

**City of Coral Gables City Commission Meeting
Agenda Item H-5
November 14, 2017
City Commission Chambers
405 Biltmore Way, Coral Gables, FL**

City Commission

**Mayor Raul Valdes-Fauli
Vice Mayor Pat Keon
Commissioner Vince Lago
Commissioner Frank Quesada
Commissioner Michael Mena**

City Staff

**City Manager, Cathy Swanson-Rivenbark
City Attorney, Craig E. Leen
City Clerk, Walter J. Foeman
Deputy City Clerk, Billy Urquia
Public Works Director, Ed Santamaria
Assistant Public Works Director, Jessica Keller**

Public Speaker(s)

Agenda Item H-5 [2:17:52 p.m.]

Update on Citywide LED lighting initiative
(Sponsored by Commissioner Lago)

Mayor Valdes-Fauli: Next item is update on citywide LED lighting initiative, Commissioner.

Commissioner Lago: Thank you. I just want to bring up Mr. Santamaria just for a quick update in regards to something that we've been working on for some time. I sent a memorandum in reference to our lighting, our existing City-owned and FPL lighting structure, so I can give you a copy of that if you don't have it; and I wanted to have Ed give us a little bit of a breakdown, so you are aware of some of the progress that we've made and see how far you guys want to push, potentially revamping our existing lighting system throughout the City.

Director Santamaria: Good afternoon Mr. Mayor, members of the Commission, Ed Santamaria, Director of Public Works. Yesterday we did distribute a memo that you may or may not have

read that outlines what's been transpiring with this particular matter over the last few months. Briefly, I'd like to go over it with you allows the time. The LED street light conversions have been under consideration since 2014. There was a primary obstacle to that conversion, which was the non-existence of a tariff that would adequately address the energy savings in terms of the costs we pay to FPL on a regular basis. So in 2017 March of this year, the tariff was approved by FPL and subsequently approved by the Public Service Commission, and what this does is in connection to the City-owned lights, of which there are 582, our analysis is that using this LT1 tariff we would have a breakeven point of 58 years in the future to recoup our initial cost. These are City-owned lights, which means that we would have to either physically replace the fixtures on these lights or retrofit them to allow for conversion to LED. These initial upfront costs in terms of the savings that would happen over the course of the lifetime of these fixtures and moving forward would only be recouped after 58 years of savings. So, that analysis when concluded proved that it wasn't really fruitful for us at that time to convert the City-owned lights. With the FPL lights, of which are 3,489 or so, in 2016 FPL completed a lighting inventory and provided it to us at the City. In August, FPL provided us with a cost breakdown on converting all of the FPL lights in the City. If we were to do so the analysis shows that our annual cost for lighting would increase \$40,400 that's converting all FPL lights in the City.

Mayor Valdes-Fauli: How much?

Director Santamaria: \$40,000 annually. So, there is a way that we can move forward and convert a good majority of these lights while realizing the savings, and that is by methodical and judicious plan where we replace only the fixtures that makes sense for us to replace in terms of providing energy savings and savings in terms of cost, and if we do this we project that we could have a savings of \$19,000 annually in roadway lighting or street lighting. Right now we are looking at an LED pilot project, which involves 64 lights on Ponce de Leon Boulevard from Eighth Street to the 2200 Block. Under this pilot program, we foresee a savings of about \$4,300 annually, and so the reason we are doing a pilot is to see, to gauge the effectiveness of the program just too kind of do a test pilot on it; and number two, also to gauge how it is received by the public. There have been some questions as to whether the public prefers a certain temperature light whether it's a warmer light or a colder light. After looking at this concern, we believe that it's appropriate to go with something a little bit warmer on the pedestrian level, which people are closer to, they feel it more and so something that is perhaps not as warm on the roadway lighting route, something around 4,000 degrees Kelvin, which tends to be a whiter light, but it is safer and it involves an increase in public safety. Pedestrian level lighting, there is temperature lighting of 2700 degrees up to 3500 degrees. We believe that the "Goldilocks Zone" is around 3,000 degrees Kelvin and that's what we are going to be looking to implement citywide. So that concludes my presentation, if you have any questions I'll be happy to answer them.

Commissioner Lago: Just a few things. When do you expect it to commence, the pilot program?

Director Santamaria: The pilot program right now is under review in the City Attorney's office in terms of the contract. It's a standard lighting agreement, we don't think there is going to be any issue with it whatsoever, and as soon as that is executed we think that within four weeks we could have the lights deployed.

Commissioner Lago: And, I know you are concentrating on savings, I don't want to get stuck on that number like \$4,000, \$19,000, \$40,000, this has multiple layers. For example, when you have LED lighting and you are not changing the bulb every six months, it's a non-maintenance issue; number two, it's a public safety issue; it's a brighter light, better quality light. Like I mentioned before, it's a direct correlation between lighting and public safety, but I think that the maintenance, the maintenance issue is a big deal, because we are not getting so many calls now, but in the past we used to get all the calls in reference to FPL lights being out for 45 days, 50 days, 60 days...

Commissioner Quesada: Six months.

