M. Kleckamper
VP Business Development
Jeff [My-Ash] - Entergy

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LOUISIANA'S INDUSTRIAL RENAISSANCE

NOVEMBER 2014

Overview

- Louisiana's Manufacturing Renaissance
- EGSL/ELL plan to meet expected growth

What Is Driving Louisiana's Manufacturing Renaissance?

The same factors that attracted industry to the state decades ago have recently reemerged and appear to be sustainable

1) Relatively low-cost domestic natural gas compared to oil or foreign natural gas
   - Feedstock / input / direct fuel source to the industrial processes
   - Fuel for Louisiana's electricity production

2) Relatively low cost electricity
   - Relative the rest of the U.S. and the world

3) World-class pipeline and transportation infrastructure for industrial uses

4) Business and elected leaders aggressively pursuing opportunity and removing roadblocks

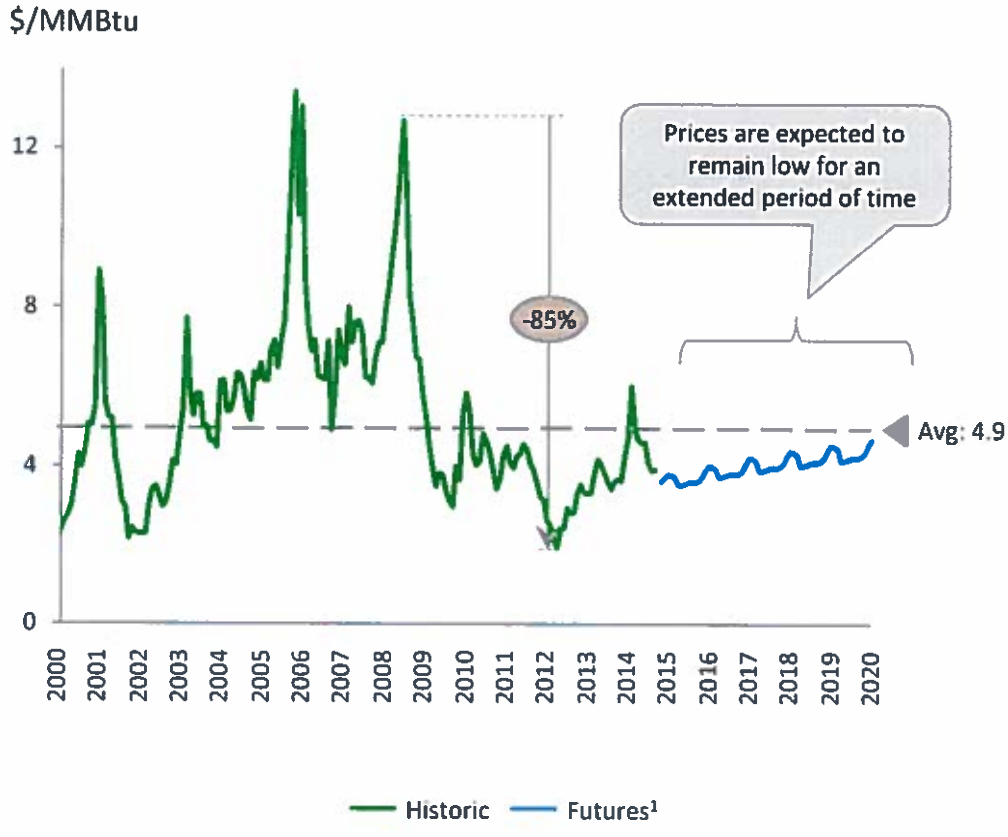
5) Long-term stability and energy security

6) Workforce quality

Relatively Low Natural Gas And Electric Prices Are Fueling

The resurgence in energy intensive industries in the U.S. and Louisiana

Natural Gas Price at Henry Hub



Key Industries

- Chemicals
- Manufacturing
- Steel & Metals
- Transportation
- Pulp & Paper

1. Futures as of Oct. 28, 2014
Source: EIA, SNL Financials

Low-Cost Natural Gas and Oil Compete as a Feedstock

Natural Gas and petroleum generally interchangeable as an energy source and as a feedstock in industrial and chemical processes

Currently, domestic natural gas significantly cheaper on a BTU equivalent than worldwide petroleum or natural gas in other countries

1 Barrel of Oil
~6,000,000 BTUs

Current Price
$80/Barrel

1 MCF of Natural Gas
~1,000,000 BTUs

Current Price
$4.00/MCF

Therefore:

- When a barrel of oil is ~6 times the cost of gas, the sources are at parity
- **<u>If the ratio is more than 6-7 times, natural gas is preferred</u>**
- If it is less than 6-7 times, oil is preferred
- Currently, oil prices are around $80 per barrel and natural gas is about $4/MCF so the ratio is around 20 to 1, so **<u>oil is about 3 times more expensive than gas on a Btu basis</u>** ($80 Oil / $4 Gas = 20; 20/6 ~3)

