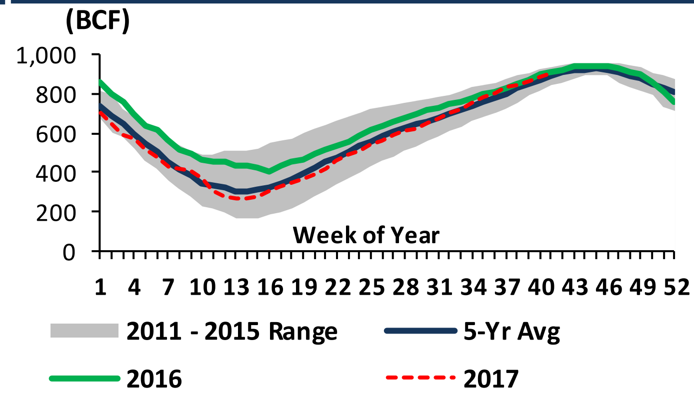


STORAGE

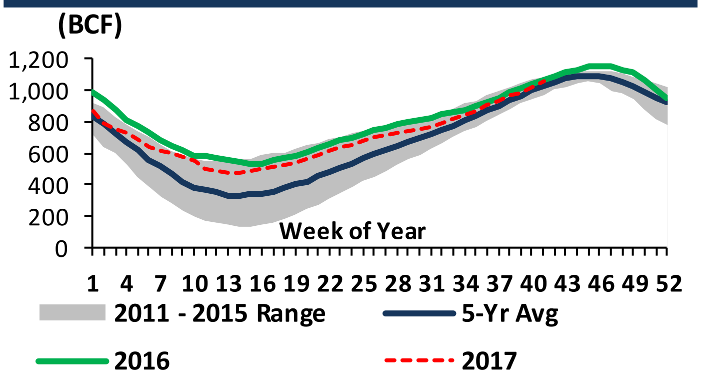
US L-48 WORKING GAS STORAGE



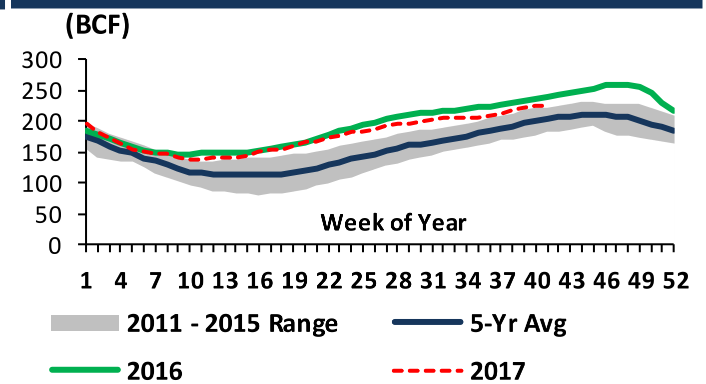
EAST



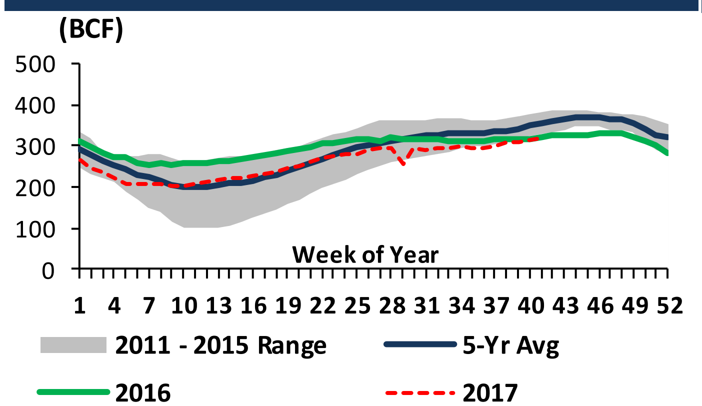
MIDWEST



