Winter Outlook

Heating Season
2014-2015

Winter Outlook: Outline

- Review: How did we do last winter?
- Looking ahead to winter 2014-2015
  - *Market pressure points:*
    economy, weather, storage & production
  - *Wild card factors*
  - *Winter expectations*
- Summary

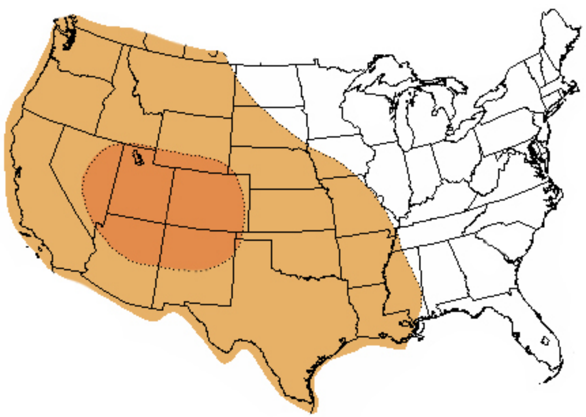
Last year's projection: How did we score?

Predicted	Actual	Score

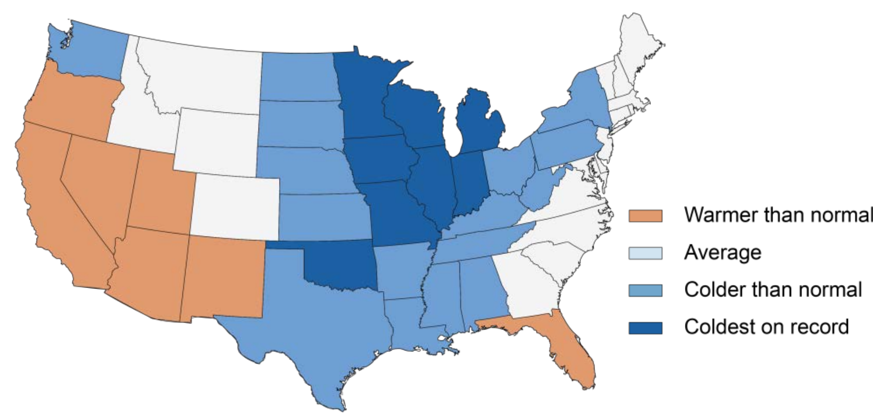
Why did we miss?

Projected Winter Weather

(NOAA projection as of Oct. 2, 2013)



What Really Happened



Sources: NOAA; EVA

Market Pressure Points

2014-2015

Demand: Winter Weather

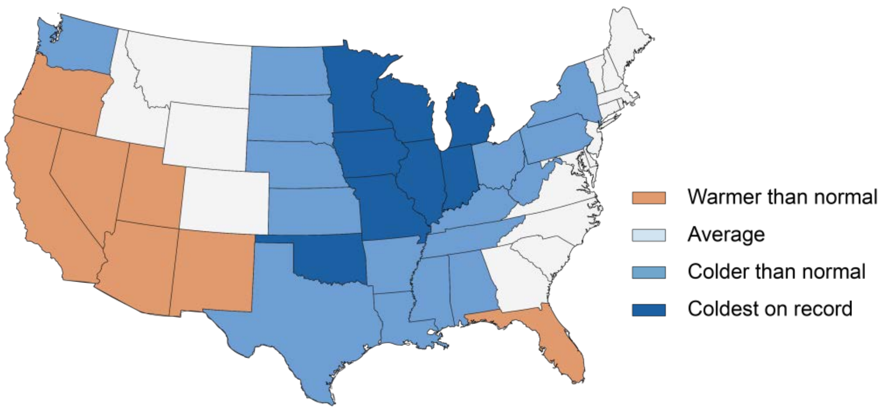
Data Sources: NOAA; Energy Ventures Analysis

Last winter: Nov. - March 2013-2014 ACTUAL	This winter 2014-2015 FORECAST

Actual season (NOAA):