U.S. Gas Prices Are Lower Than Most Industrial Countries

Middle East, North America, Islands, and Australia are advantaged

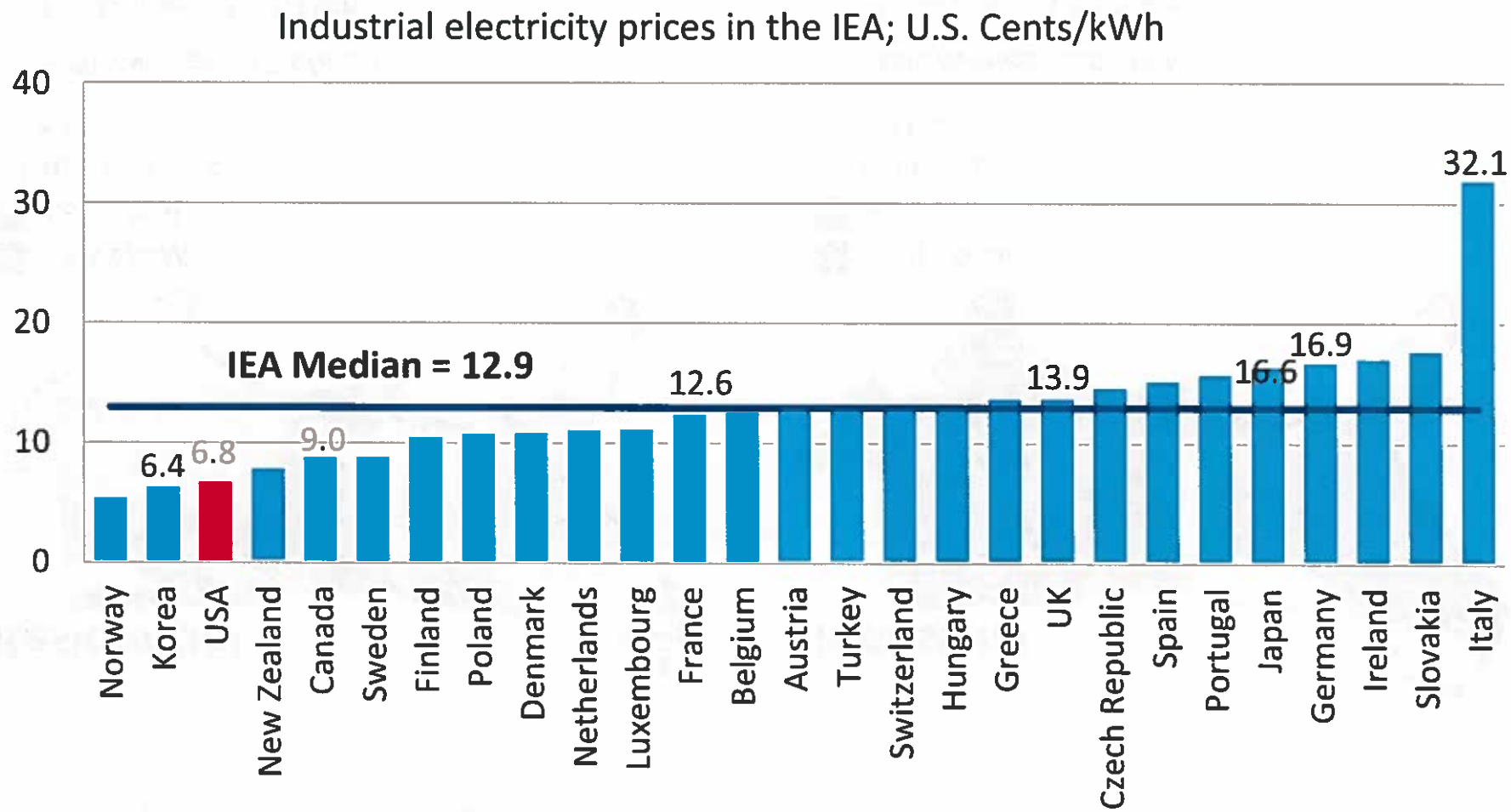
Liquefied Natural Gas Prices in LNG Consuming Countries Reflect Demand, Transport, and Domestic Alternatives

World LNG Estimated October 2014 Landed Prices

Source: *Waterborne Energy, Inc.* Data in $US/MMBtu
Note: Includes information and Data supplied by IHS Global Inc. and its affiliates ("IHS"); Copyright (publication year) all rights reserved. Updated September 2014

