#### CITY OF FORT LAUDERDALE SUSTAINABILITY ADVISORY BOARD CITY HALL CITY COMMISSION CHAMBERS – 1ST FLOOR 100 NORTH ANDREWS AVENUE FORT LAUDERDALE, FLORIDA SEPTEMBER 26, 2011 – 6:30 P.M.

Members	Attendance	Cumulative Attendance 1/2011 through 12/2011 Present Absent	
Jon Albee, Chair	Р	8	1
Alena Alberani, Vice Chair	Р	8	1
Anthony Abbate	Р	8	1
Valerie Amor	Р	3	0
Jaime Castoro	Р	8	1
Cathy Curry	Р	4	0
Vicki Eckels	Р	9	0
William Goetz	Р	8	1
Dana Pollitt	Р	5	3
Rebecca J. Walter [until 7:41]	Р	7	2

#### Also Present

Todd Hiteshew, Staff Liaison Susanne Torriente, Assistant City Manager D'Wayne Spence, Assistant City Attorney Dick Eaton, Senior Code Enforcement Officer Debbie Hernandez, Assistant Code Enforcement Manager Heather Steyn, WaterWorks 2011 Heike Naigur, Energy Manager Brigitte Chaippetta, Recording Secretary, ProtoType, Inc.

#### **Communications to the City Commission**

None.

#### 1. Call to Order

The meeting was called to order at 6:30 p.m. by Chair Albee.

#### 2. Roll call – Introductions

Roll was called and it was determined a quorum was present.

#### 3. Approval of Meeting Minutes – August 2011

Ms. Eckels noted a correction to the minutes.

**Motion** made by Ms. Amor, seconded by Ms. Eckels, to approve the Board's August minutes as amended. In a voice vote, Board unanimously approved.

#### 4. Staff Liaison Report

#### • EECBG

Mr. Hiteshew informed the Board that they had spent \$1,238,040 so far. He stated the Capital Improvement Projects and Energy Efficiency Conservation Strategy were complete.

#### • CESP

Mr. Hiteshew said they had received an email from DOE the previous week indicating the Community Energy Strategic Planning was being revamped.

#### 5. New Business

• FPL Presentation – Lynn Shatas, FPL

Ms. Shatas and John Geneco, Director of Project Development at FPL, gave a Power Point presentation regarding modernization of the Port Everglades power plant, a copy of which is attached to these minutes for the public record.

Mr. Geneco informed Dr. Goetz that no new gas lines would be required.

Mr. Geneco described the solar plants FPL had in operation now, and said these had cost \$700,000,000 to build. Ms. Eckels asked about building hybrid plants and Mr. Geneco explained that each megawatt of solar power required 10 acres of land. He stated FPL went through a process in order to pass the costs onto customers. Ms. Eckels noted that passing the cost on to customers meant they would not see cost savings for some time. Mr. Geneco said FPL had the lowest rates of the 50 utilities in Florida, partly because they had been increasing the efficiency of their plants for 20 years.

Ms. Amor asked if FPL considered the source of their natural gas and Mr. Geneco stated they purchased gas on the market, mostly from Texas, where it was obtained offshore. Ms. Amor pointed out that natural gas was still fossil-fuel based, and it could be extracted through fracking. Mr. Geneco said there was a lot of attention to fracking operations to ensure that groundwater was not contaminated.

Mr. Geneco said they used the Intracoastal for plant cooing and the water was discharged back into the waterway.

Mr. Geneco said their plants were built to withstand 145 mph hurricane winds and also built to exceed 100-year flood levels, which was approximately 15 feet on this site.

Mr. Abbate asked if there were plans for carbon capture, and Mr. Geneco said there were no immediate plans for carbon capture, but he believed they were more than 30 years away from carbon capture being implemented.

• PACE – Property Assessed Clean Energy

Mr. Hiteshew distributed a brochure regarding PACE financing. He explained that PACE was an innovative way to fund energy projects. Property owners paid the loan off as a portion of their tax bills and the loan was passed from owner to owner until it was paid off. He said there was an issue regarding the loan's priority status compared to mortgages.

Ms. Amor asked about Ygrene Energy Fund and Ms. Torriente said Ygrene had been awarded a contract in Cutler Bay. She stated they wanted other cities and counties to access the contract because more participants yielded better results. Mr. Torriente said staff was discussing how they could implement this. Ms. Eckels stated this was a funding mechanism; the Property Appraiser must agree to collect the funds from property owners and pay the company.

6.

#### Old Business

• Sea Turtles – Educational Video

Mr. Hiteshew stated a stakeholders meeting had been held the previous week. Ms. Alberani said Ms. Torriente had done research with the Fish and Wildlife Commission and other sources to find out what was currently being done regarding landscape and lighting mitigation. Ms. Alberani said they had discussed the need for dune fortification near the sea wall and a possible adopt-a-dune program for local businesses.

