

City of Coral Gables City Commission Meeting
Agenda Item G-1
January 10, 2023
City Commission Chambers
405 Biltmore Way, Coral Gables, FL

City Commission

Mayor Vince Lago

Vice Mayor Michael Mena

Commissioner Rhonda Anderson

Commissioner Jim Cason

Commissioner Kirk Menendez

City Staff

City Attorney, Miriam Ramos

City Manager, Peter Iglesias

City Clerk, Billy Urquia

Public Works Director, Hermes Diaz

Public Speaker(s)

Maria Cruz

Agenda Item G-1 [11:35 a.m.]

Update on the installation of solar panels for the Granada Clubhouse. (Sponsored by Mayor Lago)
(Sponsored by Commissioner Anderson)

Mayor Lago: G-1. Mr. Diaz, how are you sir?

Public Works Director Diaz: Good morning, how are you? Hermes Diaz, Public Works Director. I have a very brief presentation to share with the Commission – Billy. Solar panels for the Granada Clubhouse/Diner. I'm sorry, it didn't start from the beginning, probably user problem, my apologies. Can somebody bring it back.

Commissioner Anderson: That's why you're not in IT.

Public Works Director Diaz: Yes, 100 percent. So, the Granada Clubhouse Diner currently includes two different uses. You have the clubhouse and the diner. The average yearly general use is about 170,000 kilowatt hours. We estimate that the diner is about roughly 75 percent of that,
City Commission Meeting
January 10, 2023

and the reason we are making that separation is because the energy that is going to be generated for the potential panels is not enough to really capture the entire facility. The clubhouse is currently being renovated, so I think it makes sense if we are going to go ahead and do solar panels, just restrict it to the diner where we haven't started construction yet, not to cost any further delays or change orders on that facility.

Mayor Lago: Can I ask you a question?

Public Works Director Diaz: Sure.

Mayor Lago: That was your electricity bill from last year, correct?

Public Works Director Diaz: This is four-year averages.

Mayor Lago: So, do we know if they had installed LED lighting, if they have done any – obviously, I know the air conditioning system was old.

Public Works Director Diaz: Correct.

Mayor Lago: Very energy efficient.

Public Works Director Diaz: Unfortunately, the only information we have is historical data. So, there are a couple of competing things that are happening. So, as we remodel this facility you are going to have a little more energy efficiency fixtures and equipment, but at the same time, I think it's reasonable to expect a heavier use of the diner, at least a more intense use.

Mayor Lago: Again, that diner hadn't been remodeled in 30-40 years.

Public Works Director Diaz: Correct.

Mayor Lago: So, you are talking about better installation, lighting, you have a higher sere value for your air conditioning.

Public Works Director Diaz: One hundred percent.

City Manager Iglesias: Mayor, I don't think – that place hasn't been remodeled for many years. Everything that we have there is extremely old. We are going to have certainly, new A/C units that are more efficient, energy lighting, and so forth. My only concern is, I saw that the energy use was a little low.

Public Works Director Diaz: Correct.

City Manager Iglesias: Compared to other facilities in the country, so I'm wondering if the usage was not quite what it might be new. So, that's the only issue.

*City Commission Meeting
January 10, 2023*

Commissioner Cason: And using cooking with gas or electricity?

Public Works Director Diaz: Gas – and that’s a big item there. But you have refrigeration, and you have a bunch of other stuff that we expect to have heavy usage.

City Manager Iglesias: But even compared to other facilities, other restaurants in the country, because gas is what you typically use, hiring cooks like gas because they can control it so finely. We are still looking at energy uses that are far below what the norm is, so that’s where we’re at right now. Gas is something that’s used in most restaurants. However, our energy uses with that consideration is still low.

Public Works Director Diaz: Correct.

Commissioner Menendez: How about the windows? – energy efficient?

Public Works Director Diaz: It’s all being redone right now. Actually, as part of the pressure job, all the windows of the entire facility is actually being impact resistant, is all being taken care of right now.

Commissioner Menendez: Which would also in the summer perhaps...

Public Works Director Diaz: Correct. Unfortunately, all the information we have is historical. It’s really difficult to gauge what the usage is going to be moving forward. Generally speaking, when you put solar on a facility more often than not, you have something that’s existing, you have data for several months, for several years and you use that as kind of your estimates, but what we have right now is the historical data, we know it’s going to change. So pretty much its predicated on what that usage is going to be moving forward.

