

# Keep the Lights On:

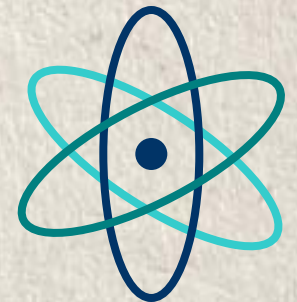
## Florida's Energy Workforce Needs

**Andra Cornelius, CEcD**

Vice President for Business Outreach  
Workforce Florida, Inc.

**Florida Energy Commission  
Energy Supply and Delivery  
Advisory Group**

July 9, 2007



# Florida's Workforce System Partners

**Workforce Florida:** Nonprofit, business-led policy board appointed by the Governor, Florida House and Florida Senate to oversee state workforce system

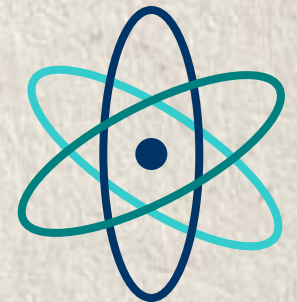


**Agency for Workforce Innovation:** State agency responsible for administrative and fiscal affairs

**24 Regional Workforce Boards:** Local private sector-led boards primarily responsible for service delivery

**One-Stop Centers:** Bricks-and-mortar access points for many workforce services for businesses and individuals

[www.EmployFlorida.com](http://www.EmployFlorida.com)



# What is the Florida Energy Workforce Consortium (FEWC)?

**Formed in April 2006**

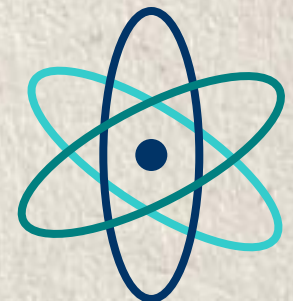
## **Membership:**

Energy companies & associations, workforce organizations, community colleges, school districts, including the Center for Energy Workforce Development (CEWD), and Labor



## **Key Objectives:**

- Identifying Florida energy workforce issues
- Better understand existing education / training options & opportunities
- Creating a plan to develop Florida's energy workforce talent and address needs—current and future
- Develop energy talent: “Puddle” to a “Pool”



# **Defining Florida's Energy Workforce Challenges**

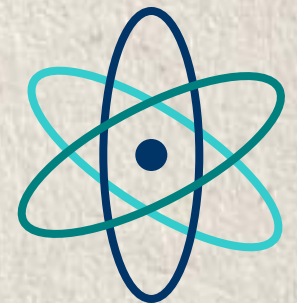
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**Energy Demand**

**Workforce by the Numbers**

**Aging Workforce**

**Pipeline Development Initiatives**



# Energy Demand

**2006**

**18 million** Floridians

**2020**

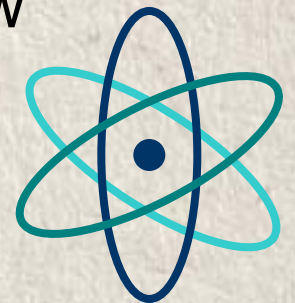
**23.4 million** Floridians

Florida will be the third most populous state surpassing New York by 2011.

Proposed Fossil Fuel Generating Units 2007-2015: 18

In addition, Florida Power & Light and Progress Energy also have announced long-term plans for possible new nuclear units.

Sources: U.S. Census Bureau, Florida Agency for Workforce Innovation Labor Market Statistics Center, Florida Public Service Commission



# Florida's Energy Workforce by the Numbers

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**Florida Electric Utilities: 55**

(including 21 companies that both generate and distribute power)

