

**City of Fort Lauderdale
Utility Advisory Committee
Tuesday, June 26, 2007 – 6:30 p.m.
100 North Andrews Ave., 8th Floor Conference Room
Ft. Lauderdale, Florida 33301**

Committee Member	Attendance	Jan. 2007 to Dec. 2007 Cumulative Attendance		
		Present	Absent	Total
Bunney Brenneman, Chair	P	7	0	7
Bernie Petreccia, Vice Chair	A	6	1	7
Terri Murru	A	5	2	7
Richard Barrett	P	7	0	7
Bob Caine	A	4	3	7
L. Thomas Chancey	P	6	1	7
Bob Cole	P	6	1	7
Fred Stresau	P	7	0	7
Nathaniel Wilkerson (arrived 6:52 pm)	P	5	2	7
Dr. Magdalene Lewis	P	6	1	7
Clare Vickery	A	5	2	7
Dr. Geri Udell	A	4	3	7
Caldwell Cooper	A	4	3	7
Raymond Parker	A	1	1	2

City Representatives

Jim Naugle, Mayor
Peter Partington, City Engineer
Travis Woods, Recording Clerk, Prototype, Inc.

Guests

Lynn Shatas, FPL
Rod Macon, FPL
Trevor Underwood
Debora Van Valkenburgh, Chula Vista Isles HOA
Rudy Herman, President, Chula Vista Isles HOA
Raymond Kaiser, Pareto Energy
Guy Warner, Pareto Energy
Shalom Flank, Pareto Energy

I. Call to Order

Chair Brenneman called the meeting to order at 6:30 p.m.

II. Roll Call

Roll was called and attendance noted. No quorum was present.

III. Self Introductions

Committee members and guests introduced themselves.

IV. Minutes of May 22, 2007 Meeting Minutes of May 24, 2007 Energy Roundtable III Meeting [date should be April 26, 2007]

Deferred due to lack of quorum.

V. Old Business

- **Line Clearing Update**

Ms. Shatas had no report, but planned to have an update at the next meeting.

Mr. Chancey asked if maps were available as to specific locations and was advised by Ms. Shatas as soon as she has the maps, each Committee Member will be given a copy.

Other Business (taken out of order):

Mr. Stresau inquired regarding the procedure when the Committee makes a motion to forward a matter to the attention of the City Commission. Mr. Partington explained there are two possibilities: 1) followup by the City Manager, or 2) meeting minutes are provided to each City Commissioner who may ask the City Manager to agenda anything they are interested in discussing further. Mr. Stresau mentioned a motion passed by the UAC on March 27, 2007 recommending expansion of the Palm Pilot Program to include small canopy trees, upon which no further action has been taken. He added, "If we make motions and they don't go forward, I think we're wasting our time." Mr. Stresau asked Mr. Partington to advise on status of the motion through the City Manager. Mr. Chancey also pointed out that they are now in the rainy season and this would be the time to move forward with the plantings. Mr. Partington believed the City Commission has discussed the Pilot Program, although he did not remember the timing of the discussions relative to the motion. Mr. Stresau felt Commissioner Teel would probably be the one to carry this matter forward unless it has stalled in the City Manager's office.

Mr. Stresau provided documentation noting several properties to be brought to the City Commission's attention and a memo written by him as follows: "The Engineering Department has little or no interest in tree installation, much less tree removal. The

engineers do not have a qualified person on the staff to deal with trees, so perhaps the responsibility should fall to the Parks Department. The Parks Department does not review or issue construction permits or, for that matter, remove a tree from the right-of-way unless it would have been under the recently commission authorized Palm Removal Program. The Building Department's position seems to be that they are not responsible for monitoring plantings in the rights-of-way or, for that matter, either the City parks or roadway medians. If not, the Building Department will oversee the new plantings in the right-of-way, and then what's the other choice, Code Enforcement? Code Enforcement can't seem to aggressively enforce the Water Management Phase 3 water use restrictions or, for that matter, do they have anybody on staff that would know the growth characteristics of a palm or an oak tree; so how could they issue a citation for the removal of the tree or groups of trees that do not meet the "right tree-right place?" It appears to me that no matter how much time and effort the UAC spends that with or without proper monitoring of the property owners or their Associations, the City and FPL will continue to suffer outages from overgrowth of vegetation. Mr. Stresau added his hope that the City Commission would consider the information he had provided in their goals and objectives for next year, further noting that he has not received any response to his communication to date.