Ms. Alberani said they had discussed adding an item to the checklist for Certificates of Occupancy for beach properties that the lighting did not violate the sea turtle code. Mr. Hiteshew said consideration of lighting was discussed as being part of the DRC process. Ms. Alberani said they had also discussed have a Sea Turtle Day in March to heighten awareness.

Dr. Goetz remarked that there was resistance to dunes between buildings and the ocean if they obscured the view.

Mr. Richard Whitecloud, Sea Turtle Oversight Protect (STOP) said the dune in the area of Birch Park and Bonnet House were approximately 36" tall. He stated neither the dunes nor the sea grasses were effective at blocking headlights or traffic lights. He remarked that dune fortification was a very cost beneficial light mitigation technique. Mr. Whitecloud said businesses sponsoring dune projects would enhance guests' environmental experience and would be educating the public as well.

Chair Albee asked if bringing the parties together to have a conversation was working and Mr. Whitecloud stated it was. He said they had established a stronger lever of continuity between the voiceless and the people who had the ability to govern for everyone. Chair Albee stated he and Mr. Hiteshew wanted to ensure that the process was as productive as possible and said the City Manager's office had facilitated this process.

Ms. Amor commented that Mr. Feldman had reorganized City departments and inspections, code enforcement and planning and zoning were now together under sustainable development.

The Board watched the sea turtle video.

Mr. Whitecloud said the video was for educational purposes and the producer had consented to its use and distribution for that purpose by anyone. Mr. Abbate stated it could be shown at the airport and the port to arriving visitors. Mr. Whitecloud wished it to be shown on the hotel televisions and in bars. Mr. Whitecloud said the County had produced its own PSA video in 2010 but this one was more effective. Ms. Amor suggested Mr. Whitecloud speak with Nancy Gassman at the County who was working on climate change and sustainability.

Ms. Eckels recalled that Code Enforcement had indicated they were focused on education, and she assumed they therefore had an educational program in place. She suggested this could be added to their educational materials.

Mr. Abbate did not want to force people to watch the video at hotels. He wanted to concentrate on implementing Dark Sky principals in the entire County. He felt this would be more beneficial to tourism, while solving the turtle's lighting problem.

Ms. Eckels felt showing the video to visitors would inform them how to behave on the beach. Ms. Amor agreed, and noted that hotels could package this to highlight this unique aspect of the local beaches.

Chair Albee summarized that the Board wished this to move forward, and said they would leave this to the City Manager's office and the turtle protection people to determine how to implement it. He requested the Board be provided periodic updates on the issue. Chair Albee agreed with Mr. Abbate that the City should set a precedent and pursue the Dark Sky concept. He asked that this item be on the Board's agenda in October.

At 7:41 Ms. Walter left the meeting.

#### • SAB Ordinance – Vicki Eckels

Ms. Eckels reminded the Board that they had previously noticed that staff had left out some language regarding their ordinance and the Board had requested staff restore the language. She asked what progress had been made with this request. Mr. Spence said Dr. Goetz was working on this. Dr. Goetz stated said he had not pursued this because he assumed it would be best to wait and have the new City management help. Ms. Eckels explained the issue to Ms. Torriente, who promised to address it.

• SAP Update – Carbon Solutions America

Ms. Torriente said she had worked with staff and provided some feedback. She wanted to get the Board's input and submit the report to the City Manager and department directors, so they would have buy-in and could implement in January. Ms. Torriente said they wanted to put achievable items in the plan. She remarked that the City Manager's reorganization would help integrate sustainability throughout the organization.

Ms. Naigur said the comment cycle was complete, and invited Board members' continued input. She stated there was "very, very able new management" in the City, which she felt would make a huge difference. Ms. Naigur reported she would meet with the City Manager within two weeks and present the plan to the City Commission in December.

Mr. Abbate asked if the City's waterways were being addressed in the plan and Ms. Naigur said the plan mainly addressed City operations, not industry. Ms. Alberani suggested integrating some language indicating the plan was not comprehensive and that in the future they could address other things. This would plant the seed for future targets and actions. Ms. Naigur stated they were rewriting the introduction to be more forward-looking. Mr. Hiteshew noted that they had a methodology and metrics now.

Mr. Hiteshew said the report would recognize which initiatives had come from the Sustainability Advisory Board. They would also like Chair Albee and the City Manager to draft interim letters for the report's foreword. Chair Albee agreed to write a letter.

Dr. Goetz stated he had a problem with the methodology used to prioritize the initiatives in the report. He said the methodology dealt primarily with greenhouse gasses and did not refer to other aspects of sustainability. Ms. Naigur stated the method they had used included energy saved, staff time, costs of implementation, return on investment and other things.