Low Electricity Prices Relative to the World

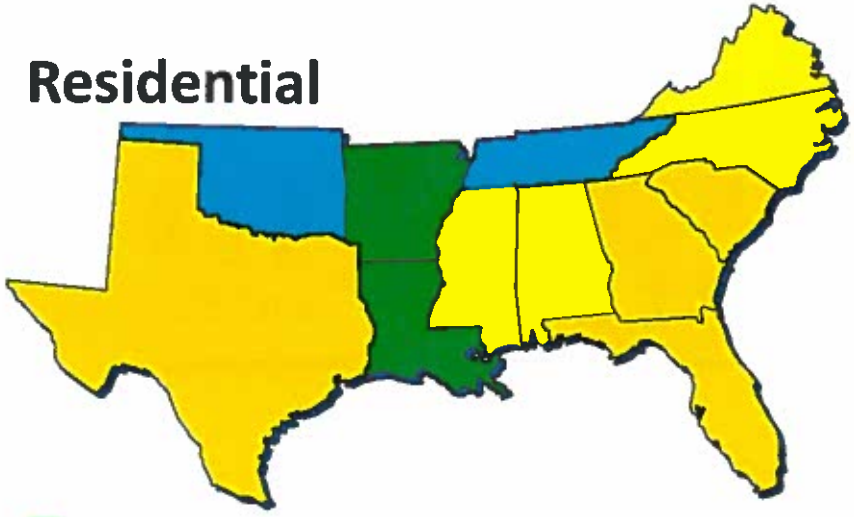
International Energy Agency (IEA) has 29 Countries w/ an Average Industrial Rate nearly double the U.S.



...And in the U.S.