(Mr. Wilkerson arrived at 6:52 p.m.)

Mr. Stresau also discussed reconvening the Tree Subcommittee and drafting a resolution to forward to the City Commission requesting that they find one or two departments to permit the planting of trees underneath the power lines, with at the very least the Engineering Department having to sign off on trees as well as a registered landscape architect from the Building Department. Creating an ordinance will then make permitting and compliance a Code Enforcement issue.

Dr. Lewis opined that Code Enforcement does not know what their duties are in the neighborhoods and specific guidelines should be spelled out.

Mr. Barrett added that if they are to have the Palm Program, determining the removal and replacing of palms, it seems "foolish from a layperson's perspective." The equipment and resources would be the same to remove or replace any other kind of tree, and expansion of the program to include other types of trees would be beneficial avoiding duplicating efforts. Chair Brenneman noted that the City Commission had acquiesced to the expansion of the program. Mr. Chancey stressed the necessity of keeping their focus on maintaining trees and not simply removing them.

Chair Brenneman stated that Mr. Dempsey had indicated that the two mobile display units for ongoing education at homeowners associations and other City functions would need photographs, asking that Mr. Chancey work with Mr. Dempsey in that regard.

It was determined that the Tree Subcommittee would schedule another meeting.

Mr. Partington agreed to followup on Mr. Stresau's request regarding the March motion pertaining to the Palm Pilot Program.

Mr. Stresau also pointed out that Tree Preservation Fund monies could be tapped if there was an ordinance change allowing the Parks Department to spend those funds in the rights-of-way to replace trees being removed.

- **Status on RFP-Consulting Services-Electrical Infrastructure Needs Assessment & Strategy**

Mr. Partington indicated a meeting is scheduled for 6/27/07 of the selection committee for the RFP and briefly explained the process.

- **Update on Undergrounding**

There was no new information to report with the exception of Mr. Partington pointing out that the City Commission had discussed moving forward with undergrounding by assessment; however, one issue flagged as a problem was the requirement by FPL that if their equipment is relocated into the right-of-way, the City sign an indemnification agreement, although it was Mr. Partington's belief that there may be a change in that requirement which may help to move discussions along.

- **Other Old Business**

None.

VI. New Business

- **Energy Independence Districts**

Mr. Warner introduced himself as CEO of Pareto Energy as well as his associates, Mr. Kaiser and Mr. Flank.

Mr. Warner provided an overview of Energy Independence Districts (EID). Three key points of focus were:

- Businesses can form an Energy Independence District to plan and finance their own community energy systems privately.
- Infrastructure improvements can begin now within the current franchise agreement.
- Energy users will enjoy more reliable, more affordable, and more sustainable services.

Pareto Energy is a group of economics, engineers, and lawyers who are planning and financing local energy infrastructure on behalf of businesses privately financed. Six cities are currently planning their own Energy Independence Districts; they are currently working with other Florida communities and developers.

EIDs are a combination of entities which regulatory-wise is similar to a municipal utility and financially has the opportunity to use tax free private activity bond financing; underwritten by private equity and the businesses themselves but with a tax free component. Goals/advantages are: 1) controlling and installing power locally at critical locations, tailoring energy and uses; 2) investment in energy savings at the outset and then build modular micro-generators to mitigate commercial power costs; 3) take optimal advantage of combined heat and power using microgrids; 4) have a commitment and work with companies such as AIG to create liability insurance covering product loss and business interruptions from power disruptions.

An extensive survey had been done subsequent to Hurricanes Wilma and Katrina to determine which types of energy systems stayed up and running.

