

Winter Fuels Conference 2012



Michigan Energy Appraisal

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MICHIGAN PUBLIC SERVICE COMMISSION ₁

What is the MI Energy Appraisal?

- Summer and Winter assessment of energy markets.
 - Electric
 - Natural Gas
 - Motor Gasoline
 - Distillates
 - Propane
- Focus includes:
 - Short-term (one year) forecasts
 - supply, demand, and price analysis
 - Discussion of relevant and noteworthy events and market trends



Appraisal Models

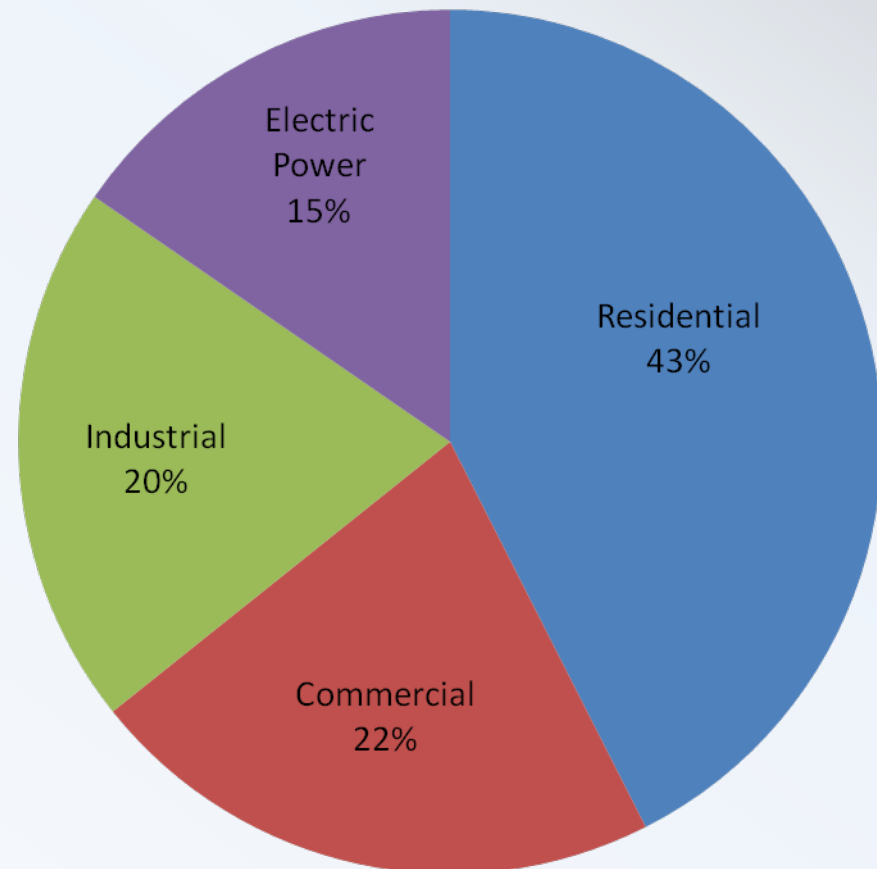
- Comprised of 21 separate structural and time series econometric models
- Parameters include:
 - Weather
 - Employment, Income and Household Data
 - Economic indices (i.e., industrial production index)
- Data Sources
 - U.S. Energy Information Administration (EIA) Short Term Energy Outlook
 - Global Insights (Economic Reports and Data)
 - NOAA, Natl. Weather Service Climate Prediction & Data Center
 - MPSC Operations & Wholesale Markets Division
 - American Automobile Association (AAA)
 - Oil Price Information Service (OPIS)
 - State Heating Oil & Propane Price (SHOPP) Survey sponsored by the EIA



Natural Gas Use in Michigan

- Demand driven by the residential sector
- Nearly 80% of homes use it as primary heating fuel
- Served by interstate pipelines including:
 - ANR
 - Vector
 - Great Lakes Gas Transmission

2011 Natural Gas Usage



Total Demand = 748.8 Bcf



Michigan Production

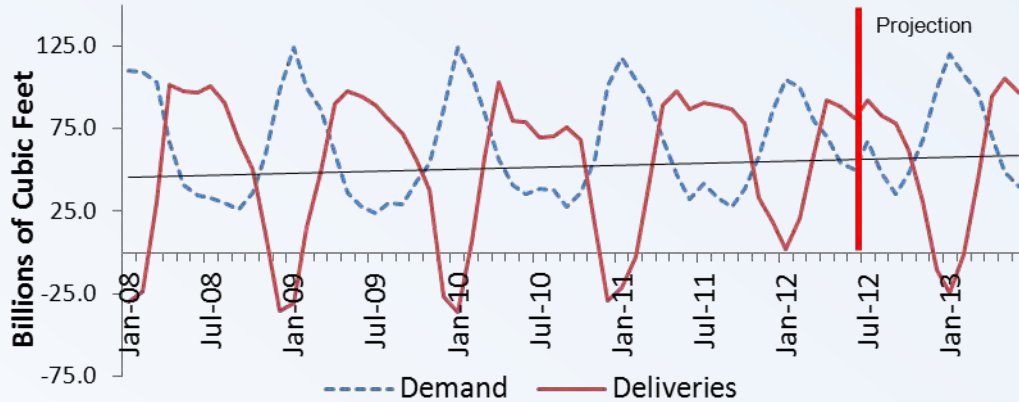


- Michigan natural gas production in 2011 was 134.5 Bcf which is equivalent to about 18 percent of winter demand
- Legacy production decreasing by approximately 5 percent annually
- Auctioned oil and gas lease rights on State lands generated \$178 million in 2010.
- Subsequent auctions have been for much less