11% colder than previous winter and

9% colder than 30-year average

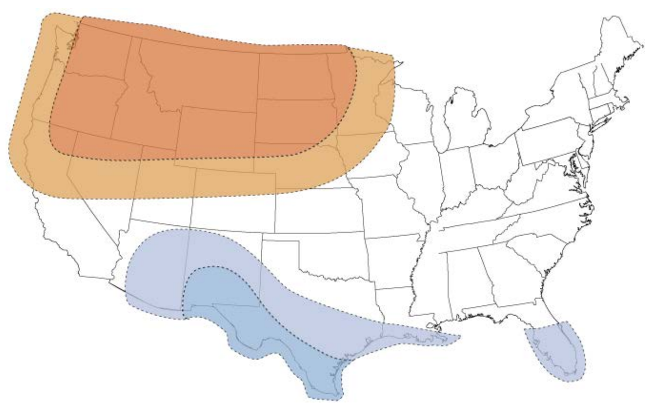


3,865 Heating degree days (NOAA)

EVA's projection:

11% warmer than last year,

3% warmer than 30-year average



3,442 Heating degree days

Winter-to-winter pressure on natural gas prices

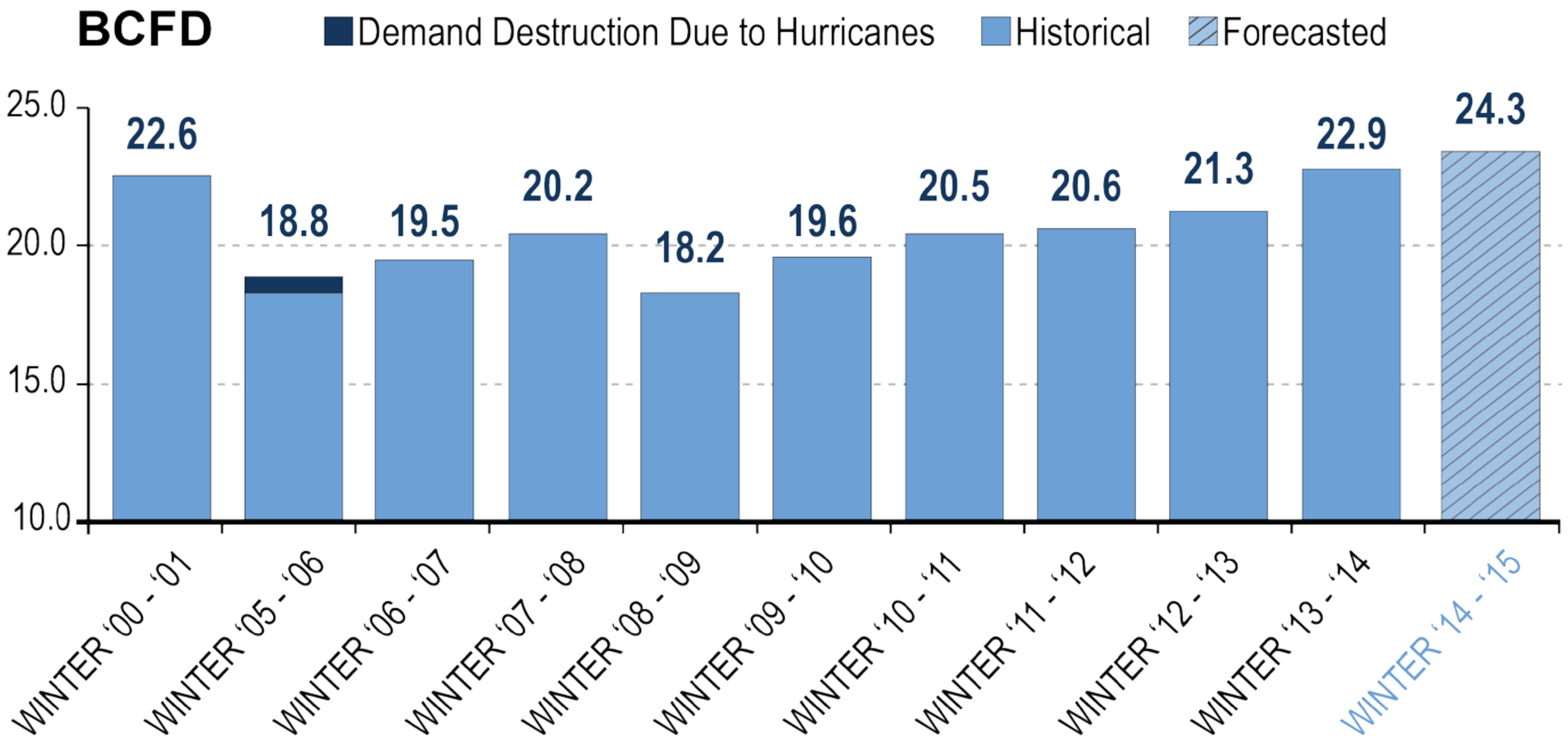
Demand: Economy

Winter season Period-to-period change Data source: IHS Economics	Last winter 2013-2014 ACTUAL	This winter 2014-2015 FORECAST
Economy	Expanded	Solid growth
GDP growth	2.5%	2.7%
Unemployment rate	6.8%	5.9%
Manufacturing	2.6%	4.7%
CPI	1.3%	2.0%
Consumer Sentiment Index	78.9	87.3