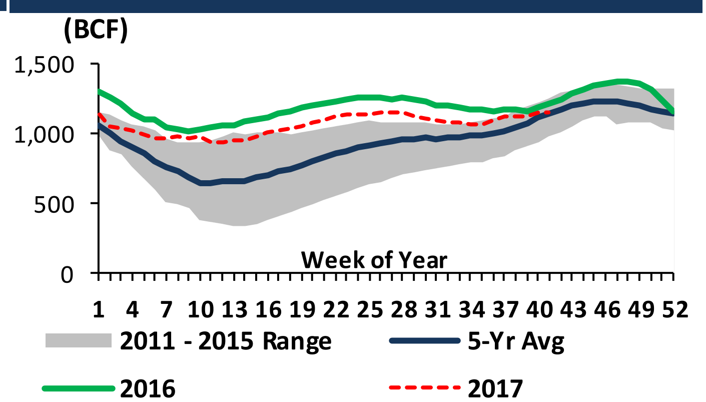
MOUNTAIN



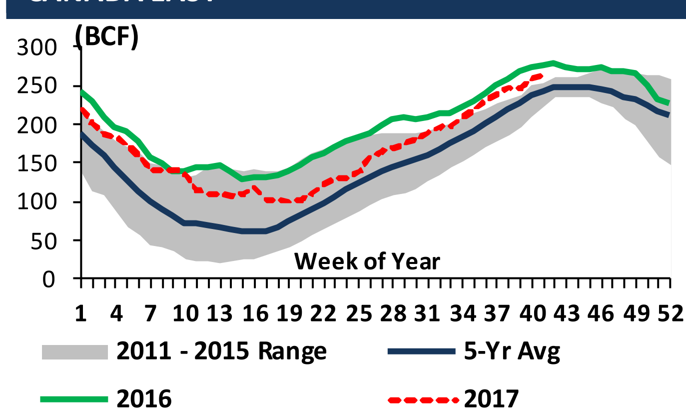
PACIFIC



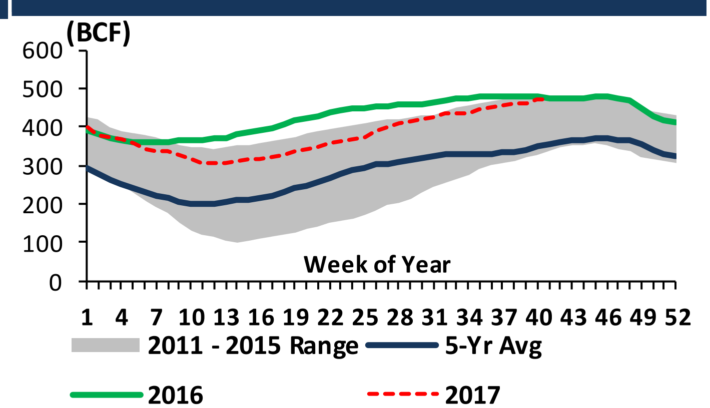
SOUTH CENTRAL



CANADA EAST

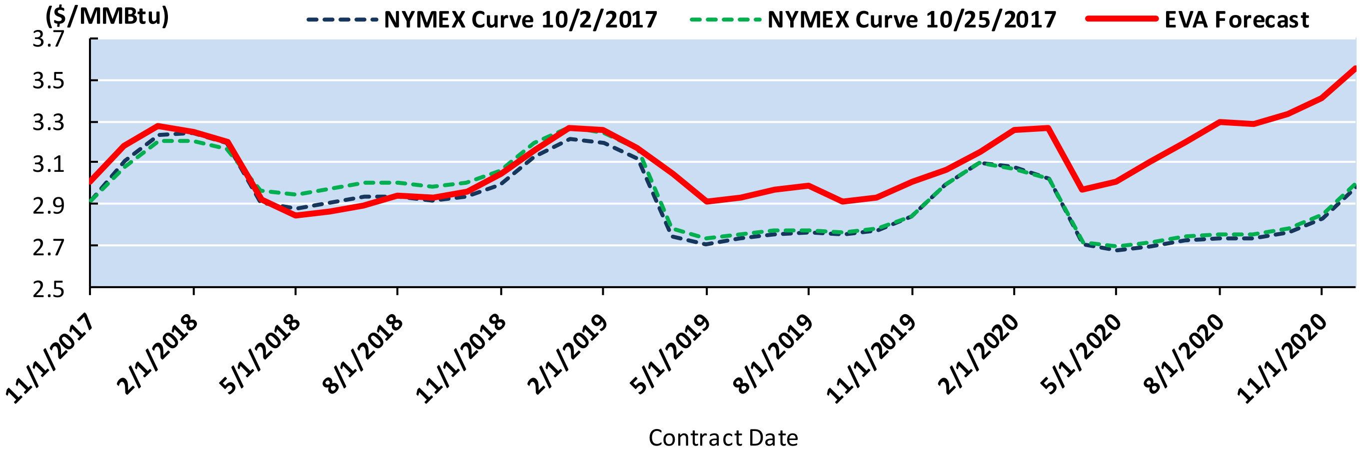


CANADA WEST