A typical project schedule was outlined:

- Agreement on a statement of work and memorandum of understanding – development costs are generally fronted, although if their design work is not used to do any type of community energy system then the risk belongs to them, but if the work was used with someone else to finance the project, there is a payment back to them. A full financial package will be provided in order to earn a developer's fee and placing the project for financing.
- Legal enabling – legal strategies are being worked on, with the intent to get the legal issues codified within the next three months.
- Detailed project design – takes 3 to 8 months including engineering master planning.
- Negotiations with FPL.
- Formation of project commissioning – will take approximately 4 months; the project is put together and an RFP is sent out to commission it to a build operator.
- System construction – depending on size and scope takes 9 to 18 months.
- Costs and detail project design - \$75,000 to \$150,000 and are usually fixed costs not dependent on the size of the project and federal grants.
- Commissioning EID formation, project financing, lining up all aspects of project - \$500,000 to \$1 million with a proviso that some of the money for legal enabling will be shared across projects.
- Project construction - \$2,000 to \$2,500 per kilowatt; contract is paid at fixed grid rate with 50% rebate of savings obtained below grid rate.

Sources of funds:

- Tax free private activity bonds
- Underwriting by the State and community, not as a bond issue
- Savings and conservation, use of recycled heat, and obtaining energy savings grants
- Environmental credits

Mr. Kaiser reviewed efforts taken in Sarasota to set up an EID. He expressed his personal belief that they will do better with a competitive set of choices for any kind of critical service.

Mr. Flank outlined the necessity of looking for local resources lowering environmental impact of energy generation and use and lowering costs. He stated "it is easy to go green in a way that takes a lot of green" but their goal is to look for more cost-effective energies. One possibility would be at the local wastewater treatment plant with the production of gases which can be used as a clean energy source. Another possibility is to use water reservoirs of relatively cold temperatures as a form of "air-conditioning" to avoid the use of electricity to run the chillers. Data to date has shown this is a feasible approach.

Mr. Chancey asked regarding when drilling is done for the water aquifer, subsequent to the chilling process, where the water then goes and was advised that it would be reinjected resulting in no net loss. The water is not directly used; it is utilized through a heat exchanger.

Mr. Warner briefly mentioned the issue of underground rights and ownership issues, explaining those matters would need to be further defined in a legal sense.

Chair Brenneman asked how much of an area the EID would encompass and if that is determined by area or number of businesses. Mr. Warner responded that the EID is viewed as a capability which can be tapped by any size organization. Generally, an ordinance enabling an EID is passed by a community, and then specific, smaller areas are targeted, depending on physical limitations. In some cases, environmental considerations are beneficial in terms of raising money. Mr. Warner stressed the central focus is increased reliability. There would be no total disconnect from FPL's power grid; an EID would "beef" up and run in sync with the current system.

Density, diversity, and proximity of load are considerations, as well the reliability and availability of emergency power.

Mr. Barrett was curious as to how billing would be implemented; he also questioned creating a mixture of demand to make the EID a feasible entity. Mr. Warner agreed

there would have to be a mixture, combining several area factors such as mixed use, residential, and retail.

User distribution is by contract, with a “switching” mechanism from EID to utility company power, i.e., they parallel charge, without an actual physical cutoff from the grid.

The lack of utilization of digital technologies in the power industry and dependency on natural gas were briefly discussed. Mr. Kaiser pointed out that the capital cost of natural gas is lower for FPL, but as they would be using waste heat from a small generator to drive air-conditioning and hot water, they can deliver 70-80% of the value of the energy – a disadvantage at the outset, but ultimately more effective in the long run.

Mr. Stresau expressed surprise that, although it had failed, the current power grid would be used, adding that if they are going to depend on overhead wires, he didn't know if they had “anything to sell.” Mr. Kaiser agreed Mr. Stresau had identified the biggest vulnerability for Florida, which is the overhead wires, not the transmission or generators which rarely fail, but the distribution grid itself. He added that part of the problem is the lack of ability to isolate problems. Mr. Flank pointed out that even if the City keeps overhead wires, that in lieu of shipping power miles, it will only be shipped several blocks making it easier to fix and reducing the chance of failure. A question of responsibility for fixing the wires was brought up with Mr. Flank indicating it could be the EID or the utility company.

