

MINUTES

Banner Center for Energy Advisory Council Meeting

**September 24, 2009 at
Indian River State College
Ft. Pierce, FL**

I. Welcome and Introductions

Al Roberts, Vice President of Applied Science & Technology, welcomed the advisory council members and thanked everyone for their service in the promotion of the Banner Center for Energy.

Jose Farinos, Dean of Advanced Technology, opened the Advisory Council Meeting with individual introductions.

Self-Introductions as follows:

Jennifer Grove: Gulf Power

Carol Higley: Jacksonville Electric Authority (JEA)

Chris Johnson: Florida Power & Light (FPL) Group

Rodney Miller: FPL Group

Kim McDougal: Dept. of Education

Bryan Kamm: Vice-Chairman-CTEF/ Coastal Caison Corp, Geothermal

Charles Puccini: Director of Coastal Caison Corp.

Tom Mudano: Coastal Synergy Corp.

Douglas Giel: Ft Pierce Utilities Authority

Libby Handel: Director of Biotech, Palm Beach State College

Edward Willey: Dean Academic Affairs, Palm Beach State College

Jean Wihbey: Palm Beach State College

Amy Brunjes: FPL, government relations Treasure Coast

Kevin Gay: Progress Energy

Pattie Wiesel: Lake-Sumter Community College

Mary Jo Rager: Lake-Sumter Community College

Audrey Brown: Orlando Utilities Commission, training and development

Richard White: Miami Dade College

Paul Wahnish: Career Tech Ed Foundation

Jose Farinos welcomed the group with an overview of the advisory council's purpose along with a history and vision for the group. The energy industry will be one of the economic drivers for this decade. The Banner Center was created to support the energy sector. The goal is to reduce the time needed to build this workforce and accomplish this goal without losing any productivity. Training offered at colleges needs to be based on industry needs and to accomplish this goal we need a stronger collaboration between industry and education. The Banner Center can provide that link.

II. Banner Center Overview

Kevin Cooper (IRSC) delivered an overview of the history of power in Florida as well as recent industrial developments in power generation. Information was shared on the new Banner Center website. Focus was placed on the need for a gap analysis. An important part of the Banner Center is to upgrade and provide training for current and future conditions in the energy industry. The Banner Center is beginning an information gathering initiative through a gap analysis. The goal of this analysis is to collect information on each energy program around the state and determine industry workforce needs, and establish partnerships with these institutions.

III. Academic Updates

Indian River State College (IRSC):

Jose Farinos

Power Plant Technology Institute started in 2006. Partnerships at the time included Miami Dade College and Florida Power & Light (FPL). The institute started with an industry that was looking at 30% retirement of workforce and an increase in production. There was an identified clear gap in industry and IRSC was able to upgrade skills working directly with the industry. Currently, IRSC has new programs proposed in renewable energy. The goal is to make sure we do not duplicate or deviate from the training in the industry. IRSC has a grant from NRC that will allow for the expansion of the program this year, including radiation protection technicians and non license operators. The Radiation Protection field will also bring opportunities to work locally, state wide, or nationally. IRSC is building a new facility: the Center for Innovation and Entrepreneurship. The economic development of the state will be linked to the energy sector in the next decade. The building construction industry and energy efficient building design will also play an important role. Those two facts will be a force in the planning for the labs in the new facility.

Miami Dade College (MDC)

Dr. Richard White

Dr. White discussed Miami Dade's Electrical Power Technology program. The local school district, Dade County, provides linemen training. Partnerships of the program include FPL at Turkey Point. Dade county public school runs lineman training through a tech center/high school. They train at FPL facilities. Funding has been pulled from that program so no more students will go through and the program is winding down. Breakdown of mechanical disciplines graduation: 1st year 10 I&C, 2 electrical. Last year had 6 I & C, 6 electrical and the remaining mechanical.

There will be an expansion into Uniform Curriculum Guidelines, Nuclear Systems Operators, and alternative energy. Other programs include Solar PV, starting with installation and design. These

programs target the same certifications and are similar to IRSC. The hope is to build into systems design and general contractors and create a full program. Turkey Point had great equipment that they gave to MDC.