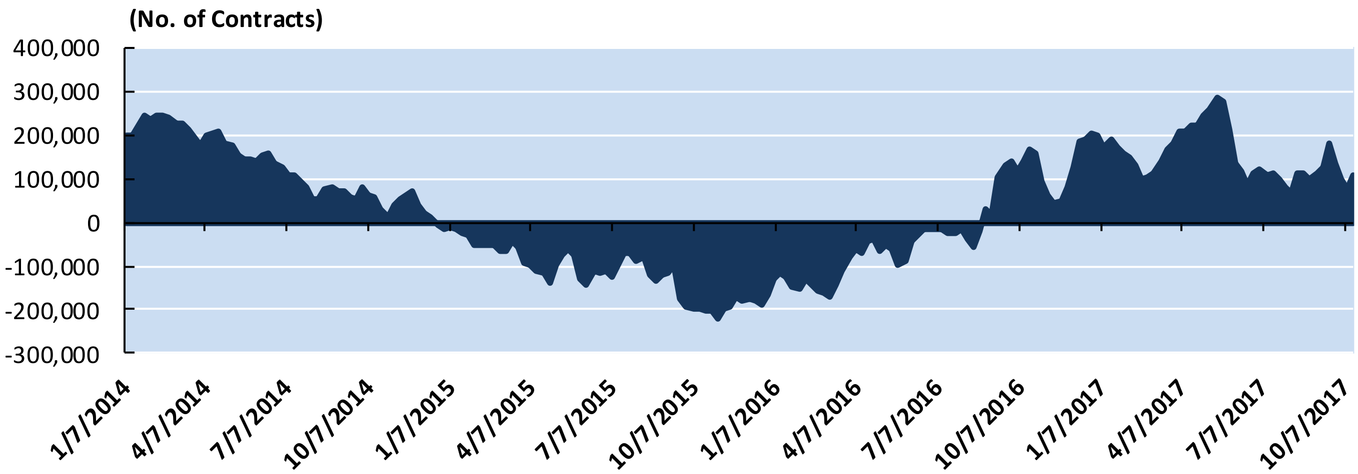
PRICES

HENRY HUB CURVE SHIFT VS. EVA'S PRICE FORECAST



Source: NYMEX, EVA

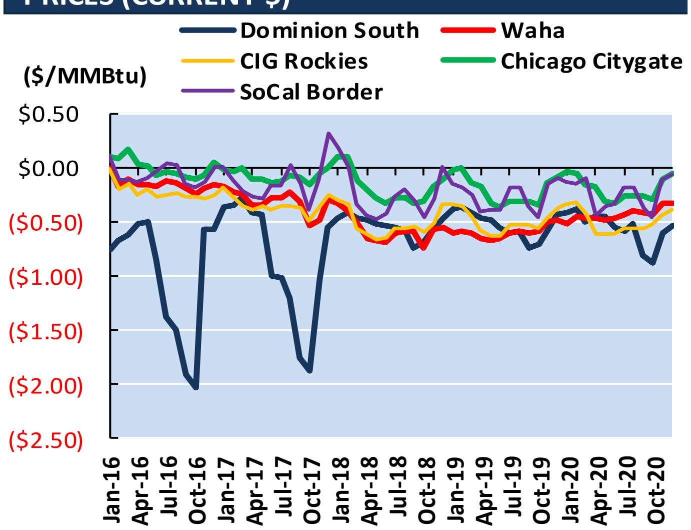
NON-COMMERCIAL NET LENGTH



Source: CFTC, EVA

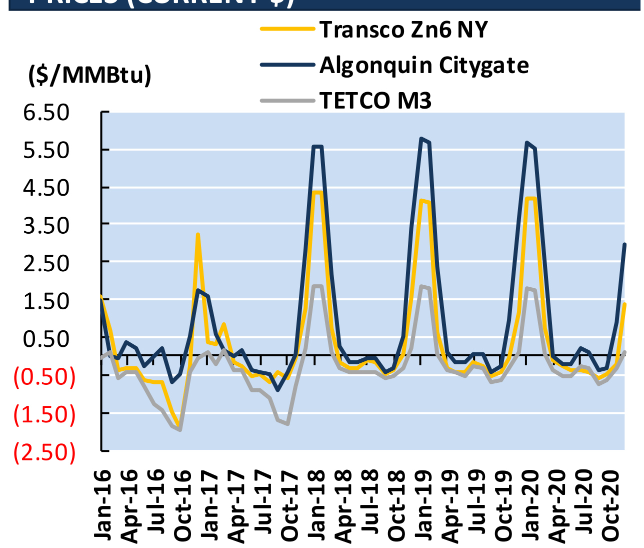
