

AGENDA ITEM 2-a

MINUTES OF A REGULAR MEETING OF THE UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH, FLORIDA, HELD MONDAY, JANUARY 26, 2009, AT 6:00 P.M., AT 200 CANAL STREET, NEW SMYRNA BEACH, FLORIDA

Prior to opening the public hearing, Chairman Allen proceeded with an invocation and requested Commissioner Diesen to lead in the Pledge of Allegiance immediately following.

(1) Final Public Hearing RE: Public Discussion and Consideration of the Utilities Commission's Direction Regarding Additional PURPA Standards and a Non-PURPA Standard:

Chairman Allen stated as we begin our meeting this evening we're going to begin with a final public hearing to discuss and consider the Utilities Commission's direction regarding additional PURPA standards and Non-PURPA standards. He then requested for a roll call to be taken and a majority of the Commissioners were in attendance as follows:

Chairman Walter Allen III
Commissioner Jeanne K. Diesen
Commissioner William E. Hall
Commissioner William H. Reynolds
Commissioner Oscar Zeller (ABSENT)

Others in attendance were as follows: R. Rodi, General Manager/ CEO; L. Klinkenberg, Director of Finance; R. Mitchum, Director of Electric Operations; T. Beyrle, Director of System Ops. & Gen.; J. White, Director of Engineering; R. Lemoine, Director of I.T.; P. Di Chiara, Director of H.R.; D. Hoover, Director of Water/Water Reclamation; B. Bilinski, Controller/Budget Supervisor; E. Fisher, Public Information Manager; D. Wood, Customer Service Manager; D. Zorge, Customer Service Supervisor; R. Walter, New Business Specialist; D. Mallegol, Fiber/SCADA Tech.; D. Reinsmith, Mtr. Serv. Tech. II, J. Santrock, Billing Tech., M. Bixby, Billing Colls. Spec., A. Woods, Util. Emp. III, K. Hautz, Cust. Serv. Rep., M. Stacy, Cust. Serv. Rep., M. Roberts, Line Maint., H. Montgomery, Line Crew Leader., and a couple of other U.C. employees; D. Simmons, Executive Asst./Recording Secretary; B. Preston, Interim U.C. Legal Counsel; NSB Mayor MacKay; City Commissioner Grasty; City Manager J. Hagood; Steve Pullins, Horizon Energy; Richard Spangler, Bob Tolley, Steve Provost, Kirk Bauer, Kent Titcomb, Mr. Titcomb, Sr., and approx. four unidentified men and women, all members of the public.

Chairman Allen then requested Mr. Preston to read the notice of public hearing and proposed resolution.

Mr. Preston stated this final public hearing was authorized by the Utilities Commission during their November 17, 2008 Special U.C. Meeting, and notices appeared in the News Journal (sic Orlando Sentinel) at least ten days prior to this date. Notices were also placed on the bulletin board at the Utilities Commission office at 200 Canal Street and City Hall at 210 Sams Avenue. Proof of publication of advertisement of this hearing will become a part of the minutes. Mr. Preston then read the resolution by title only.

Chairman Allen then asked if there were any comments for or opposed to this resolution. He stated seeing that there are none, I close this public hearing. The final public hearing closed at 6:05 p.m.

REGULAR U.C. MEETING:

Chairman Allen stated as we begin our regular Utilities Commission meeting I'd like to welcome everyone of you. It's good to see a few folks out there, the City Manager with us, City Commissioner Grasty, I see Mayor Mackay, we welcome you. He then opened the regular U.C. meeting with a roll call with the same persons in attendance as shown previously in the opening of the final public hearing.

(1) Agenda Changes, Additions and Deletions:

Chairman Allen then asked if there were any additions or changes to the agenda.

Mr. Rodi stated no.

(2) Approval of Consent Items:

Chairman Allen then asked if there was a motion for the approval of the consent items on the agenda.

Commissioner Reynolds made a motion to approve the consent items: item 2-a. Minutes of Regular UC Meeting Held 12-15-08, approved as submitted; item 2-b. Revision of Utilities Commission Meeting Schedule for 2009, approved the corrected/revised calendar as submitted; item 2-c. Developer's Agreement and Addendum - Smith Street Pumping Station, approved as submitted and authorized the General Manager/CEO to execute these documents; item 2-d. Sovereignty Submerged Land Easement Renewal, approved ratification of the execution of the renewal of a submerged land easement for a submerged 23 KV U.C. electric line in the Indian River – Easement No. 0091(3914-64), FDEP BOT file no. 640558064; and item 2-e. Contracted Engineering Services - Think Resources, LP, approved a Services Agreement for a contract engineer for a six month period totaling \$51,480. Commissioner Hall seconded the motion and it passed unanimously on a roll call vote.

(3) Public Participation:

Chairman Allen then asked if there was any public participation this evening. There being none, he stated we'll move on to item 4., the General Manager's Report.

(4) R. Rodi - General Manager's Report:

(4-a) Financial Status – December 2008:

Chairman Allen stated item four, the General Manager's Report, Financial Status.