Winter-to-winter pressure on natural gas prices		—

Demand: Customer Demand

Winter Season Period-to-period change Data source: EVA	Last winter 2013-2014 ACTUAL	This winter 2014-2015 FORECAST
Customer gas demand	91.1 Bcf/d	87.7 Bcf/d
▪ Electric	20.1	20.2
▪ Industrial	22.9	24.3
▪ Residential/Commercial	41.5	36.9
Growth sector	Residential/ Commercial	Industrial +6.1%
Winter-to-winter pressure on natural gas prices		

Focus on Industrial Demand: Return to Highest Levels Since 1990s



Sources: EIA and EVA, Inc.

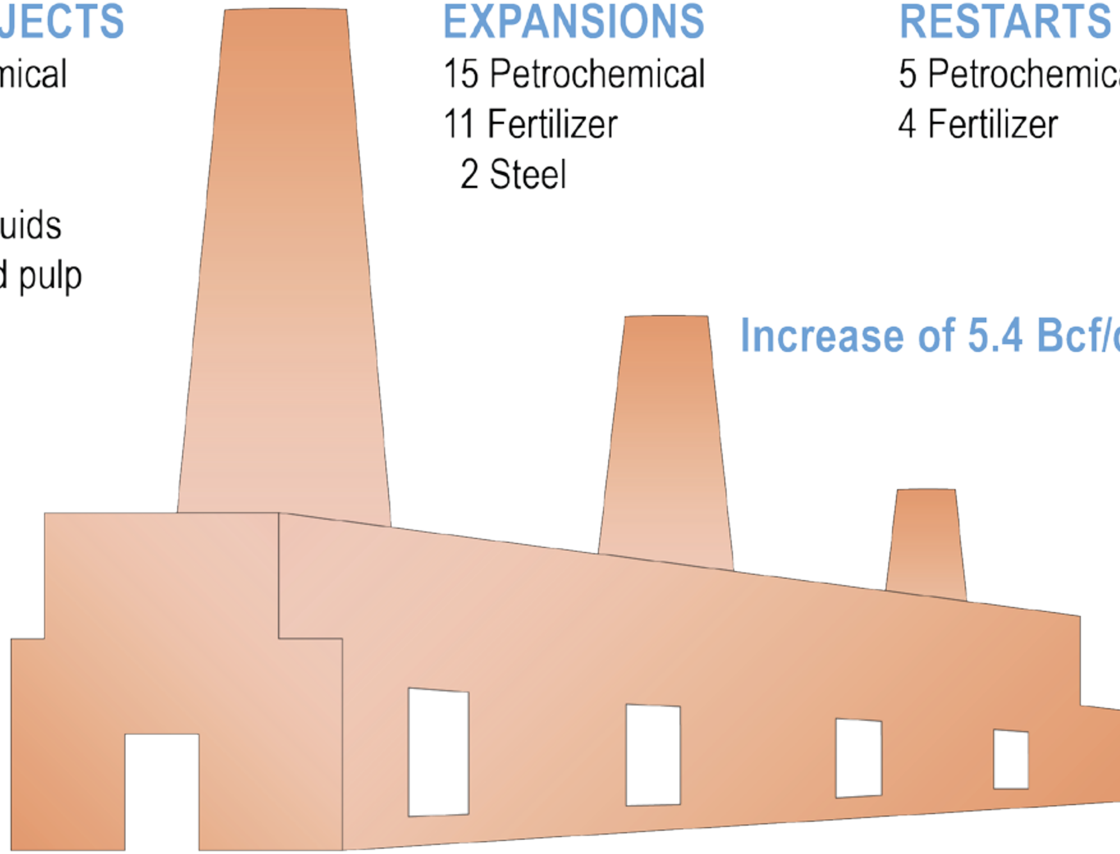
Natural Gas Spurring 100 Major Industrial Projects 2012-2019; $90-$100 Billion Investment to Build