Note: positions are prompt month futures and swaps

REGIONAL BASIS HISTORICAL AND FUTURES PRICES (CURRENT $)



Source: Bloomberg, ICE, EVA

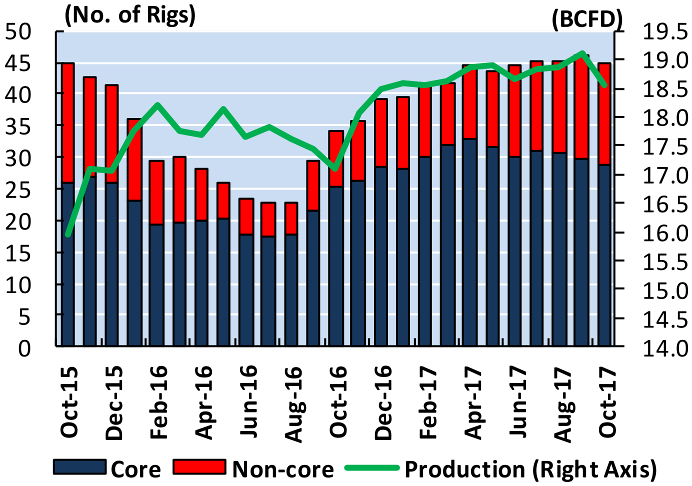
REGIONAL BASIS HISTORICAL AND FUTURES PRICES (CURRENT $)



