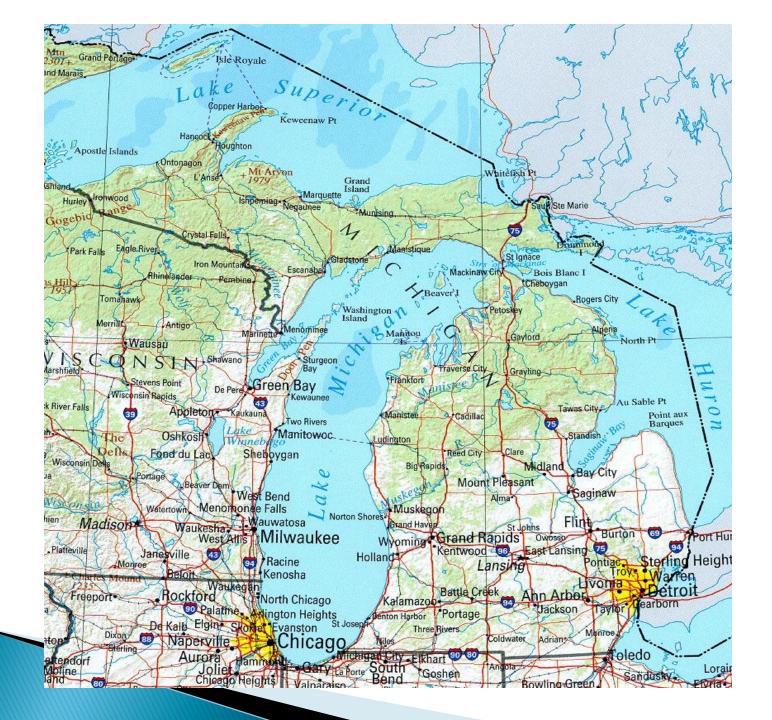


UP Energy Summit October 6, 2010

James A. Ault President Michigan Electric & Gas Association



US Energy Independence #1

For decades we have known the days of cheap and easily accessable oil are numbered...now is the moment for this generation to embark on a national mission to unleash America's innovation and seize control of our own destiny. Barack Obama 6–15–10

This country can dramatically improve our environment, move beyond a petroleum based economy, and make our dependence on Middle Eastern oil a thing of the past. George W. Bush 1–31–06

We need a long-term energy strategy to maximize conservation and maximize the development of alternative sources of energy. William J. Clinton 6–28–00

U.S. Energy Independence #2

There is no security for the United States in further dependence on foreign oil. George H.W. Bush 8–18–88

We will continue supportive research leading to development of new technologies and more independence from foreign oil. Ronald Reagan 2–16–81

...this intolerable dependence on foreign oil... Jimmy Carter 7–15–79

...new standby emergency programs to achieve the independence we want... Gerald Ford 1–15–75

We will break the back of the energy crisis. We will lay the foundation for our future capacity to meet America's energy needs from America's own resources. Richard M. Nixon 1–30–74