Commissioner Anderson: I can give you some historical data. When I first moved to my house the electricity bills were \$400, okay. Then I got it down to \$200-\$250, with installation, etc., and impact windows and so forth, and of course now I have solar panels. I’m now down to the lowest possible you can pay. What is it now? - \$29 bucks FPL charges us, Vince, Mayor.

Vice Mayor Mena: How much do you pay?

Commissioner Anderson: \$29-\$30 is the bare minimum.

Commissioner Cason: What percentage of the current electric usage would be covered by...

Public Works Director Diaz: I’m going to go through that. The calendar electricity bill – the electricity for calendar year 2021 was \$14,500. So that is one option. We called it the southeast option, that is the southeast roof of a facility. We worked at a location with the help of the City Architect’s office. Generally speaking, when you are trying to put solar panels, you are trying to put them in a way where it will be less visible from the street. Unfortunately, because this facility happens to be at a corner, and because of the golf course, the visibility, it will be seen. Greenway

*City Commission Meeting
January 10, 2023*

is the secondary road, so that suggestion is approximately 1,100 square foot of allowable roof space. That allows for a system of approximately pay 23 kilowatt hours, 60 panels, 380 watts, with an annual estimated production of 34,000 kilowatt hours. The panels that we're looking at are American made with a 25-year warranty. Keep in mind, this is the original design. This is just a high-level magnitude review. If this were to proceed, you have to go through the design process. The review by the Board of Architects and the Historical Preservation Board may be necessary. And this is an example of what somebody walking on Greenway will be looking at. For that option, this is a graph that shows the solar production versus the historical energy consumption. We estimate that approximately 25 percent of the diner's historical consumption, not of the entire facility, just for the diner, will be offset by the solar panels. We are requiring a meeting and agreement with FPL, and we require the installation of a utility interactive inverter and that's an FPL requirement for solar installation when you have metering. We are looking at approximately \$87,000, including design and contingency, and the project is estimated to offset 16 tons of CO2 for the life of the system, and the equivalent of 561 new trees being planted.

Commissioner Cason: You get any kind of tax credit under the new credits that are out there for solar panels.

Public Works Director Diaz: That is a possibility, but we're not 100 percent sure whether we will qualify for, but it's up to 30 percent, but we don't know whether we would be able to get that or not at this point.

City Manager Iglesias: We will actively pursue that, if we can.

Public Works Director Diaz: Absolutely. So, another option and this is something that there were some concerns about visibility and there was a question as to whether there was a different roof that it would be less visible from the street, and even though Granada is the main thoroughfare here, this is another option where solar panels could be installed. It's a lot smaller, its only approximately 400 square feet. That will cost about \$35,000 only, but that will only offset about ten percent of the dining historical energy consumption, and that's roughly what it will look like from the other side. And obviously, another option will be to do both, and then you're looking at roughly 35 percent of consumption for the entire facility at the higher expense, so that's definitely an alternative as well. Return on investment – You're looking at roughly 17 to 18 years. There is a possibility of a donation of a grant for \$20,000, which will reduce that return on investment, down to 14 years if we do the southeast option, which is the larger installation, approximately 9 years, 8 to 9 years for the southwest option and 15 years return if you do both. The panels supposed to have a warranty of 25 years, so they are all within, I would say they are all within the lifespan of the system. That's it. So, if you have any questions, we'll be more than happy to answer them.

Vice Mayor Mena: Is there any issue with how this comports with our like code requirements. I know we've had issues in the past where residents have started to install solar, and we have this requirement that it can't be visible. This is in the middle of a golf course so it's tricky, but.

City Attorney Ramos: So, the Board of Architects has tried to take that position in the past. There is a state law that prohibits us from placing those kinds of parameters, so we can go to the Board
City Commission Meeting
January 10, 2023

of Architects, as I've said to the Manager, for a voluntary review, but if you remember a few years ago, the city exempted itself from the zoning code.

Vice Mayor Mena: Right.

City Attorney Ramos: So, if the Manager wished to simply bring it to the Commission and avoid the Board of Architects entirely, he can. If he wants to get his feedback, he can, but that idea that they can tell us it can't be enough front facing, that's not permissible under state law anyway.