#### Other Items and Announcements

#### Urban farming/gardening ordinance

Chair Albee had attended a meeting at Building Services regarding a proposed farm and garden ordinance. He said the Board's original report had included extensive

narrative regarding urban farming and urban gardening. Chair Albee stated the City was "behind the curve" on the issue of food sustainability.

Chair Albee felt the Board should review and comment on the draft ordinance and Mr. Hiteshew agreed to include this on the action item spreadsheet.

#### Smart Watts workshop

Mr. Hiteshew announced that on October 22 there would be a Smart Watts energy Saver Workshop at Cinema Paradiso.

#### Sustainability Award

Ms. Castoro asked about the Sustainability Award. Mr. Hiteshew said Ms. Gonzalez had advised him that they should develop criteria to institute the award process.

#### Plastic bag ordinance

Ms. Amor had spoken with an environmental attorney regarding overturning the State's Statute that prevented municipalities from enacting their own ordinances. She wanted to contact the Florida League of Cities about this, and Mr. Spence advised her to get permission from the City Commission for this if she would represent the Board or the City. If she approached the League as a private citizen, she did not need permission.

#### Anthony Olivieri

Chair Albee introduced Anthony Olivieri and said he was a food policy advocate and expert. Chair Albee said his business associate, Jessica Patron and Mr. Olivieri were meeting to establish a food policy council for Broward County.

Mr. Olivieri explained that a food policy council was citizen-run and acted to advise governments and other groups regarding what they needed to do for the food shed.

#### 7. Communications to the City Commission

None

#### 8. Adjournment

With no further business to come before the Board at this time, the meeting was adjourned at 8:12 p.m.

#### Next meeting date: October 24, 2011

Attachments: Minutes – August 2011

[Minutes prepared by J. Opperlee, Prototype, Inc.]



## Potential Modernization of Port Everglades Power Plant

# Fort Lauderdale Sustainability Board

September 26th, 2011

## FPL is currently modernizing power plants in Cape Canaveral and Riviera Beach. The new energy centers are scheduled to enter service in 2013 and 2014

## **Next Generation Clean Energy Centers**



FPL's Cape Canaveral

FPL's Riviera Beach Next Generation Clean Energy Center, 2014



Over the operational lifetimes of these two new high-efficiency clean energy centers, they are expected to produce combined net savings for FPL customers of \$850 million to \$950 million



# FPL's aging 1,200-megawatt Port Everglades plant has four units that have been in operation since the 1960s

## Port Everglades Power Plant

- Conventional dual-fueled (natural gas and oil)
  - Historically, it has operated on approximately 60 percent oil and 40 percent natural gas
- Commercial operation:
  - Unit 1: 1960
  - Unit 2: 1961
  - Unit 3: 1964
  - Unit 4: 1965



### This facility has provided reliable electricity for the growing South Florida community for the last 50 years



Modernizing the plant into a high-efficiency combined-cycle natural gas energy center offers many benefits for FPL customers

## **Potential Modernization of Port Everglades Plant**

- New facility will produce up to 1,280 MW of power beginning in 2016
  - Enough electricity for about 260,000 FPL customers
- Efficiency will be improved significantly, with power generated using 35 percent less fuel per megawatt produced
- Reduce environmental impact with a dramatic reduction in emissions



Artist rendering of potential Port Everglades Next Generation Clean Energy Center











The potential infrastructure investment of more than \$1 billion will produce significant economic benefits

## **Economic Benefits**

- Construction will create an estimated 650 direct jobs and more than a thousand indirect jobs at peak while supporting numerous local businesses
- In the plant's first full year of operation, it is expected to deliver more than \$20 million in new tax revenue to local governments and school districts
  - City of Hollywood: Approximately \$6 million
  - Broward County: Approximately \$7 million
  - Broward County School District: Approximately \$7 million

 Over its 30-year operational lifetime, the new energy center is projected to produce net savings for FPL customers of more than \$400 million

Major technological advances in fuel efficiency, environmental performance and reliability would benefit customers for decades



By modernizing this plant with the latest technology, FPL's environmental profile – already among the best in the United States – would be even better

**Environmental Benefits** 

- Compared to the old plant, the new energy center will:
  - -Cut CO<sub>2</sub> emissions rate in half
  - Reduce other air emissions by more than 90 percent
  - -Utilize existing transmission infrastructure facilities
  - -Require no additional cooling water and no additional land
  - Continue to support endangered manatees in the area



FPL's Ten Year Site Plan, filed with the Florida Public Service Commission in April 2011, indicated a need for capacity in 2016

**Potential Project Timeline** 

- Need determination from PSC (2012)
- License through Florida's Electrical Power Plant Siting Act process (2012)
- Demolition of existing plant (2013)
- Construction (2014-2016)
- New clean energy center operational (2016)