63
NEW PROJECTS
29 Petrochemical
13 Fertilizer
12 Steel
7 Gas-to-liquids
2 Paper and pulp

28
EXPANSIONS
15 Petrochemical
11 Fertilizer
2 Steel

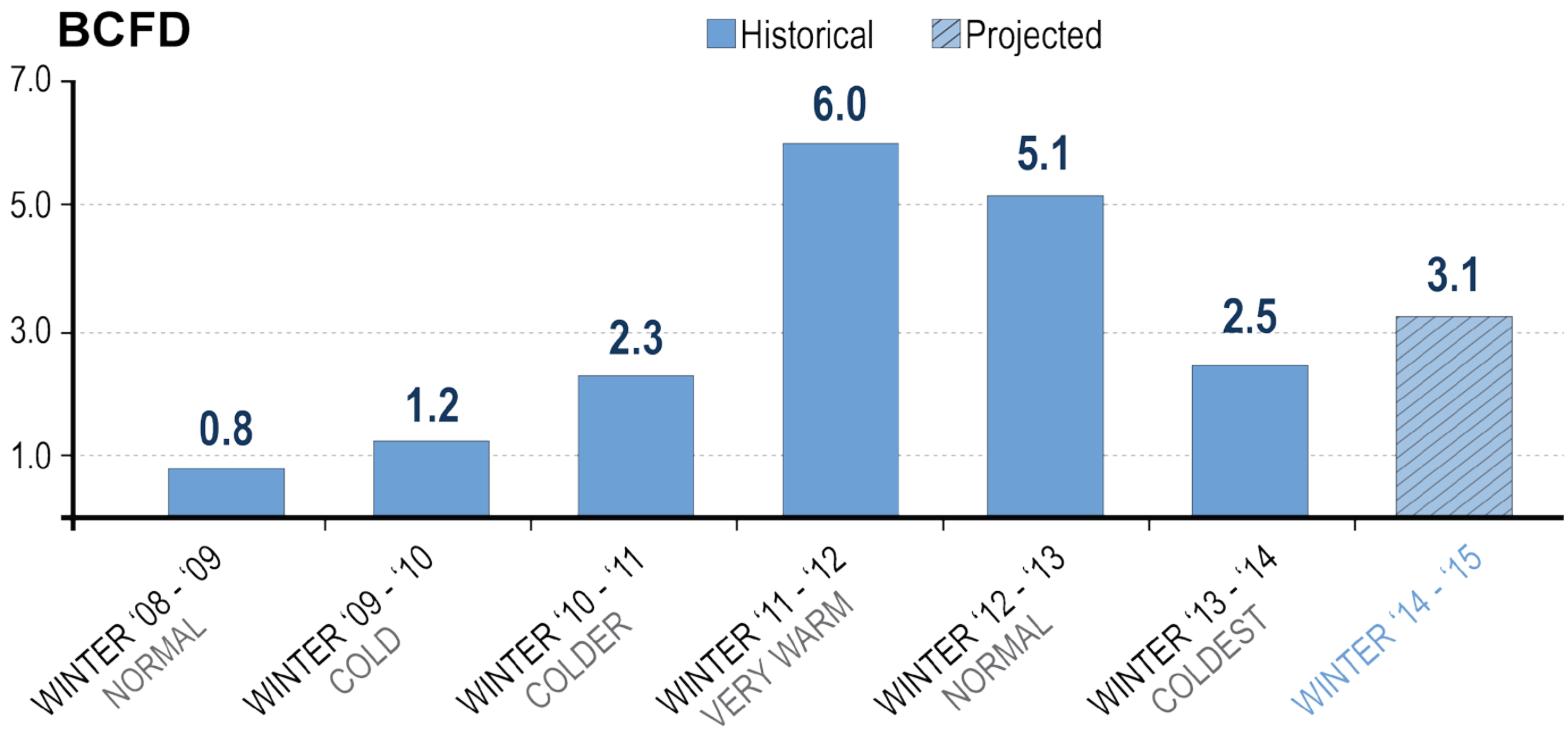
9
RESTARTS
5 Petrochemical
4 Fertilizer

Increase of 5.4 Bcf/d



Data source: Energy Ventures Analysis, September 2014

Electric Demand: Monthly Coal-to-Gas Switching Sustained Since 2008