Vice Mayor Mena: Right.

Commissioner Cason: Is there any likelihood that somebody will come up with a barrel tile in the timeframe that we're looking at, that would be solar panel. We were talking about Tesla, but it's not Tesla tiles.

City Manager Iglesias: They are not quite approved down here yet and my understanding it's a very strong – that would put the entire roof at play, as far as a solar panel, and it would be a much better aesthetic option, still not available right now. My understanding is they don't have the county approval yet, but that would certainly be an option in the future. This is a difficult building because it's on a golf course, so you have exposures in all directions. So, no matter where you put it - we tried to avoid the completely west direction, which is towards Granada and the north direction, which is toward Coral Gables Country Club, but no matter where you put it, you will have visibility because you are on a golf course.

Commissioner Cason: Which is why it would be ideal if there was a barrel tile solution that would take care of the visibility.

Commissioner Anderson: Yes.

Commissioner Cason: The aesthetic, I don't know about the cost.

Vice Mayor Mena: I don't know. I agree with what you're saying, although I do view the sort of Granada frontage as the front façade of the building, which if you are doing apples to apples when we're looking at homes, that's really what you're trying to keep it in the bag. The fact that the back of this building happens to be on the golf course, I get it, but.

Public Works Director Diaz: Correct.

City Manager Iglesias: Vice Mayor, if you look at a corner facility, where you have two corners visible.

Vice Mayor Mena: Right.

City Manager Iglesias: That's what we've done. We've taken these two corners, we took the other two corners, similar to if you had a corner condition.

*City Commission Meeting
January 10, 2023*

Vice Mayor Mena: Right.

City Manager Iglesias: In a regular residence, so that's the idea of that. The fact that you're visible in all directions makes it quite difficult, but if this was a corner house and you had two corners visible, then you'd have the two other corners it would be towards the back of the house and towards the side setback. So, what we've used is the side setback.

Public Works Director Diaz: And I will mention that the roof for the facility was actually redone, I think it was finished around mid-2019, so the roof is fairly new.

Commissioner Anderson: Right. I mean it's sort of like my roof. I did do the solar panels, I do have a corner house, and if you look from one street, yes, you can see them. I've sat with the City Architect on many projects that have come through, residents putting some solar panels on, and we would come up with a contiguous design that was aesthetically appropriate. The other advantage we have, because we have a golf course, we could put a few more beautiful trees out there at a sight line distance away that's not going to shade the solar panels, but we can resolve that aesthetic feel issue that some folks are concerned with. Ms. Jude provided us the opportunity of a donation of \$20,000, and as part of her legacy, I think we should take advantage of it. This facility is only opened up for breakfast and lunch so that helps keep that usage down, and I think you'll see just like the electricity bill on my house, it used to be \$400, I think you're going to see a dramatic drop, with all the new cases that we are putting into play there.

City Manager Iglesias: The roof has recently been replaced. It should have about a 25-year life; the panels have about a 25-year life. They both pretty much coincide with a replacement period of 20 to 25 years, and then hopefully, Commissioner Cason, we will have the tiles. I would like to go to the Tesla tiles as much as possible, but its currently unfortunately not available.

Commissioner Anderson: I tried back in 2018 when I replaced my roof, still they are not available.

Commissioner Menendez: I have a quick question. Just a comment first. Having watched some people play golf on that golf course, thank goodness it's behind the golfers and not in front. We'd have to replace a couple of those panels, that's a side comment. My other comment and I brought it up last time, and I'm not an expert in solar panels as many of my colleagues are, and obviously you and your team are. You mentioned the kitchen would be gas powered.

Public Works Director Diaz: Correct.

Commissioner Menendez: So that would leave lights, air conditioning...

Public Works Director Diaz: Refrigeration.

Commissioner Menendez: Refrigeration.

Public Works Director Diaz: Probably the biggest.

*City Commission Meeting
January 10, 2023*

Commissioner Menendez: So how does it work, because I know when people lose power, hurricane, whatever it is, does solar power maintain the power available for an extended time after that. If I'm connected to FPL, if I lose power, I lose power.