Mr. Rodi stated I think I'll take both of the items that are listed under the General Manager's Report. If you looked at the financials for December, it again shows both the effect of the economy and the deteriorating financial condition that's affecting our businesses and our community. One of the, again, interesting things is it shows a loss in customer base in the electric side of the house, and I know that there are a number of measures that are being taken by the Directors and obviously by all of the supervision and the workers to conserve our finances as best we can. But even though we're doing a little better with it, we're still showing a negative arrearage. He stated so I think it's

(4-a) Financial Status – December 2008 (cont.):

in keeping with what we've been doing to try and maintain our conservatism when it comes to expenses and also how we're spending our money on a number of items; so I wanted just to make that comment.

Mr. Rodi then stated you have also seen that we are filling out more and more of the key performance indicators. These are from a U.C. perspective and at the same time this has been going on, we're also looking at those measures that are important from an employee perspective. So the idea, when we're finished with this, is to have line of sight measures from top to bottom because that's how this thing works overall.

(4-b) Updating UC Personnel Practices Manual:

Mr. Rodi stated on a comment as it relates to the second item there, the Personnel Practices Manual, you had given us permission to move forward, just to tune it up and to clean up the language. You have a copy of this first draft (Chapter 1) through and even though we could just move forward with it, we thought you might want to see it. As we get these done we'll just include it in your package. He stated so that's all I had on the General Manager's Report.

Chairman Allen asked if there were any comments from any of the Commissioners.

Commissioner Reynolds stated I think it's a good clean up job, a big improvement over the last one, so I think that's heading in the right direction.

(5) Commission Counsel's Report:

Chairman Allen then moved on to item 5, Commission Counsel's report.

(5-a) Amicorp – Sabal Lakes – Public Participation Request at 12-15-08 UC Meeting:

Mr. Preston stated I wanted to respond to your request at the last meeting pertaining to the Sabal Lakes proposed subdivision. It is not primarily, but a legal issue at this point and to give you a brief update as to where we are with that issue. As you know this is a somewhat long standing issue we've had with Sabal Lakes subdivision dating back to letters that I have in my file of July of 2007, for the installation of their wastewater system. Now there have been issues that have been addressed in the installation of that system since the very beginning. Those issues are primarily with the failure to meet the standards that we have set, by building a sub-standard system. One that has the rise and flow less than what is required and purported dips and valleys within the system, and other issues that have been identified that persist today.

Mr. Preston stated the developer of that system has come to the Utilities Commission repeatedly. Sometimes suggesting that repairs would be made, other times suggesting that the deviances should be accepted regardless that they are less than our standards. As you know they approached you in December, at the December meeting, asking that there be further communication in an attempt for resolution looking at several ideas that they had proposed. One of which was to maintain their system as a semi-private system, suggesting they would develop and maintain their system, giving a hold harmless or a bond or some sort of assurances that the system would not be of fiscal concern

(5-a) Amicorp – Sabal Lakes – Public Participation Request at 12-15-08 UC Meeting (cont.):

for the U.C. down the road. Others were attempts to make changes in their system to attempt to come closer to the standards that we have set for the development of the system. They have failed to do so. We also had notified them, and I have a letter addressed to their attorney prior to our meeting in December, it was in November, advising them that we do not accept semi-public, semi-private, whatever the terminology you want to use is, systems. That we had established a policy here, this Commission established a policy not to do so primarily because of history of having done so in the past.

Mr. Preston stated I believe that actually Mr. Rodi went above and beyond the call in seeking during this path month to find some resolution with Sabal Lakes, including spending some significant time in researching whether or not a totally private system would be available for them. Where they would provide and maintain all on site, which was determined they cannot. We have, in order to remove any indications of any kind of bias in determinations for whether or not this system is of standard and meets the qualifications set by the Utilities Commission, we have hired an independent entity, Brad Blais. To study the system, to view the system with cameras, to determine whether or not the most recent as built survey supplied by the developer was accurate in its measurements at the manhole areas. We are not satisfied that they are and we're not satisfied that the system in fact does meet the standards that we set. As a matter of fact we have measurements which show that they are very substandard in certain areas; areas being locations of the construction itself.

Mr. Preston stated so at this point there is no resolution in terms of any kind of compromise nor in my opinion should there be. We have a system which is less than what we believe is a viable long term working system for which we will become responsible when it is turned over to us. We see long term problems down the road. He stated I'm not even sure if this is an actual issue at this point because I'm not even sure if there's actually been an application, but there has been a lot of discussion regarding the development. The design and the standards were clearly known at the time of the execution of the developer's agreement; a 4:0 slope for example is specifically designed within the system. So it was not a matter of miscommunication by the Utilities Commission to them prior to development and construction in any way. It was simply an error in construction which led to the deficiencies.

Mr. Preston stated so we wanted to give you an update. We are still, at this point, seeking if there can be a way this matter can be resolved, but in essence, even as late as today speaking with the attorney for the developer, the bottom line that I represented to him is that you've got to fix the system.