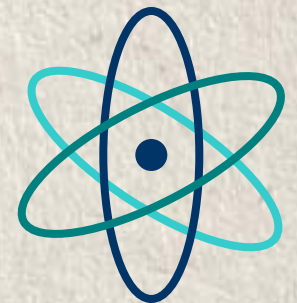
**No. of Workers: 26,300+**

**\$68,991: 2006 Energy Industry Average Annual Wage**

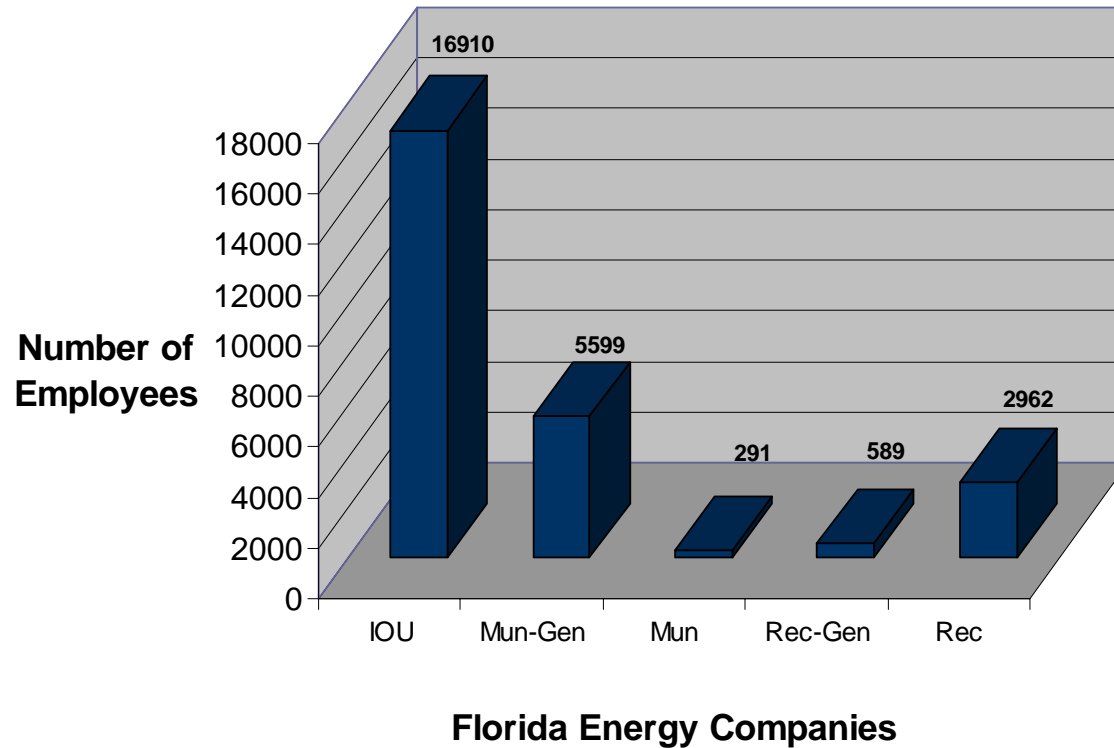
**\$44,647: 2006 Power and Communications System  
Construction Contractors**

**\$38,498: 2006 State Average Annual Wage  
(All Industries)**

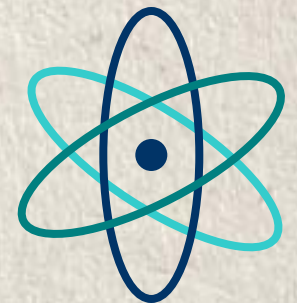
*Sources: Employ Florida Banner Center for Energy and Florida Agency for Workforce  
Innovation Labor Market Statistics Center*



# Energy Employees At Work



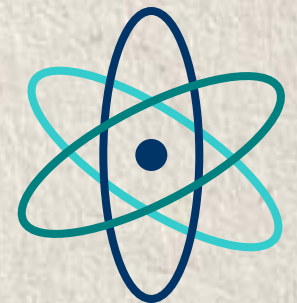
Source: *Employ Florida Banner Center for Energy*



# 'Graying' of the Energy Workforce

## Surveys Say...

- U.S. electric utilities expect between 11% to 50% of their workforce to retire within next five to 10 years
- Aging workforce cited among top three concerns of U.S. electric utilities
- 75% of Florida electric companies cite accelerated pace of retirements as a major concern



Sources: U.S. Department of Energy, Black & Veatch and the Employ Florida Banner Center for Energy

# Occupations of Concern

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**Power plant operators**

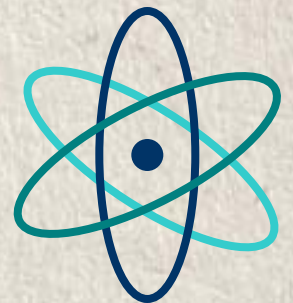
**Line installers and repairers**

**Maintenance and repair workers**

**Electricians**

**Plumbers, pipefitters and steamfitters**

**Engineering technicians**



# **Pipeline Development Initiatives**

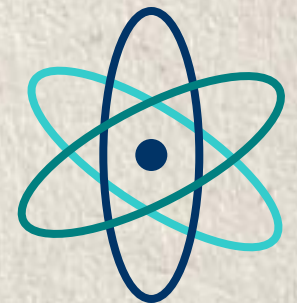
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**Middle School Awareness**

**CHOICE-model Replication/Secondary  
Career Education**

**Employ Florida Banner Center for Energy**

**Florida Community Colleges  
and Universities**



# Career Exploration

Building

Awareness

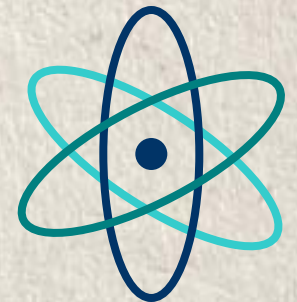
About Energy

Occupations



The screenshot shows a Mozilla Firefox browser window displaying the 'Get Into Energy' website. The page features a navigation menu with 'VIDEOS', 'CAREERS', 'EDUCATORS', and 'ABOUT'. The main content area is titled 'Skills Needed in Energy Field' and lists four occupations: Lineworker, Technician, Power Plant Operator, and Pipefitter, each with a small image. To the right, there are three main sections: 'CAREER ASSESSMENT' with a 'GET ASSESSED' button, 'JOB LISTINGS' with a 'FIND A JOB' button, and 'SKILLS NEEDED IN ENERGY' with a 'LEARN MORE' button. A 'UNDER CONSTRUCTION' banner is visible at the bottom of the page. The Windows taskbar at the bottom shows the Start button, several open applications, and the system clock at 3:35 PM.