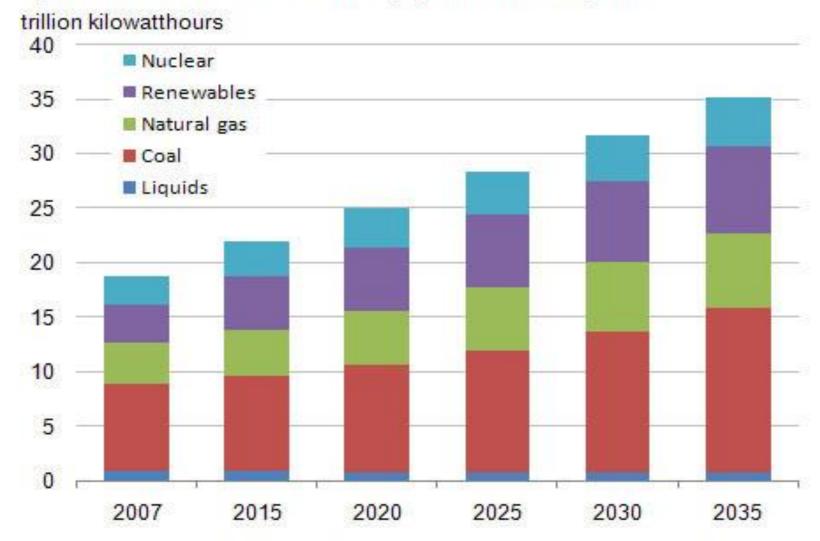
MICHIGAN ENERGY POLICY – REGULATORY

| <u>Act</u> | <u>Subject (s)</u> |
|--|---|
| Clean, Renewable and Efficient Energy Act, 2008 PA 295 | Energy optimization, renewable energy, government efficiency, wind zones, net metering |
| Regulatory Reform, 2008 PA 286 | File and use, mergers/asset transfers, certificate of need, electric choice 10% cap, cost-based rates |
| Customer Choice and Electricity Reliability Act, 2000 PA 141 | Electric retail choice, merchant plants, assure reliability |
| Electric Transmission Line Certification Act, 1995 PA 230 | MPSC certification of major transmission lines |
| Low Income Heating Assistance and Shut Off Protection Act, 1984 PA 34; Weatherization 1984 PA 35 | Temporary programs (continued by rules) |
| State Energy Emergencies, 1982 PA 191 | Broad authority to Governor during emergencies |
| Adjustment Clauses, 1982 PA 304 | Gas and purchased power rate adjustments (controversy with ballot proposals) |

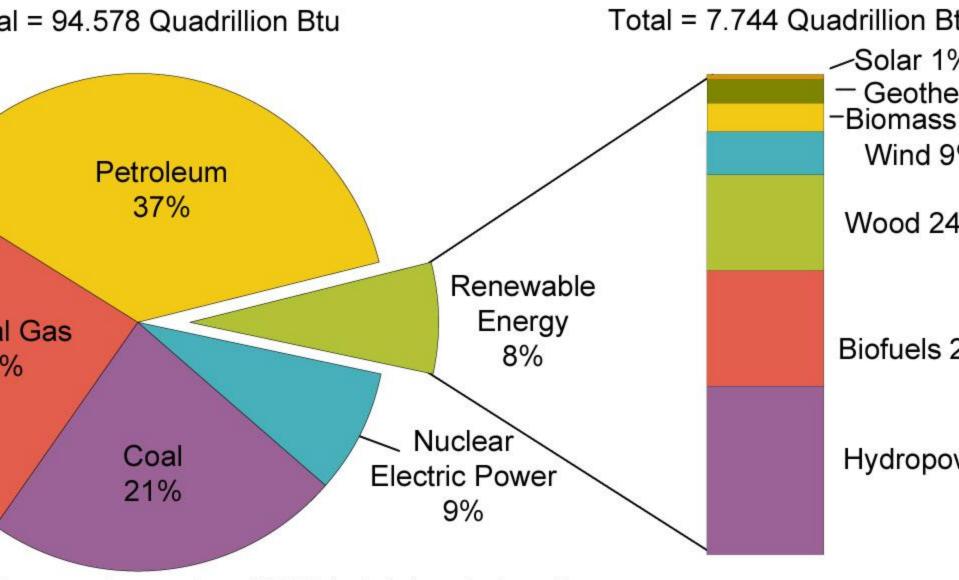
FEDERAL ENERGY POLICY – RECENT ACTS

| <u>Act</u> | <u>Subject (s)</u> | |
|---|--|--|
| HR 2454 - American Clean Energy and Security Act of 2009 (PASSED US HOUSE ONLY) | Cap and trade (GHG), RPS, Energy Efficiency, CCS | |
| Energy Independence and Security Act of 2007 | CAFÉ standards, biofuels, light bulbs/EE, grid modernization, etc. | |
| Energy Policy Act of 2005 | Assortment - daylight time, nuclear support, RE support and subsidies, clean coal, biofuels (ethanol), various studies, Great Lakes drilling ban, reliability standards | |
| Energy Policy Act of 1992 | Assortment - promote wholesale competition (FERC open access authority), energy efficiency/conservation, alternative fuels | |

Figure 6. World net electricity generation by fuel



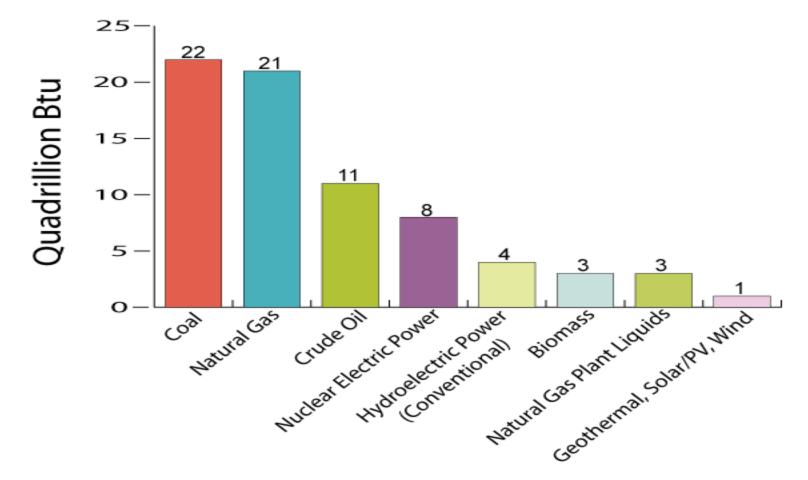
Energy Consumption by Energy Source, 2009



f components may not equal 100% due to independent rounding.