Public Works Director Diaz: So, the things – because that facility only generates roughly, actually when we do both sides which is about 35 percent of the total, and there are no batteries, because it doesn't really, since you're not generating more than you're producing there's no point of going through the expense of the batteries. Also, the electrical room is rather small, so for us to even get to that level it may need some additional expense. So, the only way to accomplish that would be then to separate the circuits and then with some kind of a transfer switch. So no, if this is a straight up connection, if you lose power, most likely most of the facility will lose power.

City Manager Iglesias: We will try to optimize that. One of the biggest issues is refrigeration using power, so we are going to try to optimize the circuits that receive this, and certainly refrigeration and lighting, but the facility cannot operate just on that, but we will certainly try to optimize the use. We've looked at battery power, it's very expensive, and it's very difficult to get right now. It's probably not the time to do it, but that's something that we can look at, as battery technology gets better and better, that's certainly something that we will be looking at.

Vice Mayor Mena: And I defer to the Mayor and Commissioner Anderson and Cason as well, because I think they are a lot more knowledgeable on solar in particular, but why is it that its only depending on which option you show me, 25 to 35 percent, as opposed to, I just leaned over to the Mayor and I said, like what percentage of your house is covered by solar, you said 100 percent. So, why is that?

Mayor Lago: Let me talk about that. When I got solar six years ago, technology has advanced leaps and bounds. So now, I don't know the exact numbers, but a house like mine that had 40 panels on it, now the footprint has gotten smaller. You can have more panels on your property. I also have batteries on my house. So, to me, right now, some months are \$9.30, your standard FPL hook-up fee, sometimes I've had \$30, \$40, \$50, depending on the summer months, I may get to \$100, but on average, I'm almost like at zero, around the \$9 dollar-range, if you average out the entire year. I replaced my air conditioning ten years ago when I built my house. They have more efficient air conditioning now, higher seere values, better LED lighting, better installation, more energy star-rated appliances. So, the efficiencies have only gone up; the solar panel technology has only increased. So, I'm not saying these numbers are wrong, but I'm having a tough time understanding why it's only 25 percent or 35 percent.

City Manager Iglesias: Mayor, I don't disagree with you. I'm only a little bit concerned, and we are going to have to look at the electrical side of this and we discussed this with our IT Director, whose an electrical engineer; and we seem to be using a lot less energy in this restaurant than normal. I'd like to find out what's going on.

Vice Mayor Mena: Is it the offset of the gas?

*City Commission Meeting
January 10, 2023*

City Manager Iglesias: No, because restaurants all use gas. The cooks like to use gas, they don't like to use electric heating, because of the control.

Vice Mayor Mena: But for example, when you say for example, 35 percent, let's use that as a number. Are you including in the 65 percent, the gas functionality or not even – excluding the gas and just be electrical at 35 percent.

Public Works Director Diaz: What we took is that we looked at the prior four-year usage, we took an average from that versus what its generating. Remember, I'm not sure what home electrical bills, but even though this usage on this facility, the electrical bills are actually low. It's still \$14,000 for the entire year, that means that its over \$1,000 a month that we're paying on average. I don't know what a regular house bill would be, but I presume for some houses even though some of the bigger homes still be significantly lower than that.

Commissioner Cason: Could it have been that with Covid a lot of the clothes not being used, not many people going there.

City Manager Iglesias: I'm not sure how much of the facility was actually utilized, and how much work was done inside this facility. We've had our IT Director, again whose an electrical engineer, look at your national standard and we are way below that. So, what we're going to try to do with the solar panels is optimize the use of the solar panel and I think, Mayor...

Vice Mayor Mena: But I'm just not getting why we're so far from 100 percent with a relatively small facility.