[www.GetIntoEnergy.com](http://www.GetIntoEnergy.com)



# Pipeline Development Initiatives

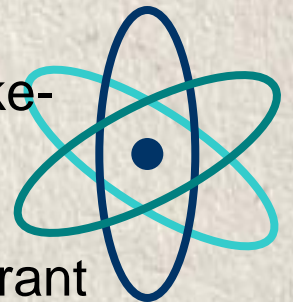


## Creative Partnerships

- Florida Energy Workforce Consortium (FEWC)
- Center for Energy Workforce Development (CEWD)

## Utility Companies Take Action

- **Gulf Power Academies:** Pensacola (West High), Laurel Hill (Laurel Hill School), Milton (Locklin Tech)
- **Florida Power & Light:** Miami (Miami Lakes Educational Center); Miami-Dade College & Indian River Community College
- **Orlando Utilities & Sumter Electric Cooperative (SECO):** Lake-Sumter Community College
- **Progress Energy, Ocala Electric, SECO, other Coops:** CLM Workforce Connection Power Industry (PI) Academy Planning Grant

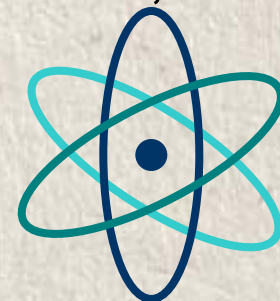


# About the Employ Florida Banner Center for Energy

- Launched in 2007
- Based at Lake-Sumter Community College
- Educational Partner: Indian River Community College
- Aims to grow Florida's skilled energy workforce by expanding availability of line technician skills training with an initial focus on offering introductory courses for young people / career changers. Also working to expand training opportunities for in-demand power plant workers, e.g. operators and mechanics

EMPLOY FLORIDA  
**BANNER** Center  
Energy

**Coming Soon:**  
Employ Banner Center for Alternative Energy  
*Location TBD*

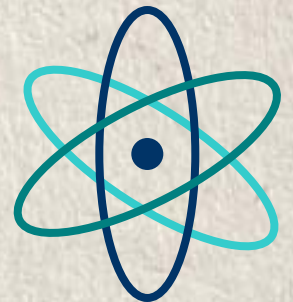


# Where do we go from here?

Challenges = Opportunities

## Proposals/Recommendations:

- Statewide campaign to raise awareness about energy career opportunities
- Adoption of energy as a targeted sector in state economic development plan
- Further development of state energy workforce consortium as driving force for collaboration

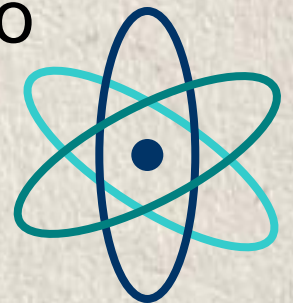


# Challenges = Opportunities

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## Proposals/Recommendations:

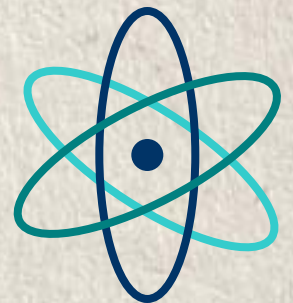
- Commitment to strengthen existing and develop new pipeline programs
- Promote math and science education in middle and high schools as pathway to power engineering careers
- Recognition of career and technical education programs and the public workforce system to develop performance-based education and training



# Challenges = Opportunities

## Proposals/Recommendations:

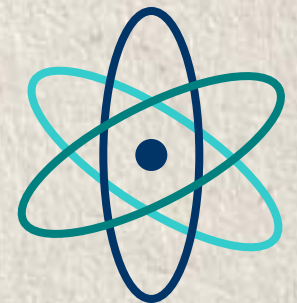
- Commitment of additional federal and state funds to develop and act on workforce development solutions
- Agreement from Florida energy industry (at all levels) to commit resources toward expanding the talent pool from which everyone draws



# Energy Workforce Agenda

## What's Ahead

- **U.S. Department of Labor Workforce Innovations**  
July 17-19, 2007  
Kansas City
- **Center for Energy Workforce Development (CEWD)  
Southeast Regional Meeting**  
July 25-26, 2007  
Atlanta
- **U.S. Department of Labor, Employment & Training  
Administration Skilled Trades Summit**  
August 27-28, 2007  
Biloxi





**“With the critical role our industry plays in this nation’s infrastructure, this potential crisis is an issue that ultimately could affect every facet of American life.”**

— Paul Bowers, President  
Southern Company Generation