Mr. Preston stated I do have the letter, and I made copies of it, that I had written to the attorney, which was very clear to him of our position. This was dated November 14 (2008) and it is the same position that we take today, specifying to the attorney that we will not accept a semi-private, semi-public system and also the standards and why the standards are set as they are. He stated to the Commissioners, so if you'll like a copy of that, I'll be glad to pass that to you.

Some of the Commissioners indicated they would like a copy of Mr. Preston's letter.

Commissioner Hall then asked Mr. Preston, what's the worse case scenario, absolutely the worse case scenario.

(5-a) Amicorp – Sabal Lakes – Public Participation Request at 12-15-08 UC Meeting (cont.):

Mr. Preston stated the worse case scenario, from a legal perspective or from an engineering perspective may differ. From an Engineering, maintenance perspective the worse case scenario is that we accept ownership and responsibility for a system that by being inferior will cost us significant monies for ongoing maintenance of that system, and of course potential unhappy ratepayers. A worse case scenario from a legal perspective can be anything from paying me another few dollars to let the attorney know they've got to make a change, to litigation.

Chairman Allen then asked if there were any other comments. There being none, he stated I just have one comment. Just from reading the information that we've received, I believe staff has strived to work hard with the developer in this issue and there is an understanding that there is a minimum standard that needs to be met, that the Utilities Commission has. And then also in the meetings, I understand, as they have met, that there was suppose to have been a written plan on bringing the system into compliance, and I understand that has not happened. With that, it's almost like trying to circumvent to get around to correcting the problems that would be a problem down the road, and it is my belief that we need to stand behind staff's recommendation. We have that minimum standard, we've had other developments come on line here and those developments have met that minimum standard. To shift in the middle of that would be setting up a new standard, a precedent, and we should not be doing that as far as I'm concerned. If it's going to come on line it needs to come on line properly, that it can be maintained and it wouldn't be a burden on the other ratepayers of the Utilities Commission. He concluded by stating that's where I stand.

Commissioner Diesen stated do we need a motion to that effect, to continue to support staff.

Chairman Allen stated I think it would be good.

Commissioner Diesen stated I make that motion, that we continue to support staff in their stand that we not bring on any sub-standard developments. It's not fair to the Utilities Commission, we have a standard, it's not fair to our ratepayers.

Commissioner Hall stated I'll second that.

Chairman Allen stated okay, we have a motion and a second. He then asked if there was any discussion, any further discussion. There being none indicated, Chairman Allen requested the Recording Secretary to call the roll on the motion.

Commissioner Diesen's previous motion then passed unanimously on a roll call vote.

A man from the audience then stated, Chairman Allen, I'm Kirk Bauer, I represent the developer, can we speak to the Commission. We showed up at public participation last month making a request to be put on this agenda.

Chairman Allen stated I guess you can speak, yes.

Mr. Bauer stated I mean it looks like the decision's made but I'd like to clarify a few things if I could.

(5-a) Amicorp – Sabal Lakes – Public Participation Request at 12-15-08 UC Meeting (cont.):

Chairman Allen requested Mr. Bauer to step to the podium.

Mr. Bauer stated for the record my name is Kirk Bauer, I'm an attorney in Deland representing Amicorp, the developer of Sabal Key. We came before you on December 15th asking for one thing and that was whether you would consider allowing the system, the sewer system, to be privately maintained. That the sewer lines within the subdivision would be privately maintained, all the sewer lines would dump into a central lift station that exists, and that lift station would go to your transmission facilities; to where the only system that the City would own is the lift station out. And at that meeting it was my understanding that we were to go ahead, I have some notes here, that we were to work with staff and do a cost analysis for some of the quotes from the Commission last month; that was on the 15th of December. He stated Mr. Preston and I have had a long term relationship, I sent him four letters, seven emails, and we've had a bunch of telephone calls. I kept asking for that meeting with staff, to talk to staff about whether there was a way to consider the private system of the sewer lines from the lift station in and you would keep it from the lift station out. No such meeting occurred, there has not been any discussion about that issue. Until Mr. Preston and I talked this morning, was the first time that I heard you were standing firm, no private system or semi-private system. And I gave you a laundry list last time we were before you of the reasons why I believe the semi-private system, using those words, would be very positive for the Commission. And I'll be happy to go through that list but we talked about them last month at length, such as there are other private, semi-private systems in this City and that we would be responsible for the maintenance of the system itself. As far as mobile home parks go throughout the State, private systems are contemplated, that's what this would be. You wouldn't be responsible for any of the repairs, bonding could be done, we would have covenants recorded obligating the owner, because remember this was going to be one development with a single owner of all of units. This system, there was a worry of there being infiltration, this system has been pressure tested and passed, it's been lamp tested and passed, it's had flow tests showing that there was a two feet per second rate, it's passed. And I would just submit to you that the system overall will fully function, and if it didn't it's not your responsibility.