Source: Bloomberg, ICE, EVA

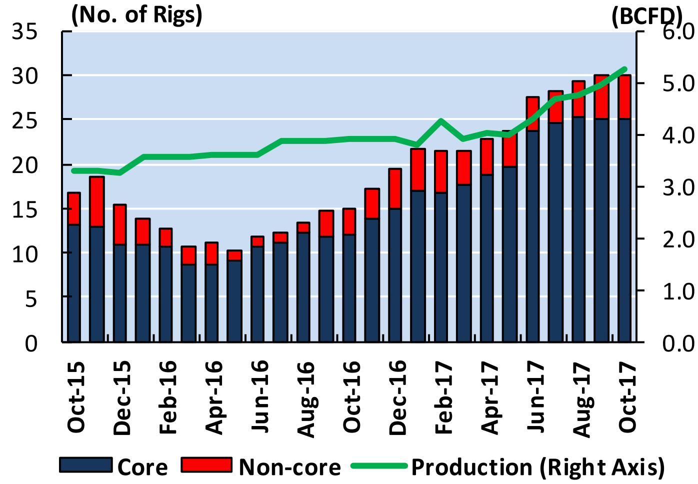
ANNEX: SHALE PRODUCTION AND RIG COUNT

MARCELLUS



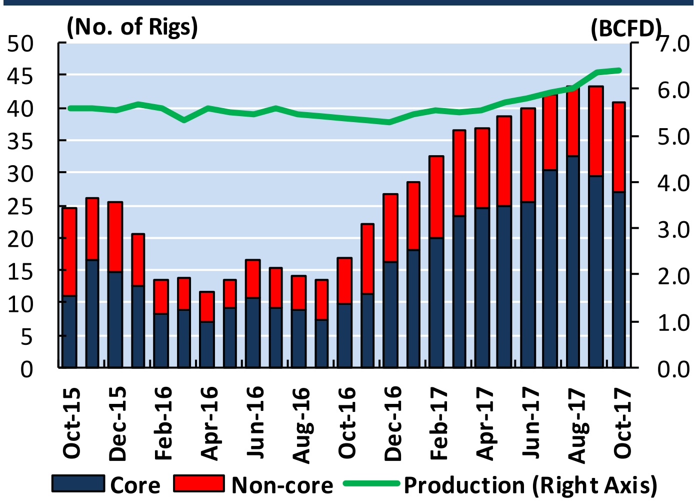
Source: PointLogic, EVA

UTICA



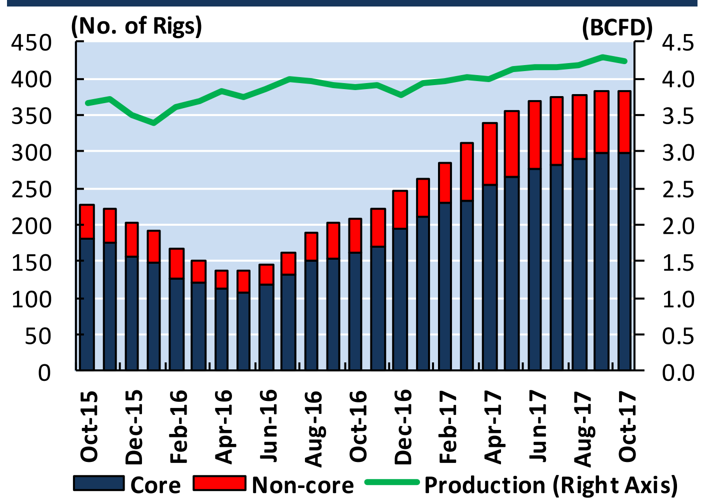
Source: PointLogic, EVA

HAYNESVILLE



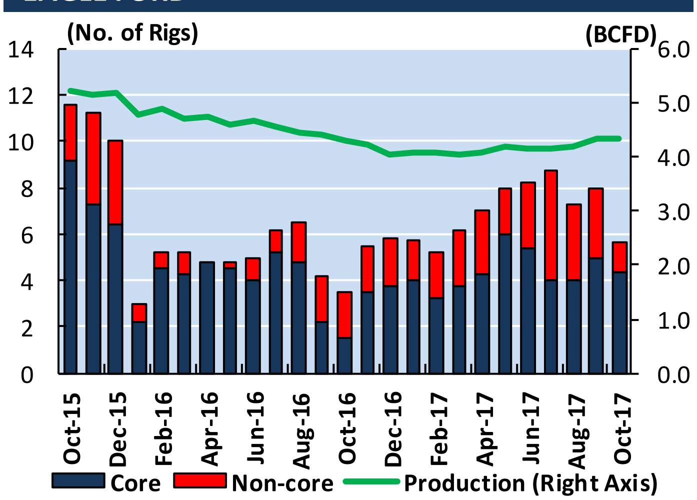