Mayor Lago: But let me explain to you, let me go off what the Vice Mayor is saying. If you look at my house, almost 3,000 square feet, it's got two air conditioners, split units, one for living, one for bedrooms. Got probably, I don't know, 80 high hats throughout the entire house: four bedrooms and an office, pool pump, sprinklers, its consuming, consuming electricity. So, let's say on average its \$100 a month, it's used to be \$5-\$600 a month, and now, I'm on my second electric car and I charge at home. I charge my cars at home so I'm consuming off my own grid basically, which again, it's not metering, we are feeding into FPL and basically, we are doing reverse metering. That's a whole other discussion for another day. I just think that, to me, we are here to talk about whether aesthetically – I'm in favor of the solar, whether aesthetically we should include Granada or not. At this moment, I'm not sure I want to include Granada. I don't want to set that. If I set it here, and then we'll be in a situation where compromised staff's ability to tell somebody, hey listen, no, you can't put solar panels in this location or we don't recommend it, better said by the City Attorney, we can't do that anyway. So, I'm in favor of having it on the back. I'm trying to fit as many solar panels as we possibly can, and also, I don't understand the cost, the cost seems high. Let me tell you why, because my system was \$30,000 and that it included a 30 percent tax rebate on your taxes. That was six years ago. I know that the cost of solar has gone down. Mine are American made also, I wanted to make sure of that, American made. I put my money where my mouth is. I paid more for mine to make sure that I followed the legislation that I was pushing forward, which I could have gotten cheaper Chinese made panels. China is exporting all over the world. So, I think that we need to take a look at that. I can give you several names on the record

*City Commission Meeting
January 10, 2023*

here of companies that provide solar here and to see what the numbers are, and if you want, I can help you with that analysis.

Public Works Director Diaz: I'd be more than happy to. I will say that the numbers that we have there right now, we actually reached out to several companies, and the prices that we got were, in fact, the actual price was \$75,000, and then there needs to be a design, five percent contingency, five percent design and ten percent contingency, that's how we came up with that number.

City Manager Iglesias: I think, Mayor, that this presentation is really the location.

Mayor Lago: Right. You and I ---

City Manager Iglesias: And we can take a deeper dive, a deeper engineering dive into this, but we want to make sure that it's okay with the Commission, because if it's not, we can't do it then it would be a moot point. So, if we remove the most efficiency is on the east side.

Public Works Director Diaz: Correct.

City Manager Iglesias: There was no question which would be the back of the building.

Mayor Lago: By the way, another thing we could do there too is, we can have conversations with multiple solar companies and manufacturers and say listen, this is going to be a showcase project. So, if you want to be able to bring clients to see something, it's going to be an opportunity for you. You can bring clients 24 hours a day, you don't have to bother residents. The individuals that sold you my solar, they'll call me and say, hey Vince, can I drive somebody onto your property because you can't see it from the street.

Public Works Director Diaz: This will be visible.

Mayor Lago: And by the way, just so we're clear, before the Manager was the Manager, the Manager required me to put 190 penetrations through my roof, okay, 190. Now you're required to put half, okay. So, there were no shortcuts for anybody here.

Public Works Director Diaz: They won't fly away for sure.

Mayor Lago: They won't fly away, thank God.

City Manager Iglesias: We will be doing a similar installation, Mayor.

Mayor Lago: So, what I'm telling you is that there's been a lot of advances, there's been a lot of advances, okay.

Commissioner Cason: Does the panels have to be on the roof? How far away can the panels be and transmit electricity?

Mayor Lago: They've got to be on the roof. We don't have a field or anything like that.

City Manager Iglesias: It would be a field of panels which probably would be a worse look than. This has kind of a Dutch roof, and these are on the bottom, so that roof has two pitches. This will be on the bottom and if we do some things, as Commissioner Anderson said, put some trees and as the Mayor said, put some trees.

Commissioner Cason: I don't think the trees might be the...

City Manager Iglesias: If the trees are far enough away, they don't hurt the facility, but...

Vice Mayor Mena: I also don't get the sense that people are as offended by the aesthetic of the solar panel, as we sometimes think.

Commissioner Cason: There's a particular house on that street.

Vice Mayor Mena: Yes – well, that's okay.

Commissioner Anderson: It's like having a skylight on your roof. If you put it in a contiguous pattern and we plant the proper trees, there they can provide the visual affect that would keep people happy. I think it's a wonderful win-win situation.

Vice Mayor Mena: But again, look, obviously I'm in support of this, so this is just an update. I'm getting all these numbers – 35 percent. What's the projected breakeven point. You don't have to tell me right now, but...

City Manager Iglesias: We'll do a deeper dive in this. We can come back and present.

Vice Mayor Mena: And why is that number so low, because that's the part that, to me, is surprising and I don't think it's as simple as putting panels – I'm not suggesting we put panels on Granada, to be clear, I agree, I wouldn't. But it's all relative and proportional, if on a house by putting panels along the entire backside you are able to power the full house. I'm not understanding why this building is not getting more, maybe not 100 percent, but 35 percent seems really low.