Mr. Bauer stated that was my request and what I thought was there were some questions about water lines and we said you could have the water lines if you wanted them. There were some questions about what we could do for enforceability, and my understanding was staff was to get with us to talk about the issues and whether we could resolve it. And that did not happen, that did not happen at all even though there were multiple requests for it to happen. And I think it shows, it just shows what's been going on since 2006, we've had issues back and forth of verbal approvals, written denials. Mr. Preston and I talked this morning about the developer's agreement requires that you are to give notice, the U.C., once an inspection is done, if it fails, the inspection is suppose to be, the developer is suppose to be given notice within ten days. You know work was done following inspections to where there was covering up, things were covered, and those written letters were not sent. Now to my knowledge there were four letters over the period of time, three of which were lengthy, these are all the problems with the system, but it was way past the ten days after the inspection.

Mr. Bauer stated so we're trying to figure out a way, and that's why I came before you last month, we're trying to figure out a way to get passed this where you're protected and my client can finish his development, and that's why we're here.

(5-a) Amicorp – Sabal Lakes – Public Participation Request at 12-15-08 UC Meeting (cont.):

Chairman Allen stated as per the information that we have, we do not accept private systems, and that's the standard here. The other thing is, looking at some of the process that the system has gone through to develop the development, even from the County side as far as resolution as far as the service for the project and it defines that sewer and water services will come from the City of New Smyrna Beach Utilities Commission. And that was the provider and for that to happen there is a minimum standard that has to be met.

Commissioner Hall stated I read the notes taken from the last meeting very carefully and I think there was another issue that is still, I think it is still an issue, the CUP for water issue, that Mr. Rodi, you said was going to be a problem. That is still an issue.

Mr. Rodi stated yes.

Commissioner Hall stated an issue that will kill this thing completely was my understanding.

Mr. Rodi stated yes, but as part of the proposal of Sabal Lakes, or Sabal Key, they had not continued to ask for a master meter. The proposal was to have a private wastewater system, that's what it had turned into.

Commissioner Hall stated similar to the one that was at Sugar Mill years ago.

Mr. Rodi stated to Mission Oaks.

Mr. Bauer stated similar in that it would be semi-private but not similar in that this is a new system. And you know, one other thing, to my knowledge, from what's been provided to me, I am unaware of you as a Commission ever voting or taking formal action to take the position that no semi-private systems were going to be allowed. I saw a memo from Mr. White, I believe it was in February 2006, where he gave a report to you that that was the position he was taking, but to my knowledge you as a Commission have not taken any formal action in that regard. I've asked, just so you know, I asked for some records that I didn't think were too significant on I think it was December 17th, and on January 9th got a letter back from your counsel saying it was going to take 80 hours and we needed to pay a deposit to get the records. I tried to clarify it but we still haven't resolved getting those few records that I needed to see, one of which was that issue. He reiterated to my knowledge you have never acted to say no private systems.

Mr. Preston stated just in response to that, just for clarification, refer back to my letter of November 14 to you where I was very specific regarding this Commission's action taken in regards to private systems, and actually quoted to you the sections and the minute dates in regards to when the Commission took that action.

Mr. Bauer interjected does it say February of 2006, I believe it does.

Mr. Preston answered February 8, 2006.

Mr. Bauer stated of 2006, but if you look at those minutes there was report on the last sentence of that sentence, that the Chairman accepted it as a report only, but we can argue to that some other

(5-a) Amicorp – Sabal Lakes – Public Participation Request at 12-15-08 UC Meeting (cont.):

day Mr. Preston if you want to.

Chairman Allen then stated that's where we stand. Thank you.

(6) Committee Meeting Reports

Chairman Allen stated no committee reports.

Commissioner Hall commented I thought we were taking that off the agenda.

Chairman Allen stated right, that's going to be an action taken later.

Commissioner Hall commented I didn't know that had to be an action then.

(7) Old Business

(7-a) UC Resolution RE: Public Discussion and Consideration of PURPA Standards and a Non-PURPA Standard – Proposed UC Resolution No. 1-09:

Chairman Allen stated item 7-a., as we look at the UC Resolution regarding public discussion and consideration of the PURPA standards and Non-PURPA standard. It will be resolution number 1-09. He stated we need a motion to approve following the two public hearings that we had on December 15, 2008, and this evening on January 26, 2009. He reiterated we need a motion and a second.

Commissioner Hall then made a motion to approve the resolution further declaring the U.C.'s direction with regard to the requirements of the Public Utilities Regulatory Policies Act (PURPA), and supplementing U.C. Resolution No. 2-08, subsequent to public discussion and consideration. Upon approval, the resolution was to be numbered 1-09 and become effective immediately upon passage. Commissioner Reynolds seconded the motion and it passed unanimously on a roll call vote.

(7-b) Requested Deletion of Committee Meeting Reports (Per Comms. Hall) – Revision of UC Resolution No. 8-05 – Proposed UC Resolution No. 2-09:

Chairman Allen stated second old business item is the revision of the U.C. Resolution 8-05, deletion of committee reports in agenda format. He stated I need a motion for that and on the passage of this, the U.C. Resolution will be numbered 2-09.

