Developing a Louisiana Energy Policy

By

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HISTORICAL PERSPECTIVE

- 1901 – Oil discovered in Louisiana near Jennings by Howard Brothers Drilling
- More than 220,000 wells have been drilled in Louisiana to date.
- Fossil fuels became the energy of the future:
  - Lamps to be lit
  - Motors to be run
  - Heat for homes
HISTORICAL PERSPECTIVE (Cont.)

• With the development and innovation of need for fossil fuel, we now have creation of use of energy.
• To safeguard lands and reduce industry’s environmental impact, the State legislated industry regulations.
Regulatory Agencies & Acts

• 1908 – Louisiana Commission for the Conservation of Natural Resources
  – Created to address problems of conservation.

• Act 127 of 1912
  – Required drilling permits be filed, use of surface casing and cement, and abandoned wells be plugged.
• 1916 – Office of Conservation
  – Created with primary statutory responsibility for regulation and conservation of oil, gas, lignite and other natural resources.
• Act 133 of 1924
  – Made it illegal to pollute natural waterways with salt water, oil and other substances.
  – First recorded environmental action taken on oil industry by legislature.
  – Louisiana became the first state to regulate the use of the environment.
• 1936 – State Mineral Board
  – Created and charged with leasing and administering state-owned land for development and production of minerals and liquid or gaseous hydrocarbons
Natural Gas Production Ranking

Source: DOE-Energy Information Administration
Crude Oil Production Ranking

Source: DOE-Energy Information Administration
TWO FUNDAMENTAL ELEMENTS OF ENERGY POLICY:

• Increase supply

• Reduce Demand
INCREASE SUPPLY

- Increase supply or access to existing energy sources

- Develop and encourage use of alternative energy sources
REDUCE DEMAND

• Develop and encourage energy efficiency and conservation

• Diversify economy to be less energy dependent
LOUISIANA STATE OIL PRODUCTION
Actual and Forecasted Through Year 2030

Source: Louisiana Dept. of Natural Resources-Technology Assessment Division
LOUISIANA STATE GAS PRODUCTION
Actual and Forecasted Through Year 2030

Source: Louisiana Dept. of Natural Resources-Technology Assessment Division
Active Rigs Versus Energy Market Price

Sources: Louisiana DNR-Technology Assessment Division
Gas Well Productivity Falling Behind

Sources: Louisiana Dept. of Natural Resources-Technology Assessment Division
Well Completion Statistics

• An average of 620 new wells per year is needed just to maintain the current state production level.

• A 25% increase in well completions would only increase total state production by 3%.
Refinery Capacity Versus State Production

Sources: Refinery Capacity, DOE-Energy Information Administration
Production, Louisiana DNR-Technology Assessment Division
Petroleum Products and Crude Oil from Louisiana to other states

1,611.55

FOREIGN

OCS

OTHER STATES

STATE

FOREIGN

2000 LOUISIANA PETROLEUM FLOW
(Million Barrels)

CONSUMPTION

311.30

Total Disposition = 1,217.86

Total Input = 1,027.34

Storage = -15.88

Petroleum Products and Crude Oil from Louisiana to other states

1,611.55 Million Barrels

Source: DNR Technology Assessment Division & DOE-EIA
Total Louisiana's exports to other states:

- **State**: 4,904.92
- **OCS**: 2,929
- **Foreign**: 58.26
- **Other States**: 3,591.87

Total Consumption: 1,320.04

**SOURCE:** DNR Technology Assessment Division & DOE-EIA
Gross State Product and Population

Sources: GSP, Department of Commerce-Bureau of Economic Analysis
Population, Northeast Midwest Institute
Gross State Product per Capita

Source: Department of Commerce-Bureau of Economic Analysis
Gross State Product Per Billion BTUs

Source: Department of Commerce-Bureau of Economic Analysis
Energy Consumption per Capita

Source: Department of Energy-Energy Information Administration
State Economics Energy Dependence

Example

ENERGY INTENSIVE INDUSTRY OR STATE ECONOMY

INPUT

OUTPUT

ENERGY

DIVERSIFIED INDUSTRY OR STATE ECONOMY

INPUT

OUTPUT

ENERGY

FOR SAME ECONOMIC OUTPUT,

Needs

ENERGY

ENERGY

ENERGY

ENERGY

ENERGY

ENERGY

Needs

ENERGY
Energy Issues

• Completed tasks
  – Prepared resolution supporting HB236 for reinstatement of 1994 drilling incentives for re-entry of inactive wells.
  – Prepared resolution requesting federal incentives for deep subsurface gas drilling.
Energy Issues

• Perform independent general tax structure impact study as relates to usage, efficiency, and production.
• Encourage new and expanded LNG terminals through tax exemptions and other incentives.
Energy Issues

• Develop relocation incentives for energy companies.
• Explore reforming utility regulations.
Energy Issues

• Encourage funding of Clean Power and Energy Research Consortium (CPERC) with LSU, UNO, Southern University, and possibly Nicholls State.

• Develop blueprint for university-based energy-related technology research.
Energy Issues

- Investigate streamlining permitting aspects of oil and gas operations.
- Investigate how to resolve conflicts of dual jurisdictions.
  - Redefine all parish rules and regulations; consolidate into one state permit.
Energy Issues

• Develop wholesale electricity market and merchant power plant activity.
• Encourage collaborative university-industry research efforts.
• Utilize Dept. of Natural Resources’ Energy Fund for more cost-effective energy efficiency improvements.
Energy Issues

- Evaluate long-term supply, demand, price projections for electric power and natural gas.
- Evaluate power generation and transmission issues.
- Evaluate energy conservation and renewable energy issues.
Energy Issues

• Determine energy’s role in state economy.
• Investigate renewable energy sources and biomass potential.
• Establish economic incentives for natural gas and crude oil production when prices drop.
Energy Issues

• Find cost-effective approach to plugging wells with potential of royalty reduction at re-entry.

• Seek legislation for reduction of ad valorem taxes for abandoned leases to be put into production.
Energy Issues

- Tax credit for production and operation in Outer Continental Shelf (OCS).
- Return depletion allowance to 27.5%.
Energy Issues

• Reduce the tangible drilling costs at a rate of 60% the first year and 40% second year.

• Create tax benefit for repair of OCS equipment (drilling rigs and supplies).
Additional Items for Consideration

1. Facilitate effective development of existing Louisiana energy resources by:
   – Prepare annual report on barriers to development.
   – Address tort reform related to environmental and class action litigation.
   – Support efforts to supply reliable, economic energy supplies to state’s industries.
2. Encourage investment in oil & gas and energy technology sector to create jobs by:

– Developing blueprint of funding priorities in energy related technology, including in:
  
  Alternative fuels, biomass, cogeneration, energy efficiency, hydrogen cycle
  
  Improved oil & gas technologies for onshore and offshore development
3. Develop pro-active process for dealing with oyster leases in coastal zone.

4. Benchmark Louisiana oil & gas regulations & incentives vs. competing states.
Additional Items for Consideration

5. Prepare annual report examining barriers to energy efficiency applications including:
   – Distributed energy resources
   – Small power applications
   – Combined heat & power and cogeneration
   – Demand-side management services and peak load reduction incentives
6. Develop incentive package for promoting lignite methane production.

7. Develop incentive package for promoting hydrogen technologies.

8. Develop incentive package for biomass.
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Thank You for Your Attention

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http://www.dnr.state.la.us/tad/data/index.html

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