Energy as a Commodity

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World Class Performance Delivering Hometown Service

People – Planet – Profit
The Most Volatile Commodity in the World

Source: Various exchanges, Goldman Sachs Global ECS Research
A Unique Industry
Natural Gas: Massive U.S. Shale Growth

Source: EIA

- Shale Gas
- Other Gas
- Total Domestic Demand

Bcf/Day

Source: EIA
Pipelines Increase Gas Supply to Midwest
Gas Prices Have Decreased Dramatically

**Real Gas Prices @ Henry Hub (2016 $/MMBtu)**

Natural gas projected to average ~$3 through 2025.
Electricity Generation Levelized Costs

Gas price: $3.00 $4.50 $6.00

Combined Cycle Gas Plant:
- New Build: 4¢, 5¢, 6¢
- Consumers Energy Sources: 6¢

Wind:
- W/ tax credit: 8¢
- W/ emission controls: 6¢
- Back-up: 8¢

Coal:
- W/ emission controls: 10¢
- Big 5: 7¢

Nuclear:
- W/ tax credit: 12¢
- Palisades: 5.5¢

Utility Scale Solar:
- W/ tax credit: 9¢
- W/o tax credit: 11¢
Business Environment

- Continued low natural gas prices
- Clean technology improvements
- Transportation transformation
- Connected and reshaped electric demand
2016 Michigan Energy Law

- Increases focus on renewable energy and energy waste reduction
  - 15% by 2021
- Increases consumer protections
- Maintains 10% electric choice provision
Consumers Energy’s Plan

CONSUMERS ENERGY SUPPLY PORTFOLIO “Clean and Lean” Strategy

- **Owned Generation 5,100 MW**
  - Retire Classic 7 –900 MW
  - Jackson Plant +540 MW

- **Power Purchase Agreements**
  - 2,700 MW

- **Renewable Energy**
  - Cross Winds II 44 MW in 2018
  - Cross Winds III 76 MW in 2020
  - 525 MW RPS Wind

- **Demand Side Management, including Energy Efficiency**
  - 600 MW peak demand reduction by 2019

- **Smaller, modular additions**
Powering Michigan’s Success

More than 300 energy efficiency rebates

- Lighting
- Heating and cooling
- Ventilation
- Process/industrial equipment

ConsumersEnergy.com/business
The Industry is Changing...

...our commitment to Michigan remains strong.