Commissioner Reynolds made the motion to approve the proposed resolution revising the U.C.'s agenda format, deleting Committee Meeting Reports. The resolution was numbered 2-09 and became effective immediately upon passage. Commissioner Diesen seconded the motion and it passed unanimously on a roll call vote.

(8) New Business

(8-a) Proposed Alternative Energy Project – Horizon Energy:

Chairman Allen stated okay as we come to New Business, it's the proposed alternative energy project – Horizon Energy, and stated Mr. Rodi.

Mr. Rodi thanked Chairman Allen and stated we can start with the lights (dimming for the presentation). He then stated I'd like to introduce Steve Pullins, who is the President of Horizon Energy. He requested Mr. Pullins to give a little background about himself.

Mr. Steve Pullins addressed the Commission, stated his name and added he lives in Maryville, Tennessee, which is just south of Knoxville. I've been in the utility business for more than 30 years. I started out in nuclear submarines, as a submarine officer, and from there, Wisconsin Electric to a couple of large firms where I was managing some utility operations, non-investor owned utilities. And then ended up in the consulting community with Science Applications International and then we formed our own company as the energy business started to really take a different shape than it has over the last 25 years.

Mr. Pullins stated Horizon Energy Group is focused on two areas, we work with smart grids, putting intelligence into the grids, and we work in integration of renewables through developing renewable projects. Our focus is on using bio-sources for power production. My background in the power business, I've observed and worked with wind and solar, and I've always seen wind and solar as a variable resource and not exactly suited for base load operations. So about two and half years ago we turned our interests to taking a look at bio, to see if bio-sources could in fact be that utility scale base load generation source in the renewable space that we really need in our country. So that's what we've been focusing on and we've learned a few things that I'd like to share with you about that technology base. I understand from talking with Mr. Rodi that some of you have got quite a background in this area, looked at this several times, several different potential projects, so you're well aware of some of the things and some of the same learnings that we've gone through over the last two and half years.

Mr. Pullins stated so let me proceed. I'm going to talk a little bit about how we got here and why, and then take a look at the technology evolution leading us to our technology partner, Enerkem. We're focused not in plasma gasification, we're focused in molten bed, fluidized bed type gasification, which is a little bit different than plasma gasification, and a whole lot different than incineration, and we'll show some of those differences. I would like to give you some broad strokes on what we consider as a solution in this space and how it might apply to New Smyrna Beach and the surrounding area. A little bit about what we would expect to see as a result of this multi-year effort and then we'll talk a little bit about some of the advantages of this approach and talk a little bit about some of the financials. And then if it seems reasonable, maybe a few next steps.

Mr. Pullins stated again, Horizon Energy Group, we're a U.S. firm, recently named last fall as a company to watch by Perfect Power. Perfect Power is a book that was written by Bob Galvin, a former CEO of Motorola, and Kurt Yaeger, the former CEO of the Electric Power Research Institute, and we're actually quite proud of that. Enerkem is a Canadian firm that has been around for awhile, and in December was given the Canadian Renewable Fuels Summit Green Energy

(8-a) Proposed Alternative Energy Project – Horizon Energy (cont.):

(Fuel) Award. They are very active in Canada and have also been looking at a couple of projects in the U.S., one of which is with us.

Mr. Pullins stated I'd like to share an overall picture of the project, brief on the technology, brief on the project approach, and then I would really like to have dialogue on your sense of this kind of general application in New Smyrna Beach. He then stated "How We Got Here", I really kind of talked a little bit about this. We have been looking for a base load biopower concept. We have an agreement with Progress Energy Florida for a 25-year 60 MW purchase power agreement. It's in front of the Florida Public Service Commission for approval. We've gone through the whole Q&A part, have everything answered, and the last step that we had to go through was we needed to do a business registry of our company in Florida; we had forgotten to do that. We've had discussion with various counties and cities, many of them facilitated by Progress Energy Florida, they've introduced us around the central and north central parts of Florida. And through that effort, Mr. Rodi asked us to start answering some of his questions and have a discussion around that.

Mr. Pullins then stated so let's take a look at the technology. Gasification is different than a burning process. Incineration is a burning process, it's an oxygen-rich environment and that oxidation can take place, typically at lower temperatures but all the way up to 1100 degrees centigrade. Gasification is a different approach, it's a high temperature decomposition of the waste in an oxygen-starved chamber. And the purpose for that is to get the immense amounts of energy out of breaking down the hydro-carbon bonds which at high temperatures is an exothermic reaction, it gives off more energy than it takes to actually get it there. So what you see is the successful gasification technologies require high temperatures and they're ranging from about 720 degrees centigrade on the low end, to up around 6000 degrees centigrade on the high end. And that's mainly, the 5000 to 6000 degrees, are the plasma torch technologies. So in that whole gasification collection, I thought it might be interesting to take a look at a few of the comparisons here that we look at as very mixed and what lead us to come to reaction.