Rates below U.S. average attractive to industrial customers

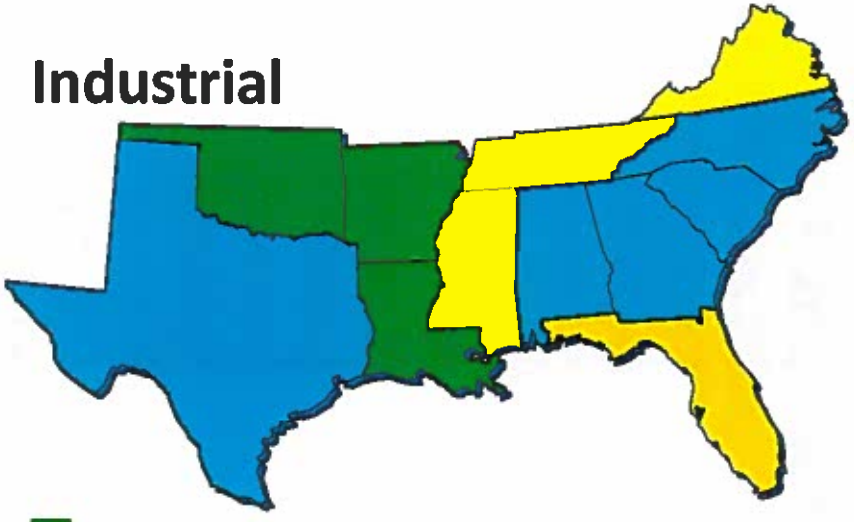
Residential



- < 9.5 ¢/kWh
- 9.5 ¢ - 10.4 ¢
- 10.5 ¢ - 11.4 ¢
- ≥ 11.5 ¢

- EGSL Average - 9.2 ¢/kWh
- ELL Average - 9.3 ¢/kWh
- U.S. Average - 12.3 ¢/kWh

Industrial



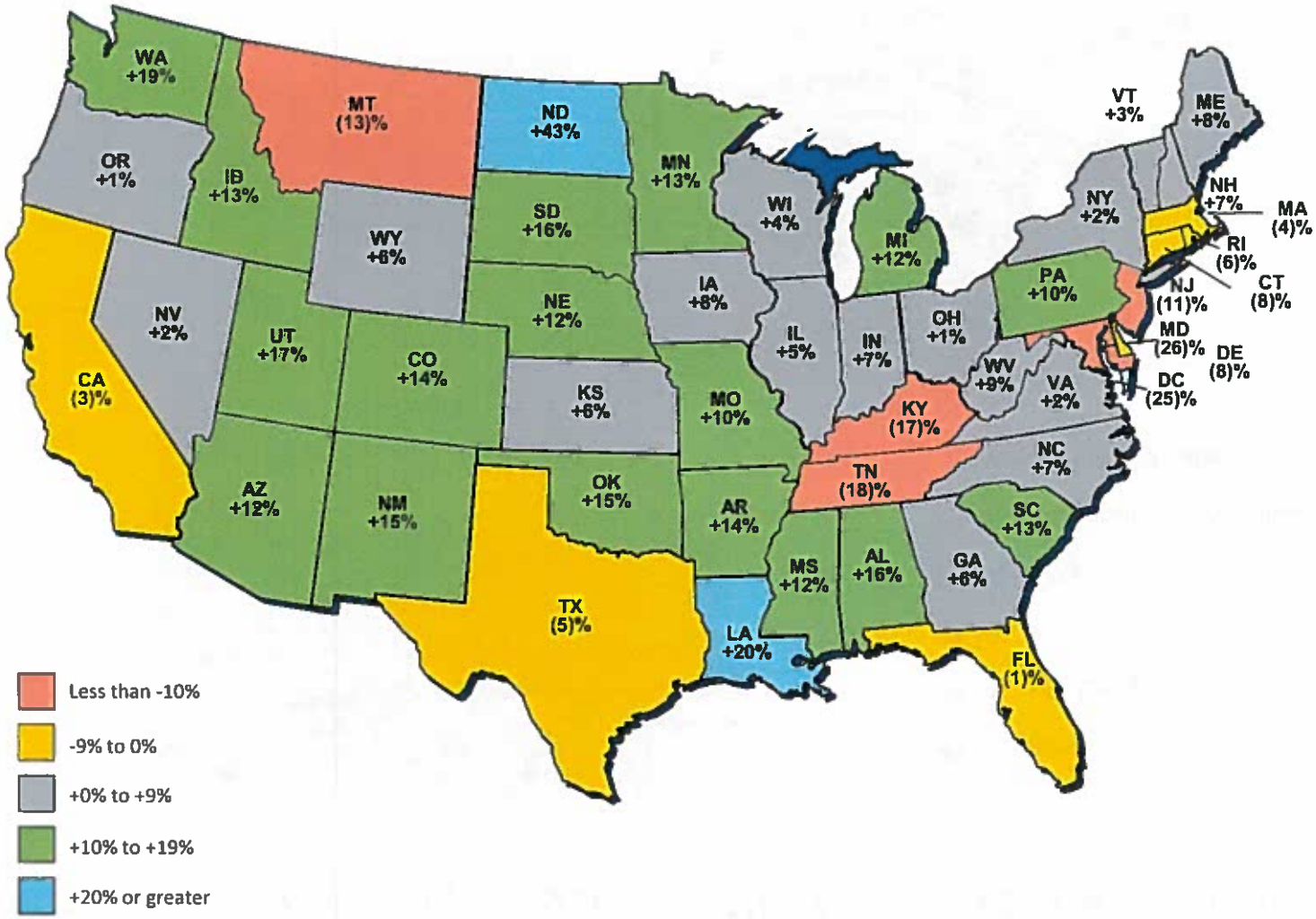
- < 6.0 ¢/kWh
- 6.0 ¢ - 6.5 ¢
- 6.6 ¢ - 7.0 ¢
- > 7.0 ¢

- EGSL Average - 5.9 ¢/kWh
- ELL Average - 5.7 ¢/kWh
- U.S. Average - 7.0 ¢/kWh

Source: *U.S. Energy Information Administration, July 2013 – June 2014 Southern U.S. Electric Rates*

Industrial Load Growth Across the U.S. Since 2009

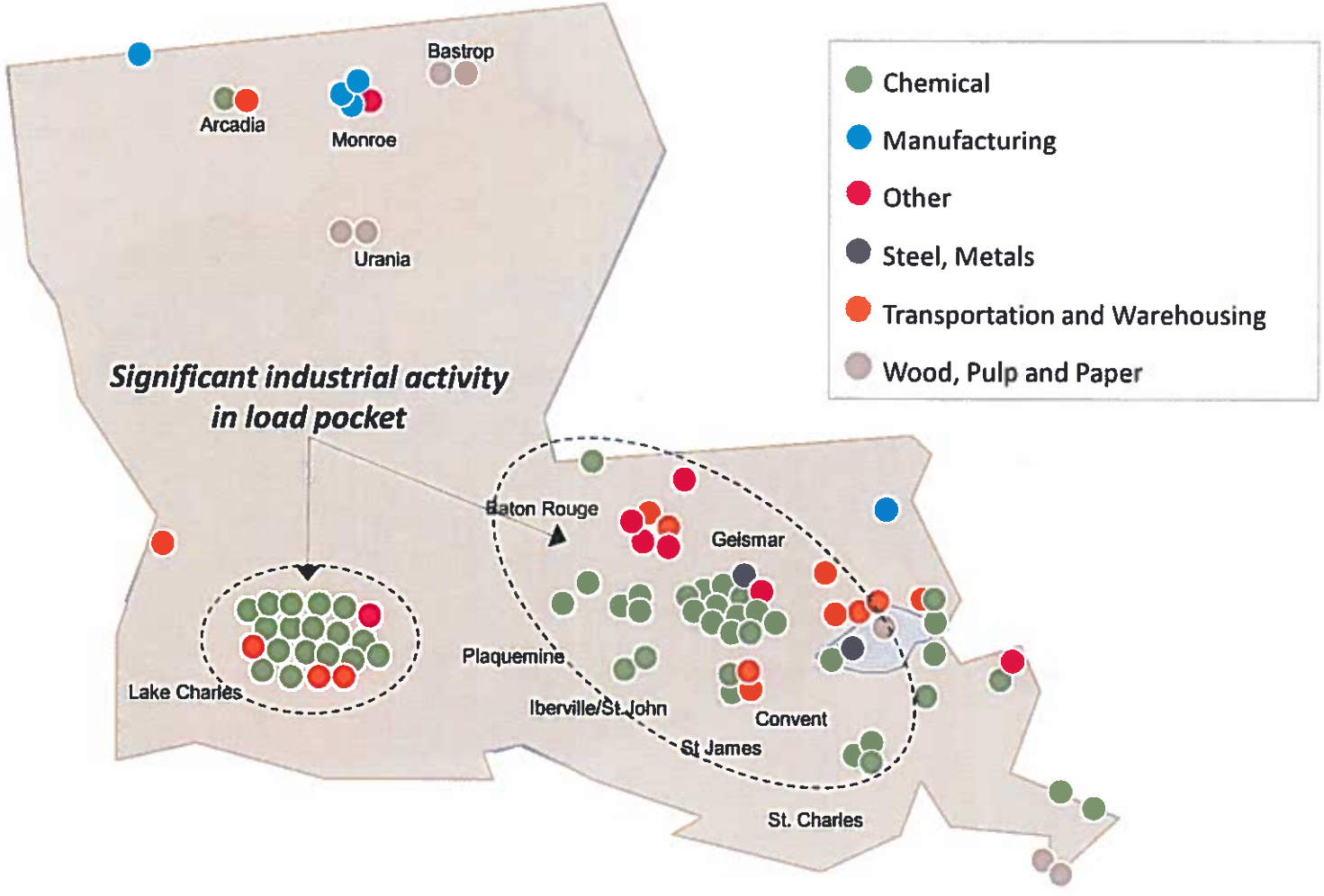
20% growth in Louisiana outpaced the U.S. average of 4%