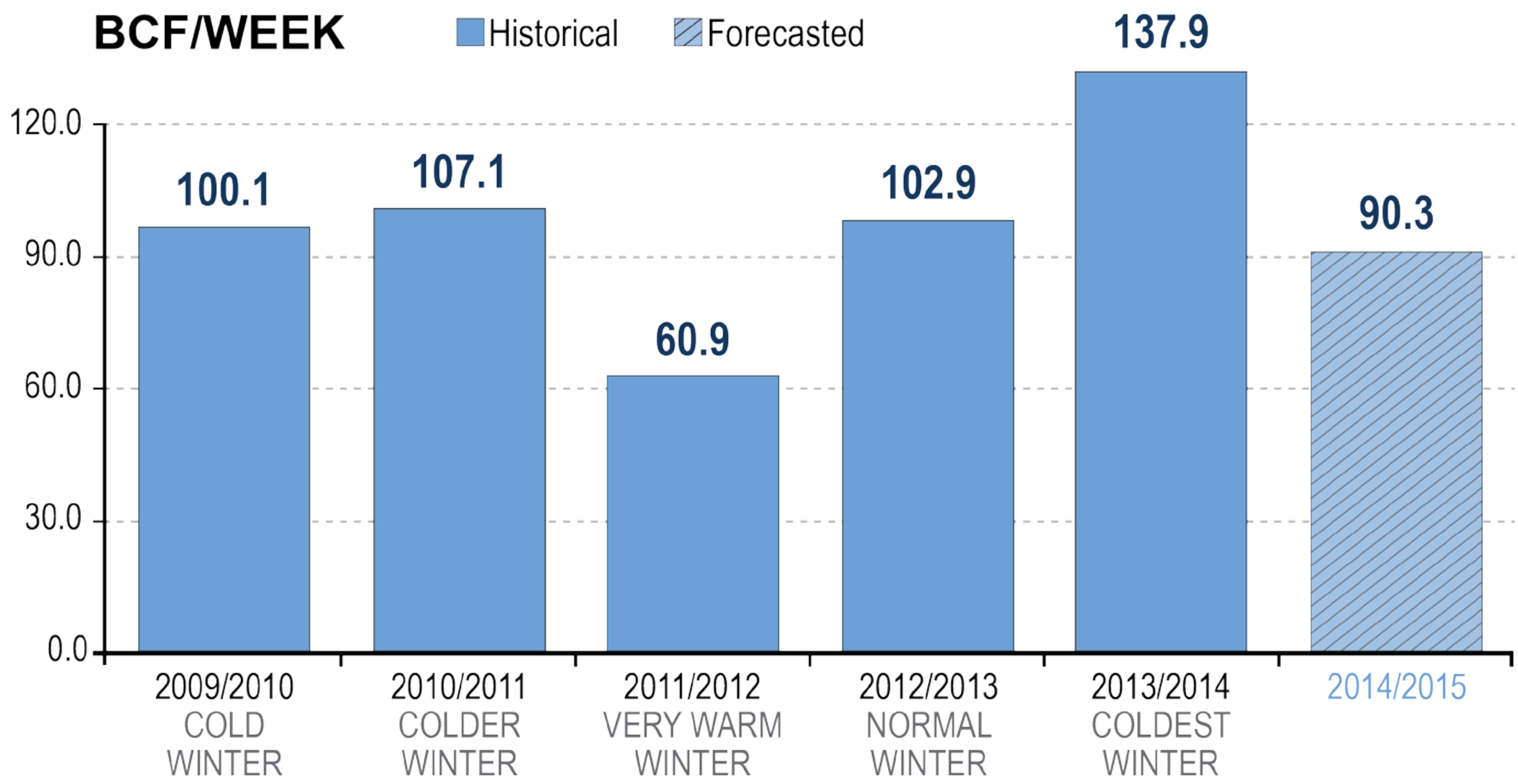


Source: Energy Ventures Analysis, 2014

Supply: Winter Storage

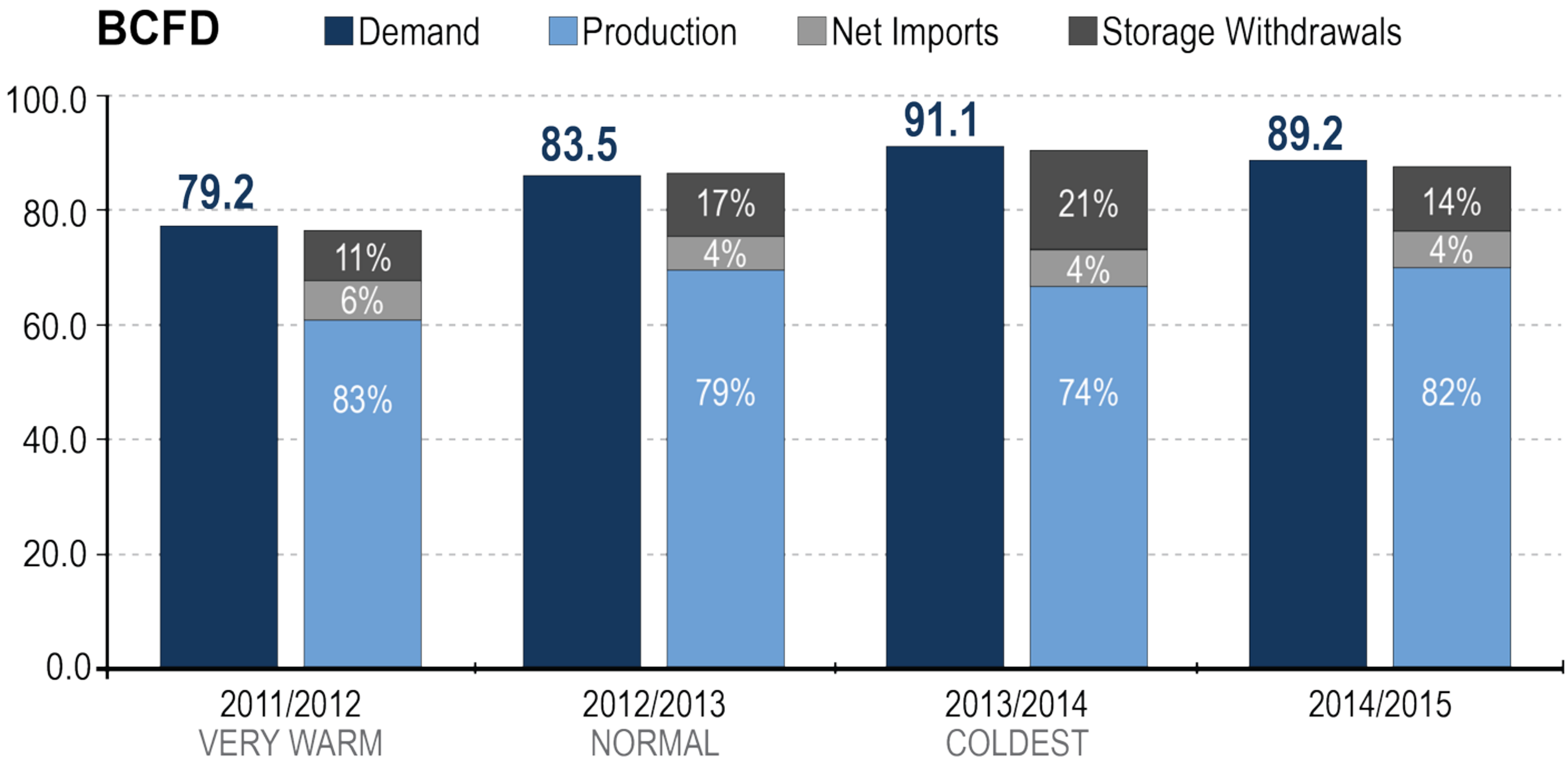
Winter Season Period-to-period change Data sources: EVA; Energy Information Administration	Last winter 2013-2014 ACTUAL	This winter 2014-2015 FORECAST
End of injection season	3,816 Bcf	3,440 Bcf
Percent of average fill (Five-year average)	95%	85%
New storage capacity	68 Bcf	Est. 5 Bcf
Winter-to-winter pressure on natural gas prices		

Focus on Storage: Winter Withdrawals



Sources: Energy Ventures Analysis; EIA

Snapshot of Recent Winters Shows Supply Flexibility and Responsiveness



Sources: Energy Ventures Analysis

Note: 2014/2015 is estimated.