Mr. Pullins stated when you start taking a look, a couple of the key things that we looked at was elimination of municipal solid waste space or landfill space, volumetric, and then the cost to actually develop a kind of sweet spot utility size renewables plant, about 36 MW. And then look at the actual energy production that I could get out of some sort of typical landfill amount, 600 tons per day of municipal solid waste. We tried to make some comparisons between the technologies, and then of course, emissions. So if you look here you'll see plasma gasification eliminates about 90% of the waste and likewise the advanced gasification technologies that we're talking about eliminate about 90% of the volumetric waste. Those things that don't get eliminated are metals, glass, and concrete, and the metals and glass can be recycled. And the front end processes on these type of plants, you go through an automated separation process to take the metals out, both the ferrous and the non-ferrous, take the glass out, take the concrete out; and that's before you send everything to the gasification cycle or the reactor. He stated so, this 90% is really a statement about what the composition of the municipal solid waste is, if it has any kind of hydrocarbon in it, whether it's plastics, paper, animal wastes, wood wastes, grass clippings, tree left overs, water treatment waste; anything hydrocarbon, we loves H's and C's. The things that really do not belong in the process or cannot be easily converted are the metals and the glass and the concrete. So when we look at the typical constituency of municipal solid waste in the United States, what we see is about 10% inert, which is what we call metal, glass, and concrete. And I have a study, there aren't

(8-a) Proposed Alternative Energy Project – Horizon Energy (cont.):

very many definitive studies, but I do have one from Marion County, Florida, that was done about ten years ago, and it tracks very well with the 90%. The inerts in there are about 11%, so it's about 89%.

Mr. Pullins stated incineration, there are some limitations on what you can eliminate in the incineration process. For example, the wet wastes are not real readily burnable, so therefore it's a reduced amount (60%, about 30% of burned waste returned to landfill as toxic ash). Landfill gas burning, long term energy cell production only reduces the volumetric amount of municipal solid waste by about 10%, the same thing with composting. So if you look at it from an elimination of municipal solid wastes, gasification, breaking down those hydrocarbons that really matter.

Mr. Pullins stated when you look at the costs to develop, some of these plants are very expensive to develop and when you look at 36 MW, we've gone through and gathered data from different projects, not only in the United States but around the world, and what you see is pretty different picture about the cost to build 36 MW. Now I should have updated this chart, this number down here is wrong, this \$96 million, it's gone up over the last two years and we're sitting at about \$130 million to do a 36 MW plant. But as you can see it's on par or better than the other technologies with the exception of the landfill gas burning process.

Mr. Pullins stated energy production from 600 tons, a 600 tons per day of municipal solid waste, you'll get about 16 MW out of a plasma gasification, out of incineration you'll get about 36 MW, out of landfill gas you'll get about 3 MW, and out of the molten bed and fluidized processes you'll get about 36 MW. So when we look at this, what we see is a kind of nexus, eliminating some wastes, a reasonable cost to develop, and a vast improvement in the energy production.

Mr. Pullins stated so then the next question becomes what about the emissions. What we have is some substantial analyses done by the different manufactures, or technology providers who work both in the plasma gasification and the advanced gasification area. What you see is, when you start looking at the noxious gas particulate and then Dioxins as some of these nasty chemicals that are in that group, the Dioxin, Purox, and things like that, what you see is from a gasification technology, whether it's plasma or advanced gasification, you see a greatly reduced amount of emissions coming out of the plant, ten to the last ninth, so it's nine orders magnitude less, or more than nine orders of magnitude coming out of an incineration process. From a NOx and SOx process, it's again nine or ten orders of magnitude better than landfill gas burning. So it's a very substantial improvement in the emissions, it's not zero emissions, but ten to the minus ninth, those are pretty small numbers, we call it near zero.

Mr. Pullins stated gasification is not new from a technology perspective, it's been used in the process chemical industry for ages. In our area, plasma gasification for destruction of wastes and metals has got a history of about 15 years in the United States with the U.S. Army. And actually a unit that one of our technology workers built is being used to destroy cocaine for the U.S. Customs Service. So when you're destroying nerve gas for the Army and destroying cocaine for the U.S. Customs service, near zero emissions matter. He stated South Africa, interesting how things happen, Apartheid, if there were a good thing you could say about Apartheid, Apartheid in South Africa actually advanced the gasification technology. Because of all of the embargos that the world has associated with South Africa because of their Apartheid policies, South Africa had to use

(8-a) Proposed Alternative Energy Project – Horizon Energy (cont.):

gasification over the last 30 past years to make fuel for their vehicles and other non-transportation needs for fuel. So they greatly advanced the gasification of coal and other carbonaceous materials over the last 30 years; so we all benefit in that.

Mr. Pullins stated Enerkem, Enerkem is in Montreal Canada. Their research facility is in Sherbrooke Canada which is about two and half hours east of Montreal. Dr. Estaban Chernot is a University Professor and a fellow who has spent the last 30 years perfecting advanced gasification technologies or fluidized bed, molten bed technologies. He is the founder and chief technology officer at Enerkem and his son is the CEO, so it's a family business. He stated Westinghouse plasma gasification research spans about 25 years in the United States and the Westinghouse plasma gasification, or Plasmacorp has actually sold licenses to several different companies around the world, Technoselect in Switzerland and Holt Energy and a few other places; but again we're talking plasma technology so we're talking torch technologies there.