Source: EIA

Significant Industrial Growth Projected in Louisiana

Particularly along the Gulf Coast and the Mississippi River Corridor



What is Louisiana Economic Development Doing?

Louisiana at the top in nationwide rankings

Business Climate

- 1st place in *Business Facilities* magazine's Best Business Climate rankings in 2014
- Gauges the competitiveness of state economic development programs and economic indicators across the nation

Recruiting

- In 2013, Gallup ranked LA the highest for workforce engagement – employees most likely to be involved in and enthusiastic about their work
- New Orleans ranked #1 by *Forbes* magazine as America's New Brainpower City

Incentives

- In 2012, the Tax Foundation ranked Louisiana 2nd in U.S. for lowest tax burdens faced by new firms and 10th for mature firms

Workforce Development

- LED FastStart® named the nation's best state workforce training program by *Business Facilities* magazine – 5 years in a row
- Called the "gold standard for workforce training solutions"

What has Entergy done?

Recently announced projects

sasol
reaching new frontiers

- Cracker / chemicals complex in Westlake, LA beginning mid-2015
- Estimated $8B project

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methanex
the power of agility

- In July 2012, announced plans to relocate a 1 million metric ton methanol production plant from Chile to a new 225-acre site in Geismar, LA; second plant relocation to Geismar announced April 2013
- Estimated $1B investment

Cameron LNG

- Development of a natural gas liquefaction export facility at the site of its existing Cameron LNG receipt terminal in Hackberry, LA
- Estimated $10B project

PennTex
MIDSTREAM PARTNERS

- Construction of a natural gas processing plant at a new site in Lincoln Parish, expected to be operational by March 2015
- Estimated $150M project

Methanex

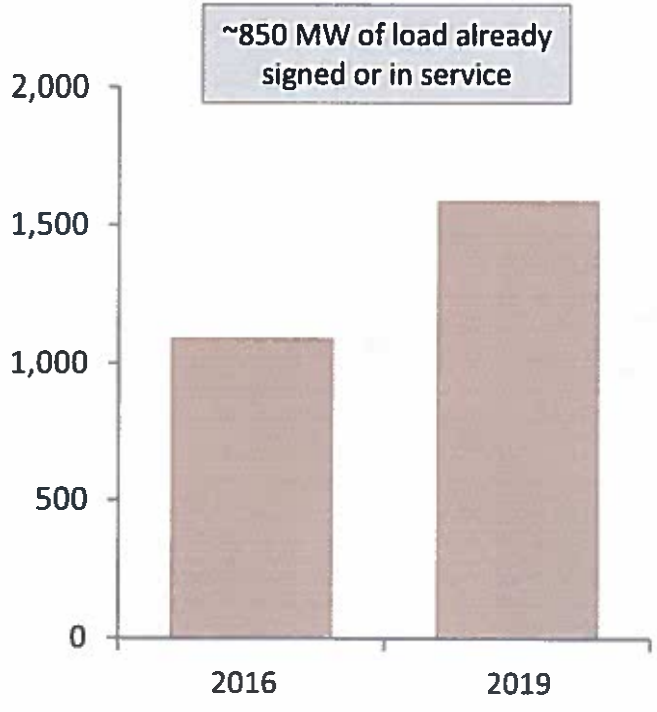
Moving modules and equipment to Geismar, LA from Chile

Unique Sales Growth Opportunity

~1600 MW of new industrial load expected through 2019

Entergy named one of nation's Top 10 utilities in Economic Development by Site Selection magazine

Expected Industrial Load growth in LA by 2019



What are we doing to make this a reality?