Mr. Kaiser noted there are gradations of reliability and “each one comes with a price.” He also stated that the power industry in the Southeast U.S. is one of the most monopolistic, with the rest of country having a more competitive market, although he did add that FPL is actually quite an innovative company.

Mr. Barrett felt that one of the more attractive aspects of the proposal was that the technologies now coming on line and being developed lend themselves to more of a localized generation and independence even within a community, citing an example of one home with solar panels powering the entire neighborhood, and suggesting that massive power distribution facilities are a “thing of the past.”

Mr. Partington asked, when the franchise agreement is renegotiated, if there is anything they should be looking for to include in order to fully preserve options to pursue EID if desired. Mr. Kaiser indicated there would be, and it is “not a simple conversation,” but could provide suggestions.

Mr. Barrett asked how municipalization would affect implementation of an EID and was advised they would go hand-in-hand and, in some ways, would not be different than pursuing EIDs under the current system – the easier part would be in ironing out the

physical engineering interaction and the legal and financial interactions between the smaller community energy systems and the larger grid. Contact has been made by high tech investors asking which cities are taking care of their own power; insurance companies are also getting involved.

In terms of size, Mr. Flank likened the footprint of the unit to that of a shipping container or smaller. The unit will have to be insulated to reduce temperature, noise, and vibration; air flow is also a design consideration.

A copy of the contract will be provided per Mr. Partington's request; contract requirements will entail minimum power usage and financial incentives, although residential long term power contracts may have added financial risk.

Diesel power would not be used due to dirt and noise. Portfolio technologies would be focused on solar thermal.

Progress of implementation of the program in Sarasota was briefly discussed.

Mr. Barrett also mentioned details of the City layout including the Fort Lauderdale Executive Air Park and Airport and the City's water facility.

Mr. Chancey asked how the process would start, i.e., a pilot program, introduction to a developer, etc. Mr. Barrett supported talking to the Stiles Corporation and directing their attention on the northern part of the City due to the proximity of extraction and well fields. Mr. Warner indicated there will be a special legislative session on energy in September and it is his hope to meet with hotel developers, bringing their case to the legislature at that time, it may "blow this wide open." The next strategic action would be passing an ordinance – a copy of which Mr. Warner will provide. A suggestion was made also to incorporate energy standards directly into the local building code.

- **Other New Business**

Status of Water Works Tower

Mr. Partington reported that a new Water Works tower is still under consideration along with the Master Plan, although it appears the favored strategy and likely recommendation coming out of the study will be to retain and refurbish the existing tower. The study will be finalized within the next month or so.

Mr. Stresau pointed out that this matter had been brought to the UAC for discussion several years ago by Mr. Bolander; community reaction to previously proposed plans is the reason the Committee is continuing to inquire.

Chair Brenneman requested that Mr. Bolander come to a meeting to provide an update as part of their community outreach.

VII. Good of the Committee

Mr. Cole noted that most of the presentations made to the UAC are by companies with an incentive to provide products or services to the City, asking how their speakers are chosen and where they come from.

Chair Brenneman advised that Pareto Energy was referred to the Committee by the City Manager. She is currently trying to find someone to give them a presentation on net metering. Mr. Cole asked that the Committee members be advised so that they can assist, if necessary, and also to know what may be coming up at the meetings. Chair Brenneman encouraged suggestions from the Committee members for future speakers.

VIII. Next Meeting

UAC Regular Meeting: Tuesday, July 24, 2007 @ 6:30 pm
Energy Workshop – November 17, 2007 at 10:00 am

At the next meeting, Mr. Underwood will be giving the full presentation previously given to the City Commission. Mr. Stresau asked if they could be given a written copy of the presentation prior to the meeting.

Mr. Partington noted there is no formal appointment for an infrastructure subcommittee, although Mr. Stresau did find information in that regard in the minutes which he will share with Mr. Partington.

IX. Adjourn

With no further business to discuss, the meeting adjourned at 8:55 p.m.