Mr. Pullins stated so let's take a look at the difference between plasma and fluidized or molten gasifiers. With the torches, and there's two types, the DC torches which were developed originally by Westinghouse, and the AC torches which were originally developed by the Russians. They're operated at about 5000 to 6000 degrees centigrade. The main limitation on torch technology or the plasma gasification technology is throughput, because with a DC torch you're working with a line and with an AC torch you're working with a football sized volume, and you can only get so much throughput in that situation. So a unit size is limited to about 4 MW and that's not really a good number for a utility level or utility scale plant, so you can start to get some of the economics that you need to make this a viable renewable. What we've learned from, the Japanese who have put in nine (sic seven) plants, and the Germans who put in three plants, is that you're looking at somewhere between \$4 million and \$8 million a megawatt capacity to build out one of those plants. So that's a very expensive proposition, you're looking at \$8 million/MW is on the high end of building a new nuclear plant and on the high end of building a concentrated solar farm. We don't consider that a viable scale, both in costs and size.

Mr. Pullins stated but when we take a look at the fluidized or the molten bed reactors, we see the fluidized reactors running at about 700 to 900 degrees centigrade and the molten metal reactors at about 1500 degrees centigrade. That molten metal is typically iron, and a lot of companies are experimenting with copper for operating at a slightly reduced temperature and the heat flow properties are a bit better. Unit size, there's an apparent limit at about 60 MW based on physical reactor size but other than that, 60 MW's is a pretty good unit size. And you can get the numbers down from a cost production standpoint here to about \$2.5 million to \$4 million per megawatt capacity, and at about \$2.5 million to \$3 million, that's better than a coal plant and that's better than any of the solar facilities, and it's better than a geothermal plant. The only thing it's not better is a combined cycle or simple gas turbine plant, or a wind farm. But comparing, you know half the cost after you build the thing, then you've got to run it and operate it and put fuel in it, and there's a big difference between the fuel in a gasifier that takes biomass and MSW than buying natural gas from inside the U.S. He stated the first commercial plant, here's the issue with this type of technology is the plasma torch has been around awhile and over the last eight years, there's been ten plants built, and there's a couple more that are being built today. Actually there's one in Canada, 4 MW by Plascotype plasma gasification plant in Ontario I think it is, that just went operational this past year. The first commercial plant (for fluidized or molten bed) is the Enerkem Westbury plant, and

(8-a) Proposed Alternative Energy Project – Horizon Energy (cont.):

Westbury is near Sherbrooke, about 30 miles from Sherbrooke, and that just went operational just in the last 30 days. So we're talking about this technology has been in development for a number of years and it is just now coming to the point where it is commercially viable, so it's kind of the front end of the wave.

Mr. Pullins stated another thing I'd like, just to make everybody aware, that there are some, one of the nice things about these gasification technologies that take any of the hydrocarbon fuels is you can use all of these things together in these gasifiers, these molten bed and fluidized type gasifiers. But I think it's important for people to understand why folks like us focus on municipal solid wastes and it's because the heat content, the average heat content in municipal solid waste is much better than wood. And then if we really want to stretch ourselves then we take a look at Miscanthus which is an energy crop. I'm not sure how much you're aware of Miscanthus, it's indigenous to southeast Asia, the University of Illinois has been working with it for five or six years now, all kinds of sterile varieties, and it's being used in plants in the UK as a replacement fuel for coal and heat and other things. But what you see here is this is a, it's a four meter tall or 12 foot tall stalk plant, it's a 30 year perennial, and it has a very high heat content, it borders on lignite but it has much cleaner properties. And this is what's really neat if you take a look at, other than clear cutting, if you look at harvesting of wood areas, you're going to get about three tons an acre from wood, but if you look at Miscanthus you can get 24 tons an acre; so it's a very, very good energy crop. So what we like is the picture of using municipal solid wastes and Miscanthus together in a plant, it's very clean, very straight forward process.

Mr. Pullins stated so what is ready today, like I said the plasma gasification is ready today. The fluidized/molten bed gasification, the Enerkem Sherbrooke pilot plant's been operating since 2003, the Ze-gen New Bedford pilot plant has been operating for a little over a year, about 14 months, and the Enerkem Westbury plant, the first commercial scale plant, began operations earlier this month. Enerkem is also working with the city of Edmonton Alberta in putting in a 300 ton per day ethanol plant, from MSW and biomass to ethanol, and that plant should be operational in 2010; so that's where we are in this technology today.

