Stop the Insanity!
Survival in a Low Price Gas Environment

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March 2, 2016

Substituting for Jack:
Warren Waite, Manager, Analysis
First off, who is PointLogic Energy?

- Full service, energy fundamental data service provider.
- 30 employees consisting of both upstream, midstream and downstream experts with offices in Houston, Denver, and Gaithersburg, MD.
- Started over 18 years ago as Lippman Consulting (later renamed LCI Energy Insight).
- Purchased by OPIS in December 2012 and renamed PointLogic Energy in January 2015.
- Over 350 years of combined industry experience.
- Detailed basin, regional and macro reports spanning multiple delivery platforms.
Stop the Insanity – Market Outlook for 2016

• Supply Outlook for Summer 2016
  – How Imminent is the Production Slowdown?
  – What’s Growing and What’s Slowing
  – Projection for Summer 2016

• Demand Outlook for Summer 2016
  – Does D-E-M-A-N-D Spell Relief?
  – Sectors of Growth and Expectations for Summer Demand
  – Export Impact on the S&D Balance

• Storage Scenarios and Implications on Price
What’s Going On With Production?

Lower 48 Dry Production (Bcf/d)

+ 3.1 Bcf/d Summer 15 vs. Summer 14
Lower 48 Production Grows 1.0 Bcf/d Winter-on-Winter
Northeast Leads Everything

Northeast Shales Now Make Up More than 28% of Total Lower 48 Dry Production

- Utica Up 1.4 Bcf/d vs. Feb
- SW PA Wet Up 0.6 Bcf/d
- South PA Dry Up 0.5 Bcf/d
- NE PA Dry, Central PA Dry, down a net 0.1 Bcf/d
- Wet WV Down 0.4 Bcf/d
- Dry WV Up 0.4 Bcf/d
Where Is the February Prod Surge Coming From?

Lower 48 Dry Production (Bcf/d)

Select Receipt Points in the NE (MMcf/d)

- TGP Clermont #2 139
- Vista Gathering (TETCO) 151
- Ohio River System - (REX) 195
- Jupiter Gathering (Equitrans) 370
- Rice Energy-Denex (TETCO) 610
- Braxton-Stonewall Gas Gathering (TCO) 1,085

Feb 16 vs. Feb 15 +2.0 Bcf/d

Feb on Feb Δ 2.6 Bcf/d
Production Forecast 2016

Dry Production Forecast through 2016 (Bcf/d)

2015 Production Average = 73.0 Bcf/d

2016 Production Average = 73.3 Bcf/d
Domestic Demand Crumbles Winter 2015/2016

Winter Domestic Demand Trend (Bcf/d)

Nov on Nov -5.3 Bcf/d  Dec on Dec -4.8 Bcf/d  Jan on Jan -0.5 Bcf/d  Feb -11.0 Bcf/d

5 Yr. Range  2014/15  2015/16
### Power and Mexico Carrying the Load

#### Power Burn By Month (Bcf/d)

<table>
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<th>November</th>
<th>December</th>
<th>January</th>
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<tr>
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<tr>
<td>2014</td>
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#### Mex Exports By Month (Bcf/d)

<table>
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<tr>
<td>2014</td>
<td></td>
<td></td>
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</tbody>
</table>

Supply
- Dry Prod: 1.0
- LNG Im: 0.0
- Can Imports: 0.1
- Supply: 1.2
- Power: 2.8

Demand
- Industrial: 1.1
- Res/Com: -0.8
- Mex Ex: 0.1
- LNG Ex: 0.1
- Demand: -4.6

Winter 2015/2016 is net long 5.8 Bcf/d vs. Winter 2014/2015

Source: PointLogic Energy Supply & Demand Report
Winter 15/16 End of Season Storage

Upper Bound: 2.47 Tcf
2012 and 5 Year Max

Lower Bound: 3.0 Tcf
5 Yr. Minimum

Storage Inventory (Bcf)
Summer 2016 Demand – Optimistic Forecast

**Lower 48 Demand (Bcf/d)**

- **Total Demand Summer 16 70.2 Bcf/d**
  - Power 29.3 Bcf/d, Up 1.3 Bcf/d vs Summer 15
  - Industrial 19.9 Bcf/d, Up 0.1 Bcf/d
  - Res/Comm flat
  - Mex Ex 3.9 Bcf/d, Up 0.8 Bcf/d
  - LNG Ex Up 0.9 Bcf/d

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**Graph:**
- Nov-15
- Dec-15
- Jan-16
- Feb-16
- Mar-16
- Apr-16
- May-16
- Jun-16
- Jul-16
- Aug-16
- Sep-16
- Oct-16

- **Power**
- **Industrial**
- **Res/Comm**
- **Mex Ex**
- **LNG Ex**
2016 Summer Forecast vs. 2015 Summer

Summer 16 Season Base Forecast: 2.9 Bcf/d Short Versus Summer 15
- Equates to 612 Bcf less gas available to inject into storage
- 20.4 Bcf per week lower injection over 30 weeks of summer

Source: PointLogic Energy Supply & Demand Report
Summer 16 End of Season Storage

Storage Inventory (Bcf)

- Storage Breaks Summer 15 Carryout Record of 4,009 Bcf
- Storage Starts Season Just 100 Bcf Below Record March Carryout

4.28 Tcf
Stop the Insanity – Let’s Cut the Fat Out of Production Even More

Summer 2016 Low Production Scenario Analysis

- Market Short By 3.9 Bcf/d, or 835 Bcf less gas injected.

Source: PointLogic Energy Supply & Demand Report
Low Prod Summer 16 End of Season Storage

- Storage Sets Record But Only By 58 Bcf
- Storage Starts Season Just 100 Bcf Below Record March Carryout
- 4.07 Tcf
NYMEX Fwd Curve vs. Henry Hub Forecast

- Downward Pressure Remains Throughout Summer
- Risk to High Side Entering October Dependent on Weather and Production
Key Takeaways

- Production on the Precipice, But **Pace of Eventual Decline** Will Determine Price and Storage Levels.
- Northeast **Projects** Provide Relief in Some Pricing Areas, But this is **Temporary Pain Relief**.
- Producers with Operational Flexibility Can Choke Back, and Will, if Price Dictates.
- Summer Demand Will Help to Balance the Market, But Not Enough.
- Exit **Summer 2016 on High Side of Storage** Inventories if Production Stays Flat or Drops 1 Bcf/d vs. Last Summer.
- Prospect of Cold Winter 16/17 and Declining Production Could Lead to **Price Support in October**.

"THE HABITS THAT TOOK YEARS TO BUILD, DO NOT TAKE A DAY TO CHANGE"
-SUSAN POWTER
Contact Us Today!

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