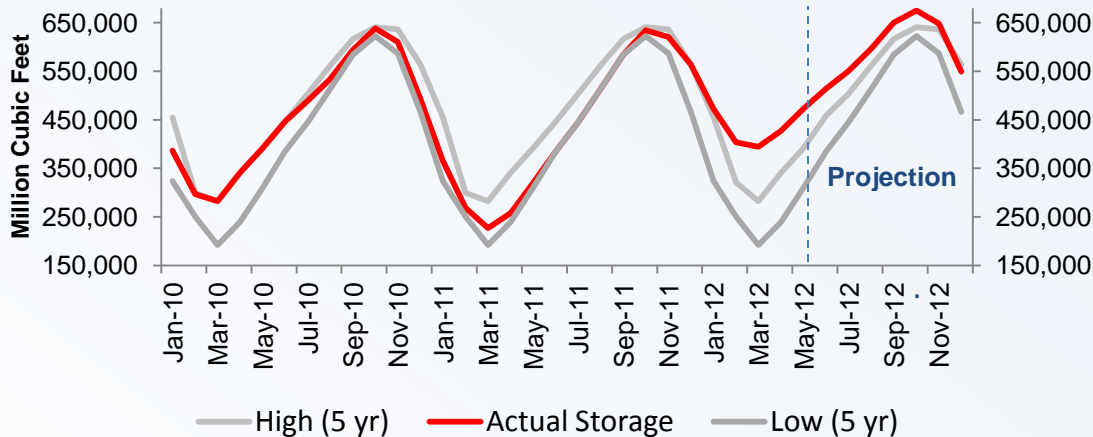
Michigan Natural Gas Demand

Supply & Demand



- Total demand is projected to be nearly 10% higher for 2012 calendar year— driven by electric power sector
- Overall trend of continued growth over past 5 years.

Working Gas in Underground Storage



- Michigan has 10% of storage nationally
- Inventories 65% above 5 year average at end of heating season in March 2012

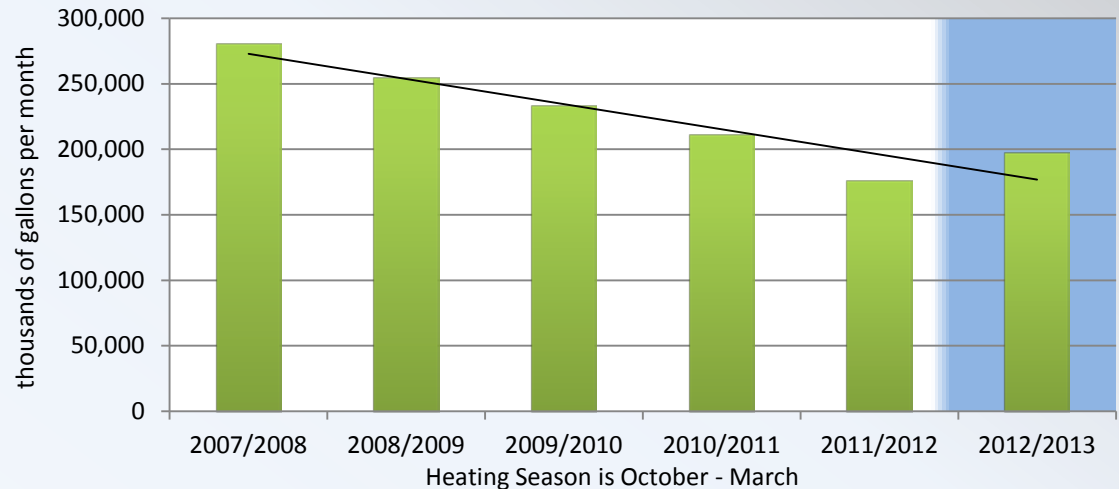


Propane

- Michigan has the largest residential propane market in the U.S.
- Overall downward demand trend
- Prices monitored each season with the SHOPP report

- Oct 1, 2012 prices 22% below last year
- Recent price trends not as closely linked to crude spot prices

Michigan Total Propane Demand by Heating Season



Mont Belvieu, TX Propane vs. Cushing, OK WTI Crude Spot Prices



Winter Heating Fuel Summary

	<i>Actual</i> 2011-2012	Weather Normalized	
		Projections 2012-2013	% Change 2011/2012 <i>Actual</i>
Natural Gas			
Consumption (Mcf)	61	68	
Avg. Price (\$/Mcf)	\$9.77	\$9.13	-7%
Expenditures (\$)	\$600	\$621	3%
Heating Oil			
Consumption (gallons)	437	546	
Avg. Price (\$/gallon)	\$3.57	\$3.77	6%
Expenditures (\$)	\$1,559	\$2,056	32%
Propane			
Consumption (gallons)	554	693	
Avg. Price (\$/gallon)	\$2.41	\$1.88	-22%
Expenditures (\$)	\$1,336	\$1,303	-2%
Heating degree days % Departure from Normal	-20.0	0	



New Projects

- Currently examining and evaluating all Appraisal forecasting models
- Annual update of our “Energy Overview”
- SHOPP report for 2012-2013 Heating Season underway



Questions?

Energy Appraisal

<http://www.dleg.state.mi.us/mpsc/reports/energy/>

Energy Overview

<http://www.dleg.state.mi.us/mpsc/reports/energy/energyoverview>

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