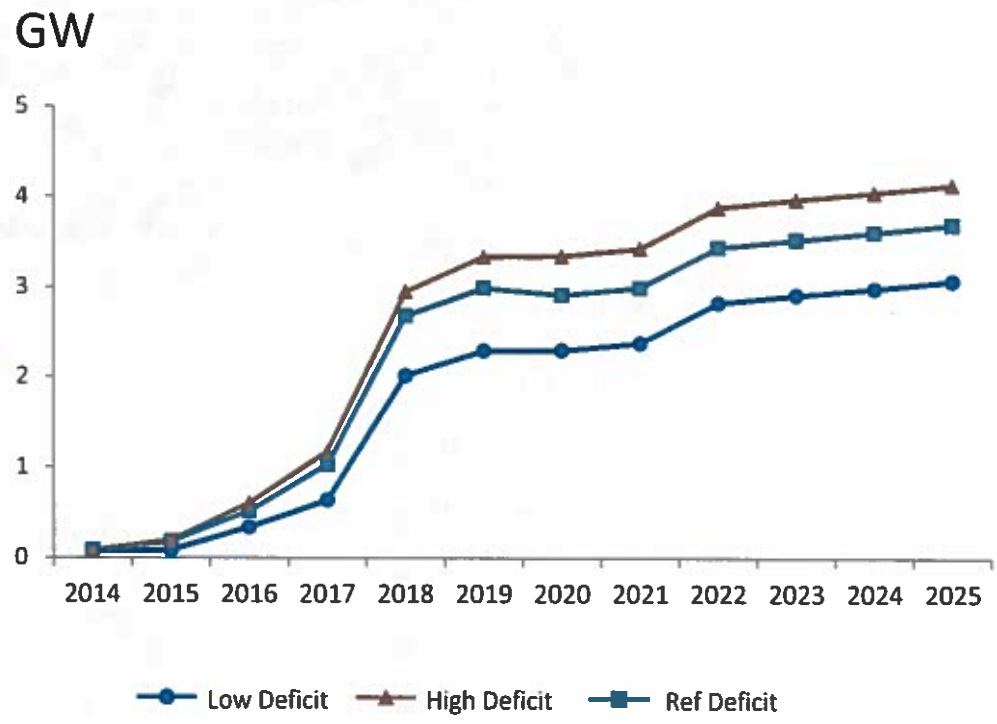
- Partnering with state economic development teams to attract new business
- Developing a supply plan to ensure we can serve the new load
- Proposing the business combination of EGSL and ELL
  - Single company with a larger balance sheet and greater geographic and customer diversity
  - Strengthen their ability to make investment needed to serve the new load
  - Establish a uniform, diverse portfolio of large power service rates

Generation Investments Needed

Drivers

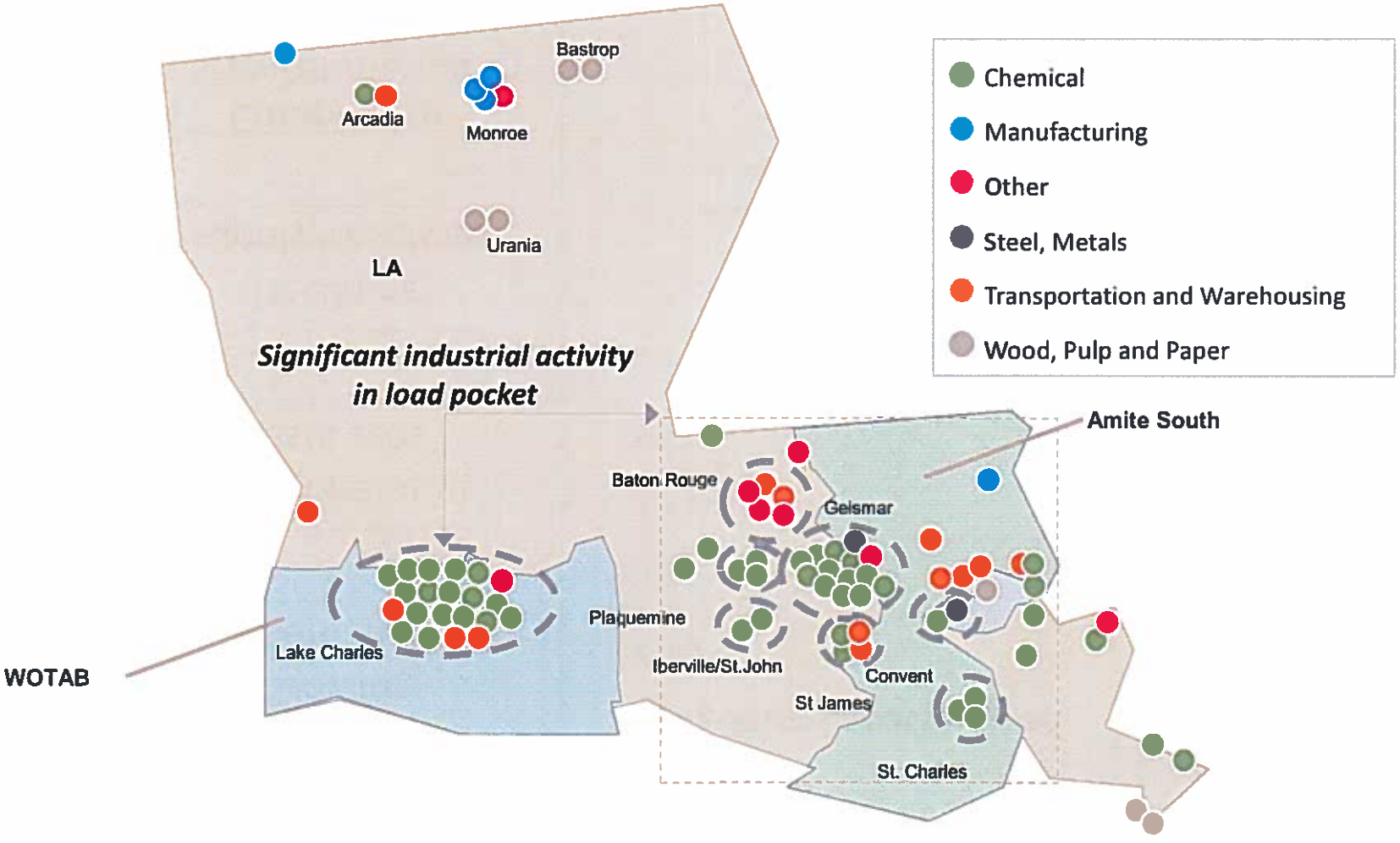
- Growing demand
- Aging operating resources
- Declining supply/reserves
- Compliance (environmental, other)