Energy Information Administration, Annual Energy Review 2009, Table 1.3, Primary Energy Consumptio ce, 1949-2009 (August 2010).

U.S. Primary Energy Production by Major Source (2009)



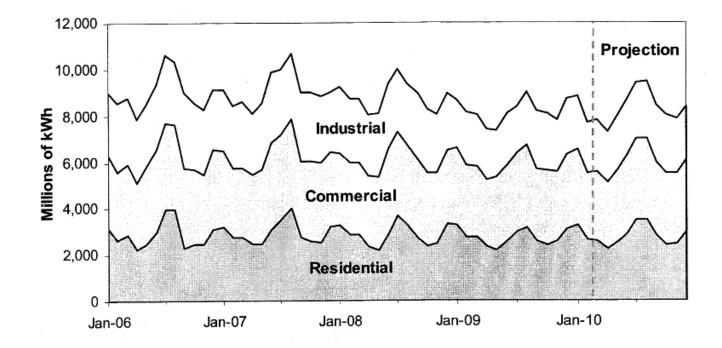
Source: U.S. Energy Information Administration, Annual Energy Review 2009, Table 1.2 (August 2010)

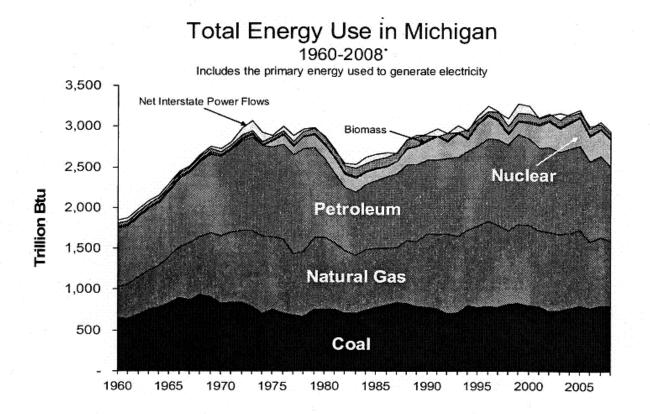
Table 2. Ten Largest Plants by Generation Capacity, 2008

| Plant | Primary Energy Source or Technology | Operating Company | Net Summer Capacity (MW) |
|---------------------------------|--|-----------------------------------|-----------------------------|
| Michigan | | | |
| 1. Monroe | Coal | Detroit Edison Co | 3,129 |
| 2. Donald C Cook | Nuclear | Indiana Michigan Power Co | 2,069 |
| 3. Ludington | Pumped Storage | Consumers Energy Co | 1,872 |
| 4. Midland Cogeneration Venture | Gas | Midland Cogeneration Venture | 1,837 |
| 5. Dan E Karn | Coal | Consumers Energy Co | 1,791 |
| 6. Belle River | Coal | Detroit Edison Co | 1,509 |
| 7. J H Campbell | Coal | Consumers Energy Co | 1,453 |
| 8. St Clair | Coal | Detroit Edison Co | 1,393 |
| 9. Fermi | Nuclear | Detroit Edison Co | 1,173 |
| 10. Covert Generating Project | Gas | New Covert Generating Company LLC | 1,058 |

MW = Megawatt. Source: U.S. Energy Information Administration, Form EIA-860, "Annual Electric Generator Report."

Michigan Electricity Sales





*Latest data available Source: State Energy Data Report, Energy Information Administration, Graph prepared by: Energy Data and Security, Michigan Public Service Commission

¹ State Energy Data Reports Energy Information Administration, February 2008 <u>http://www.eia.doe.gov/emeu/states/sep_use/total/pdf/use_mi.pdf</u>

RECENT OR POTENTIAL ENERGY GAME CHANGERS

- Potential Gas Committee Reports Unprecedented Increase in U.S. Natural Gas Resource Base (6-18-09; Michigan included - Antrim and Collingwood shale production)
- The current economic decline has reduced the urgency regarding new energy supplies – if and when the economy rebounds, the new supply issue returns to prominence.
- After the Fall 2010 elections.....will there be a change in the politics favoring centralized energy planning, climate action, EE and RE mandates?
- The impact of the projected EPA regulatory actions on the price and supply of electricity from traditional generating plants.
- Will there be a breakthrough technology?

Michigan – Energy Challenges Ahead Improvements to Efficiency, Conservation and Load Management Measures

Informing and Educating Utility Customers

•Making the reasonable investments in new technologies.

•The changing role of government regulation.