Palm Beach State College (PBSC)

Ed Willey

Discussed the AS program in Electrical Power Technology. The college saw the need as neighbor of FPL to begin programs. The program's initial sponsorship came from FPL. Challenge is now trying to find lab space for curriculum. The college is currently exploring expanding industry partnerships. FPL has a memorandum of understanding and they maintain a good relationship with the company. Some courses that are under development include solar and wind courses, as well as biofuels. The PBSC faculty is strong in biotechnology. The college will be able to help develop biofuel and biotech easier because of faculty strengths. Have ears open the most with solar now. Internships: the college currently has 5 students with internships out of state. The challenge is to provide internships and experiences.

Lake-Sumter Community College (LSCC)

Mary Jo Rager

The college is located in central Florida serving a two county district NW of Orlando. The Sumterville campus is where the lineman program is located. There is an AS degree program and additional certificates. Local utilities came to provide financial support and curriculum for the program because they wanted a college credit curriculum. The college also offers a 6 week boot camp. It is a pre-apprentice lineman boot camp. A private donor gave money to put on boot camp for high schoolers; 18 went through and 17 employed straight from high school. There is also the option of non-credit training articulating into credit program with the opportunity to earn 9 credit hours. The numbers in the program are getting smaller but the college opened up enrollment to the general public and now has 17 students going through the track. There is also a boot camp program at Florida Sheriffs' Youth Ranch through grant money. Also, Orlando Utilities, OUC, had a boot camp that worked great with LSCC resulting in a great number of placements.

University of South Florida (USF)

The university is involved as a partner. There was a need for transmission training and USF has quality training in this area. USF has a power center with a focus on energy distribution and generation, the transmission of power, and on renewable energy.

IV. Industry Updates

FPL:

Amy Brunjes

FPL just proposed a wind project that needs approvals locally. There is a need for highly skilled power employees. Providing local education ensures the students will stay local and is in some ways a two-year job interview with these students. Looking toward the future, where we are going, toward green initiatives and solar. Future initiatives are at a standstill statewide because of legislation. The state does not have renewable portfolio standard. There is a need for it in order to be empowered to create programs. What can people actually do to assist in motivating legislators? People could speak at local

legislative delegations telling them that we are prepared to train people in new jobs but do not have places to employ the graduates. FPL has entire fleet of hydro electric vehicles and will reduce gas emissions to become a clean company. There are jobs in the hydroelectric industry as well.

Progress Energy

Kevin Gay

The industry is looking at retiring individuals; they need transfer of knowledge to the younger generation. The focus is on craft technical personnel. Progress Energy partners with a number of high schools and technical academies to ensure the younger generation is equipped with the skills and ready to fill in the gaps.

Ft. Pierce Utilities

Douglas Giel

Ft. Pierce Utilities is a smaller facility. Issues facing Ft. Pierce Utilities include budget problems and customers demand lower prices. There is a push to go green but costs are a problem currently. Now the goal is to watch initiatives and look at cost effective solutions.

Coastal Synergy Corp

Tom Mudano

There is a need highly trained workers. Operations are all computer driven now. It is impossible to take current workers and train them in computers. We need to go to the younger generation to get computer skilled workers. Coastal has gone down to high schools to get students involved and found that the demand was great. The studies show the industry must look into high school and educate students around ages 16 and 17. These students are looking to their future. The future in the energy industry is virtually guaranteed.

Orlando Utilities

Audrey Brown

A main goal is to outreach to community high schools to educate people about the industry. The majority of the students do not know about the utility industry. There are also opportunities in talking to guidance counselors in high schools to tell them about energy industry opportunities for these students. We know we are aging out and we need to build the workforce.

Florida Municipal Association

Cheryl Anderson

This association represents all utilities. There is a lineman competition each year statewide. Additionally, opportunities are shared at a career day each year. Many kids are not familiar with the jobs available. With outreach, students can see that is something they can do. Florida Municipal Association went to MTI for a career day and that really helped. It is important to direct students that may not plan to get a degree to these programs.

Gulf Power

Jennifer Grove

Gulf Power in NW Florida operates within Southern Company. The first energy career college is located in NW Florida. They have many successful students graduating from these programs. There are also middle and elementary school programs to inform kids about the energy industry. It is found that kids make a decision in 5th grade whether or not to go into these programs. Students in the upper levels get mentors and this is very helpful for kids that want engineering degrees. They are able to clearly understand different types of engineering opportunities. Many jobs do not require 2 year degree to enter into, they prefer actual work experience.