Long-Term Capacity Need



Proposed Supply Plan Includes Investment in Load Pockets

Ongoing Amite South RFP for CCGT by 2020; WOTAB CCGT by 2021



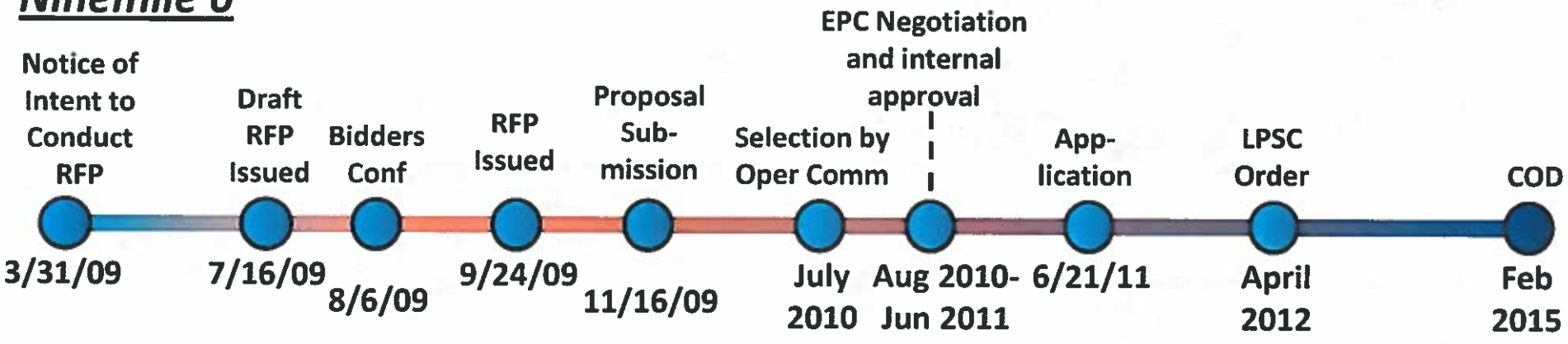
ELL and EGSL are Moving Forward with Needed Investment