Source: PointLogic, EVA

PERMIAN



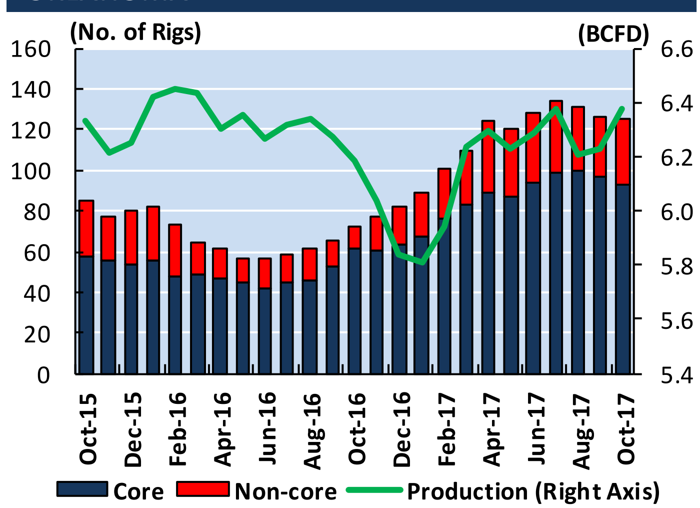
Source: PointLogic, EVA

EAGLE FORD



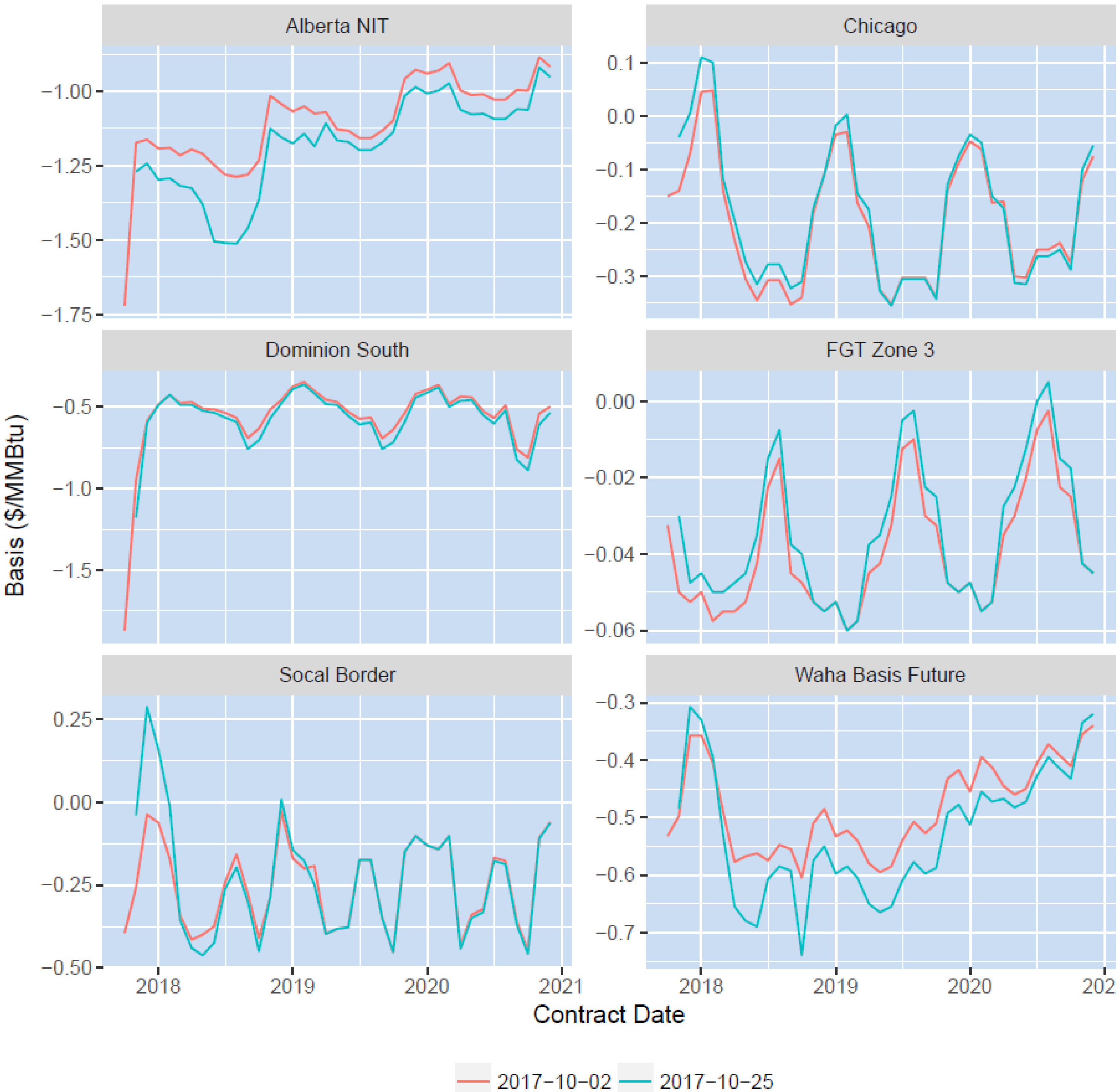
Source: PointLogic, EVA

OKLAHOMA



Source: PointLogic, EVA

ANNEX: BASIS FUTURES CURVE SHIFTS BETWEEN OCT 2 AND OCT 25



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