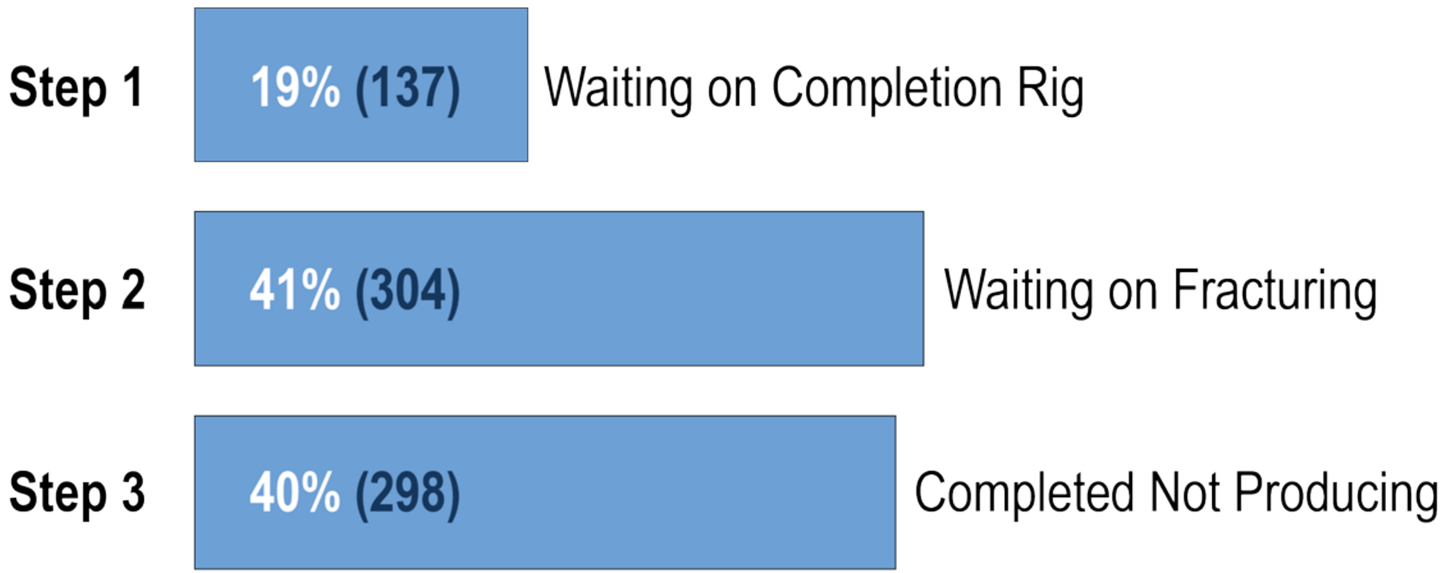
Supply: Winter Production

Winter season Period-to-period change Data source: Energy Ventures Analysis	Last winter 2013-2014 ACTUAL	This winter 2014-2015 FORECAST
Annual natural gas well completions (Lower 48)	7,971	7,397
Winter average production (Lower 48)	67.2 Bcf/d	70.8 Bcf/d
Canadian imports (net)	5.7	5.3
LNG imports	0.1	0.1
Mexican exports (net)	1.7	2.2

Winter-to-winter pressure on natural gas prices

Focus on Production: Inventory of Drilled But Not Yet Producing Wells

Snapshot of Backlog Wells in Marcellus, Haynesville and Utica



Sources: Energy Ventures Analysis, June 2014

Winter Outlook: Wild cards

- Unexpected cold – or *warm* – snaps
- Higher consumption by power sector due to coal-to-gas switching
- Hurricanes

This Season's Winter Outlook

Winter season Period-to-period change	This winter 2014-2015 FORECAST
Weather	↓
Economy	–
Overall demand	↓
Storage	↑
Winter production	↓
Winter-to-winter pressure on natural gas prices	↓

Natural gas outlook: Era of growth

- Record supply continues
  - Added takeaway pipeline capacity reduces backlog
  - Drilling efficiencies and associated gas contribute
- Industrial market demand growing strongly
- Coal-to-gas switching projected to continue for 7th winter
- Overall, stable natural gas outlook for consumers
  - But regions with infrastructure constraints remain vulnerable to occasional volatility with cold snaps

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