JEA Municipal Utilities

Carol Higley

JEA Municipal utility serves Duval and three adjacent counties. JEA is in a different mode now because of budget situation, currently looking on biweekly basis for hiring. There is a hiring freeze now. However, there are exceptions in crafts level from line-workers above ground and below, substation, meter technician, and engineers. Those are the areas to have replacement or a placement. From a retiring standpoint there are ten employees a month going into retirement. Currently we see a larger number retiring because from a pension standpoint they see it as the right time to go. This leads to the certainty that there is a need for another generation of workforce. Mostly engineers are on the degree track, but there are also engineers on a work track. These students could also move into a technical role if no engineering is available. On Community College level, have articulation with Lake City, IRSC, UNF, and UF. Also have partnership with Georgia Power Okefenokee Technical Institute. Not looking at expanding for the next decade.

V. Questions & Comments

- Jose Farinos (IRSC): To industrial partners, now that you have heard about our facilities and programs what can we do to fill in the gaps?
- FPL representative discussed the reality on green power. The reality is that 70% of power is from fossil fuel. Coal, natural gas, and oil will be around forever. A major part of job openings will be craft skill in mechanical, electrical, and I & C. Most companies put in combined cycle because they are quicker and cheaper to build as compared to nuclear. Fossil fuel will be around forever. Not many colleges offer combined cycle technology. There is a need to gear something toward combined cycle because most companies are going to this as a great return on their investment. In reality we have two new plants in Florida but we have 40 combined cycle plants. The skill sets for these plants is a little different. Within the next 3-5 years we will not be able to keep up with the demand. Most of the energy workforce would have been gone (retired) by now, but because of the economy 50-60 year olds are staying a little longer. However, as soon as the economy improves, we will have a mass exodus. Most companies have gone away from apprenticeship programs. They want the new employees to have dual-craft or multi-craft skills now with fossil fuels. Nuclear training cannot go that way because they have to follow strict NRC guidelines.

- Doug Giel (Ft. Pierce Utilities) reinforced the idea that they are looking for people to multitask. Companies do not have training programs because the cost is too prohibitive.
- Kim McDougal (Florida Department of Education) said that the focus should be on degrees and certificates in post secondary level. There is a need to add career academies and expand partnerships with energy companies. This includes school districts and private sector schools as well. There could be a public and private partnership in future.
- Coastal representative suggested that the reason they are so involved on the education side is because of the new technologies brought in by parent company and the need for new skilled workers. It seems that the Banner Centers do not cross into other industries that need those same skill sets. Coastal wants to find other industries that need the same skill sets they are looking for. There are some pockets around Florida that need to be combined together. The Banner Center is one way of doing that. There is a need to discuss with other banner centers that focus on developing pools in regional areas and also need to discuss reaching out in other industries. Some examples include Pasco County that has launched career academies and River Ridge opened up a career academy and have 55/56 students.
- Jose Farinos (IRSC) discussed having an industry of the month feature in the college's newsletter. It is important to understand the things being done to bring industrial development into the state. We can expand the reach of the Banner Center beyond just energy.
- Jennifer Grove (Gulf Power) put forth an idea to identify non-named energy academies around the state. There could be an inventory of energy related academies and a way to identify the other programs as well. It is important to maintain an inventory of existing secondary programs to the feeder programs. This will make it easy for all to understand what is going on. Need to find out what is available on all levels and the different 'career areas' that are available. The inventory could look at it by skill or career area instead of institution. They could seek out an energy champion at each community college. An energy education specialist needs to be identified.
- Mary Jo Rager (Lake-Sumter Community College) suggested that the occupational deans could share this information.
- Jose Farinos (IRSC) said there is a need to inform all colleges of initiatives in the energy sector and invite them to be a part of these projects.
- Tom Mudano (Coastal) talked about the need to delve into the geothermal side and look at it from an 'energy storage' standpoint. In regards to air conditioning, how can we use geo thermal to reduce energy loads on buildings in the future? Also, energy auditing, how do we reduce our energy costs? Solar, geothermal? What can people really do? Education can lead to audits from an objective point of view to say 'here is what will best fit you'.

VI. Closing

Jose Farinos (IRSC): All are invited to look at the Banner Center website as a work in progress. It is to be used as a tool for industry. Summing up the suggestions, the Banner Center should ask educators about program successes, work closer with high schools and identify academies focused on energy related sectors, and increase support for energy related industries. There is a need to look for a search engine that will help people unfamiliar with the site to easily find information. We want to make it usable and intuitive for anybody searching for help in training, education, or resources. All attending were invited back in two or three months for the next advisory council meeting.

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