Commissioner Lago: Six months whatever it may be. So, in this case you have a LED light and unless it gets hit by lightning or a car or a malfunction it won't go out for years, and if it does go out it gives you an immediate notification, we have the necessary software that that light is out and we can address the problem. One final point, I wanted to put on the record because Dr. Bernal was here, who is the appointment by the City Manager to the Sustainability Advisory Board and he's been an integral part over the last three years in helping me deliver, helping us deliver on first, counting how many lights the City owns and FPL owns and to get into those points. So, he had a brief statement regarding LED lighting initiatives, we strongly support the initiative to reduce energy consumption by 70 percent; City should negotiate to achieve lower electric bill in spite of relentless FPL lobbying to increase bill via maintenance contract scheme; recommend all bulbs are 3,000 with a CRI of point 85 like streetscape project has done on my advice; pleasant warm color not provided as first choice by FPL; recommend use of advisory board members to assess the desired brightness levels appropriate to the City by either visiting similar installations or by setting up pilot installations for review and approval. Dr. Bernal has been a consummate gentleman and I think we probably met like 100 times in regards to this issue and his only interest is to see that the City deliver on LED lighting. So this is a good opportunity, I'm happy that after three years we are finally getting to this point. I know Jessica and Matt have worked diligently, because at one point I remember one of our first meetings, my question was, OK, let's talk about LED lighting. I think Jessica looked toward me, she goes, I don't even know how many lights we have in the City. So, literally they had to do a fixture count to get to the

number; and then FPL will shock you, but FPL was not very interesting in assisting the City in regards to this.

Mayor Valdes-Fauli: Does it surprise you?

Commissioner Lago: I think staff probably worked for about a year to a year and-a-half getting the fixture count done, analyzing what's in place, and then they went back to FPL and all of a sudden FPL wanted to play ball, hey let us do it, when we threatened that we were going to go to the private market and probably through an RFQ. So, I'm happy that we are here; I just would like to see hopefully this get delivered, at least this pilot project, so that we can see some fruit and then hopefully spread this throughout the City where we have the capabilities.

Commissioner Mena: You made reference to Mr. Bernal's letter to the streetscape lighting and I know some of us have gotten comments about the brightness of those lights. Are these the same as what is currently on streetscape?

Commissioner Lago: He recommends we use 3,000 K, what do we have on the streetscape?

Commissioner Mena: Is that what we have there?

Director Santamaria: Peter, the street lighting, the Giralda lighting, are they 3,000?

Vice Mayor Keon: Isn't 3,000 pretty white?

Director Santamaria: 3,000 is still considered incandescent range of the upper end of the incandescent range.

Vice Mayor Keon: The upper end of the incandescent range. What is the range from?

Director Santamaria: It's from 2,300 to 3,500 is considered incandescent quality.

Commissioner Lago: So it's pretty moderate. I think what the issue there is it's very bright, because on the Mile and Giralda they never had any lighting period, before. So, now you've gone to some lighting. The issue for the lighting for me is not a hook; it's not an issue for me. I just want to see LED come to the City; I want to see that option. So we can discuss that, staff can make a decision, I don't care to me if it's white or warmer, I prefer a warmer light, and I think that most residents will prefer that. The goal here was to finally bring this to the table and start moving forward. So, when do you think we'll start seeing our first retrofitting?

Director Santamaria: Commissioner we believe that it's very possible in the next four to six weeks that we'll have some – the commencement of the pilot project, pilot program, and also we really are aiming toward having a large scale deployment of retrofit lights sometime in the second quarter of next year.

Commissioner Mena: I don't want to belabor the point, because I agree with you, I'm totally supportive of this, but before we commit to whatever the pilot program will involve in terms of cost and buying lights, etc., from your perspective does it make sense to like show us a 2,300, because we do get a lot of complaints about this stuff. We got it at City Hall, we got it on streetscape, and if it's going to be LED either way, I just want to make sure we are mindful of that.

Commissioner Lago: I spoke to Jessica and Peter about this issue and I know that there's been a lot of interested vendors that have wanted to come to the City and provide samples and we've met with a lot of them, maybe we could put some of those samples before City Hall.

City Manager Swanson-Rivenbark: She still has a sample out in Lot 25.

Ms. Keller: Lot 25, I know that you've all been to, I'm sorry, I have a cold, but the lot at the end at Galiano and Giralda, we have different colors set up there, they've been there for quite some time.

Mayor Valdes-Fauli: Galiano and Giralda.

Ms. Keller: I'm sorry?

Mayor Valdes-Fauli: What did you say?

City Manager Swanson-Rivenbark: The little surface parking lot at the end of Giralda and like Galiano and Merrick Way, you know we have like 25 parking spaces, and so Jessica is telling me that she has provided a sample.

Ms. Keller: We can circulate -- we had a little graphic that told what the temperature was of each of the lights out there. Also, Ingraham Park they have 4,000 Kelvin's at Ingraham Park.

Commissioner Lago: Are you aware or has anybody complained about the 4,000's, those are a little warmer.

Ms. Keller: They are warmer.

Commissioner Lago: Cooler, I'm sorry, cooler.

Ms. Keller: I'm sorry, they are cooler, but we have all the different temperatures next to each other at the parking lot and we will send an e-mail with that graphic.

Commissioner Lago: Perfect – good news. I know we have some monies in the budget this year coming up in reference to LED lighting and I want to see if we can work with Parks we can potentially just continue to grow that pot, so that you have the necessary resources, once you've identified an area that would be great for LED lighting, let's move forward.

Mayor Valdes-Fauli: Good. Thank you.

Commissioner Lago: Thank you. I appreciate it. You've done an exceptional job, thank you.

[End: 2:30:26 p.m.]