Ninemile 6 CCGT facility in Amite South expected on-line by end of 2014

Speed to Market Key to Meeting Load Growth

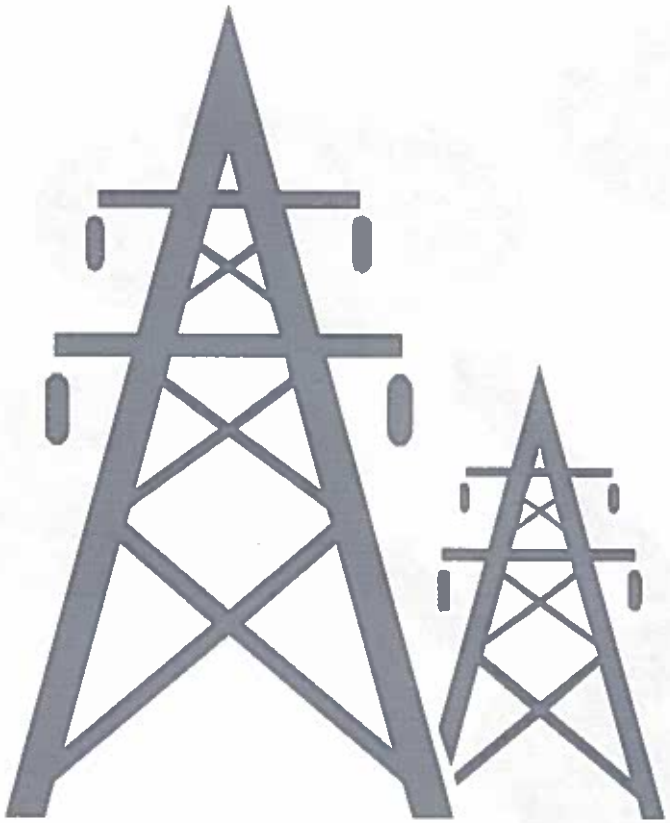
RFP Timeline

Ninemile 6

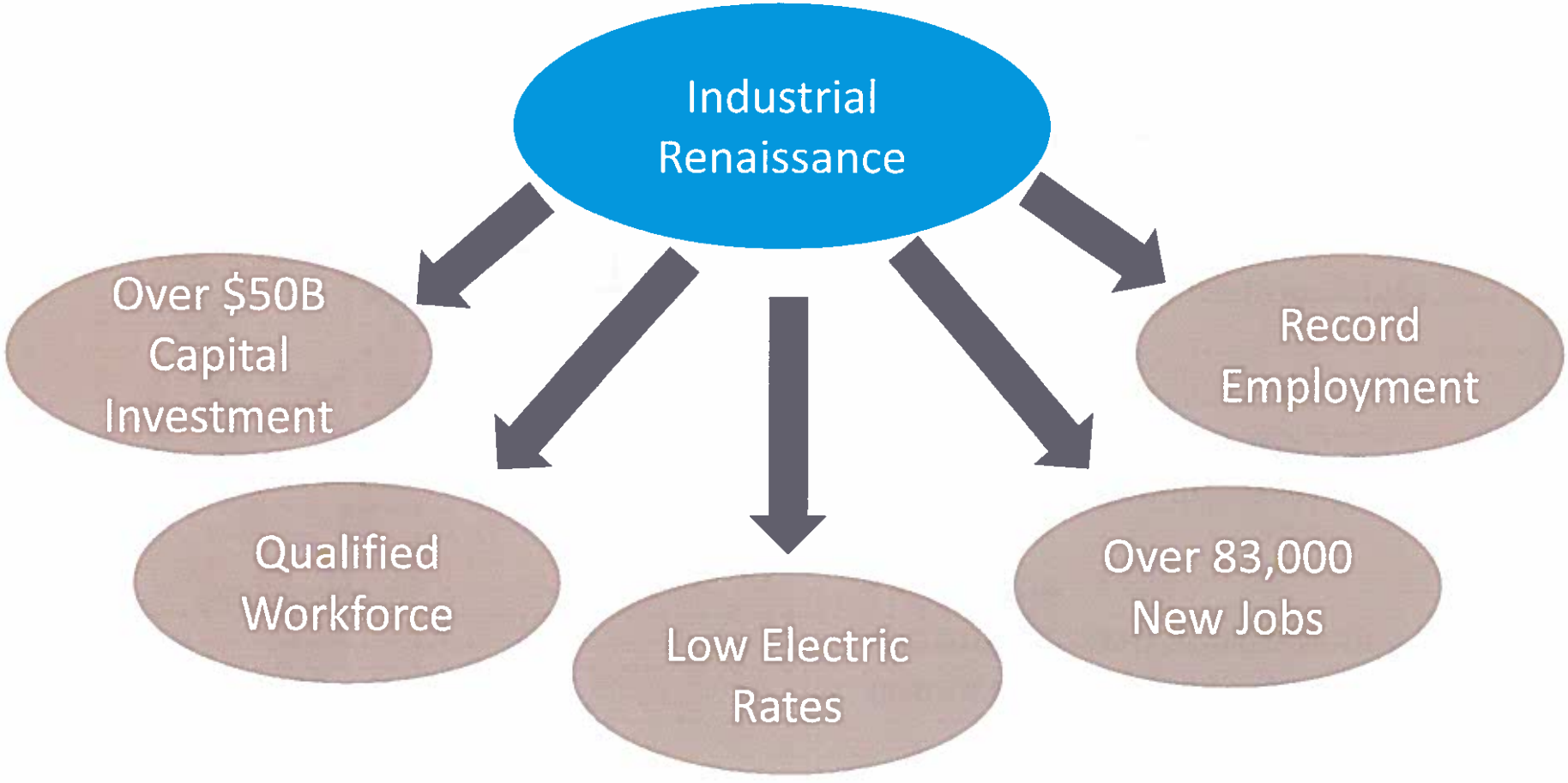


Transmission and Distribution Investments

Aimed to enable industrial growth in Louisiana



- ✓ Improve load serving capability in industrial growth areas around Lake Charles
- ✓ Improve load serving capability in the industrial corridor between Baton Rouge and New Orleans
- ✓ Enhance reliability for Companies' existing loads
- ✓ Economically reduce congestion

Working Together

Benefits our customers and our region