City Manager Iglesias: We would like to take a deeper dive in the electrical design and we're at the point right now where the design of the restaurant is at that level. We can also look at the design – the Pro Shop is done.

Vice Mayor Mena: Its particularly low if you're telling me, you have gas the most high intensity use of appliances that you're using.

Mayor Lago: Let me take it a step further. The facility is used for breakfast and lunch. When you have a residence, you are using it all night. The air conditioning is on...very important. And also, don't forget, please we all know this, and I was talking to the Manager about this. Rates are going up in 2024.

*City Commission Meeting
January 10, 2023*

Commissioner Anderson: Right.

Mayor Lago: And in 2025 is my understanding. So as per the Public Service Commission, it's been approved already. So can either pay for it now in infrastructure through solar and have a payoff. By the way, I paid my system off; my system is paid off because when you incorporate an electric car and you add, not only electrical savings, but also the savings in gas, it really knocks off the payback period, the ROI, like half.

Public Works Director Diaz: So, on the years, where I actually assume a three percent increase over electricity price every year to come up with the approximate return on investment.

Mayor Lago: Okay.

Commissioner Anderson: Okay.

Public Works Director Diaz: If its higher then obviously, the return on investment would be quicker.

Mayor Lago: Mr. Director, do you want a vote here in regard to we're in favor of the location?

Public Works Director Diaz: Sure. If you gave us that direction, we'd be more than happy. We'd like some direction to dive into the specifics.

City Manager Iglesias: That would be good because that is going to determine the scope of the work. At that point we can work with our Asset Manager on the new operation of the restaurant, and we can look at the facilities, the air conditioning, etc., refrigeration that we're going to have and then we can certainly take a much deeper dive and get some good numbers based on what we're going to be doing.

Commissioner Anderson: I'll be happy to move it. And I'd ask you to look at one other thing. When I put in my panels, because I didn't do the batteries. I wasn't willing to pay 20K for the batteries at the time, because my little generator handles my refrigerator. There is an in-phase switch that was supposed to have been manufactured that would have not turned the panels off when FPL cuts power. So, you at least would have power during the daytime paneling your refrigeration, your air conditioning, depending on how heavily you air condition. Look for that and see if its available.

Public Works Director Diaz: Sure.

Commissioner Anderson: That would be sweet if we could keep it powered during the day because it's only a daytime facility.

Public Works Director Diaz: Right.

*City Commission Meeting
January 10, 2023*

Commissioner Menendez: Can we clarify for those watching what we're voting on. Its just to do the study for this location, not that we're approving, that comes back later, but its just come up with the numbers.

Mayor Lago: Okay. Do we have a motion. Can I have a second.

Commissioner Menendez: Second.

Mayor Lago: This is just to give guidance to move forward and approving the location in the rear of the project, not accepting Granada.

Vice Mayor Mena: What about the side?

Mayor Lago: Not accepting Granada.

Vice Mayor Mena: But what about the side? There's a side also, right.

Public Works Director Diaz: Just on Greenway, on the southeast larger side.

City Manager Iglesias: That would be just in the back. If this were a home, it would be in the back of the home.

Vice Mayor Mena: Got you.

City Clerk Urquia: Mr. Mayor, before you vote, we do have a member of the public requesting to speak, Ms. Maria Cruz.

Mayor Lago: Ms. Cruz.

Ms. Cruz: Maria Cruz, 1447 Miller Road. You know I'm not an expert on this, but I'm sitting back here and I'm questioning, we're bringing something to you and maybe we can get \$20,000 in a grant, maybe we can get a tax credit, maybe, maybe, maybe. When it comes to you, we should have answers. It should not be maybe.

Mayor Lago: Can I answer you. May I?

Ms. Cruz: Yes. Please.

Mayor Lago: The reason what the Director is doing, along with the Manager is that, to get the right calculation, we have to have the approval of how many panels we can install and the location. So, they were being very careful and thoughtful, to curate the panel location, as per the Commission's request. So, we're not going to just put panels around the entire facility and its not going to look, in my opinion, the best aesthetically. So, what this gentleman is doing is bringing us right now an update on the installation and now that he has guidance with the vote that we're about to take, he can properly calculate how much of an ROI, in regard to our investment, which are the solar panels.

*City Commission Meeting
January 10, 2023*

Also, we have to go after the grant; the grant is not for sure, we have to apply, and the application process takes, again, how many panels we are going to install, what is our request, all that kind of information. We are doing our legwork right now, so we can put together a grant application, which is thorough and gives us the best opportunity to win.

Ms. Cruz: Okay. I understand that, but I've sat here long enough to know that you get almost 100 percent, so that should have been entered into the equation before we got here, is what I'm saying. Some of this stuff that you all brought up is common knowledge already. We hear this all the time, right. So, when somebody comes in with 35, wait a second, shall we check and see why he can get 100 and I'm only getting 35, is what I'm saying. That's comment number one. Comment number two, I guess because of my age, I'm getting tired of every time or several times when we discuss, I've learned not to generalize. Several times when we discuss municipal buildings, mobility hub, etc., etc., etc., we always have, well you know, there is something in the county code that we don't have to do this. The state says we don't have to. But you know what, its time for us to do what I say – don't expect the residents to do what you say, but not as you do. I think instead of saying, we don't have to, let's see if we can do it. Let's try to do as much as we expect the residents to do, and today, I hear you saying, Commissioner Anderson, maybe having trees will make it look better. Do the residents get that choice?

Vice Mayor Mena: Yes. So, to answer your question, the decision we made here today was to only put them in the back of the property, which is exactly what we asked residents to do when we can. So, we expressly said, let's not put it on, what we consider the front of Granada. The trees that she's talking about are above and beyond, which is to try to shield a view from the backside of the property, because it just so happens to be a golf course which most residents don't have an entire golf course in their back yard.

Ms. Cruz: Okay. But what I'm saying to you is, perhaps where we come up with something creative like that, that would be something that we suggest, because the back may not be in the front, but there's somebody living in the back.

Vice Mayor Mena: Sure. What happens is when residents put it in the back, oftentimes when you have too many trees there's not enough sun getting through for it to be a probable option for a single-family home.

Ms. Cruz: All I'm saying is, let's try to do as much as we ask the residents to do, encourage the residents to be as creative as you are, instead of sticking to the rules and say no, you cannot do this. No, there's options. There are things that you can do.

Commissioner Anderson: That's exactly what was done on my house, and it complies with the current code. That is the backside of my house. It does face east, and it does carry throughout the year all of my usage, okay. So that's no different, and the front of my house is loaded with trees. So, if my home can be carried with 20 panels, I would think that this building that is smaller than my house should do pretty well too. Remember, I had a \$400 dollar bill when I first came into that house it leaked like a sieve, okay.

Mayor Lago: We also have to install windows, like Commissioner Menendez, I think said, impact windows stop the air conditioning from running, the machine stops running, spend a little bit more, spend an extra \$5,000, like the Manager will spend, on the air conditioning to get a higher sere rating, it cost more money, but we also have to have one thing which is critically important and that is something that – sometimes I raise my voice at home to my two young daughters and I say, discipline to turn the lights off. If you're not in a room, turn the lights off. If you're going to leave the house, leave one light on. You don't need to leave 50 lights on. There has to be discipline.

Vice Mayor Mena: Bring you to my house.

[Laughter]

Mayor Lago: Like those two adorable girls, I'm pretty sure that you can crack the whip there and turn the lights off. But my point is, it requires discipline to turn the lights off, so that when you're not there, you are trying to save money.

Ms. Cruz: [Inaudible – off mic]

Commissioner Anderson: Oh, yes. I had the teenager phase. They hated it when I would turn off the water heater.

Public Works Director Diaz: So, my eldest becomes a teenager today.

Vice Mayor Mena: Alright. Happy birthday.

Mayor Lago: Oh, by the way, since the Commissioner mentioned, get rid of your water heater and get a tankless water heater. These are all things that lower the cost significantly of the electricity bill, and it pays dividends, okay. We have a motion, second.

Vice Mayor Mena: Second.

Commissioner Menendez: Yes

Commissioner Anderson: Yes

Commissioner Cason: Yes

Vice Mayor Mena: Yes

Mayor Lago: Yes

(Vote: 5-0)

Mayor Lago: Thank you for the update. I appreciate it, Director.