Mr. Pullins stated let's take a look, if you don't mind, at the Enerkem technology, in a little more detail. He stated this is a little hard to see, but what we do in the front end is take any kind of carbonaceous or hydrocarbon material and sort it, shred it, dry it, a one step or two step process in drying, and feed it into the gasifier, which is a large reactor. You control the amount of air and oxygen that goes in so that you preferentially get hydrogen and carbon monoxide out and minimize the amount of carbon dioxide and methanes that you get out. Then through a gas conditioning and purification process, you basically scrub with synthetic gas to get to the quality that you need. In this case, in this example here we're showing it going into some catalytic reactors to get transportation fuels. The same thing, just break the line right here, to do power, you put a combined cycle unit on the back end of this. Now you have to use a special combined cycle, you have to use a low heat content or low energy content turbines to do this; there are a couple of manufacturers or suppliers of that. Alternatively, you could use reciprocating engines, but there's a lot of maintenance associated with those and at this kind of scale we don't think that's the right solution. So working with folks like GE and Solar Turbine to do a combined cycle gas, turbines pop in, and steam turbine train on the bottom to get the maximum amount of power out. So that's the overview of the Enerkem system.

(8-a) Proposed Alternative Energy Project – Horizon Energy (cont.):

Mr. Pullins stated what I would like to do, and this is the Westbury gasifier that's up there out of Sherbrooke, I would like to show you a quick video of the Enerkem folks and process.

After the video concluded, Mr. Pullins stated so we find it pretty exciting that the technology is now commercially ready and we really look forward to starting to expand the whole fleet of this kind of operation, whether it's a power output or a synthetic fuel output. He then proceeded to the solution framework. He stated one of the things we did, looking here, was to then explore options for New Smyrna Beach. We drilled down through those to see which ones made the most sense with what we know today. He stated we explored these four options, which the first one is using our existing power purchase agreement with Progress Energy Florida, destroy biomass and municipal solid waste in the area, and do this as a separate facility. We looked at an option of selling power to the Utilities Commission, again through the destruction of biomass and municipal solid waste in a separate facility here. We looked at that same kind of option, only this time what if we took the Field Street units and moved them out to, for example, the U.C. site by S.R. 44 and refurbished them, converted them, turned it into a combined cycle operation, would that work, that was our question, would that be a good option. And then finally looked at something a little bit larger, the first three we were kind of focused in the 36 MW area, and the last option well, let's look at a 60 MW application where the Utilities Commission could take 30 MW as a base load and then the rest of it we would sell to Progress Energy Florida under our existing PPA.

Mr. Pullins stated so just a little side by side comparison of these four options. What we're looking at is destroying about 660 tons a day, the CapEx is \$134 million, the annual tax estimate, and this is just an estimate based on income and real estate and other taxes, city and county, we think it's around \$3.1 million for this size plant. Annual power production would be about 274,000 MWH. We looked at this, and our assumption here was that, I believe it's 21,000 tons a year I think are coming out of New Smyrna Beach, so we would not charge for that. We would take tipping fees from others, but not New Smyrna Beach, so we see that as an annual savings of about \$700,000 to New Smyrna Beach. Another thing is that I understand you have a recycle program that's probably a little bit of a net drain on the economy so to speak. One of the things whenever you think about a recycling program you think about taking the plastics out and taking the cardboards out, well those are all the higher carbon content fuels, we like those things, we like those things even more. So this would be a situation where let us do the recycling, we're going to turn this into a clean effective power and you could probably greater reduce or eliminate your recycle costs that way (estimated \$500,000 annual savings). This plant will generate about 20 to 25 jobs and these are fairly good technical jobs. These are power plant operators, engineers, and process operators. And then because we were looking at just a pure sale of power to Progress Energy Corp. we would not see any annual power bill savings for New Smyrna Beach in this option.

Mr. Pullins stated the next option is exactly the same except in this case we do have an annual power bill savings of \$2.7 million. Now what I did there is this plant would go operational about 2011, so what I took, I didn't have real good numbers, but I had numbers from 2006 on what your average energy delivered cost is, and what I did is I projected that out based on the national average of 3% per year, and by 2011 you're going to be at about \$74 dollars and change for your delivered cost of electricity to your citizens. So with this we're at a \$64/MWH and so that rolls out to be about a \$2.7 million a year annual savings on your power bill.

(8-a) Proposed Alternative Energy Project – Horizon Energy (cont.):

Mr. Pullins stated now looking at the last two options, this is where we move the Field Street station, the CapEx price is a little higher too, and some of the things that we needed to do with those units and also look at converting them. They probably can't be converted, the CT's there probably can't be converted to take a synthetic gas, we'll probably have to install methanol on it, that was talked about in the video, so that adds to the price and estimated tax estimate, the other numbers are the same. But when we rolled it out, the power bill savings really wasn't a good option, even at a \$1.32 a gallon methanol costs, output from our plant, the difference in the heat content between your no. 2 diesel and the methanol, which is much lower, it just didn't work as an option.

Mr. Pullins stated so the final option was going a little bit larger, going up to 60 MW, instead of 36 MW, destroying more tons per day (1060 tons), a lot larger CapEx (\$202 million), annual tax base goes up (\$5.4 million), producing more power (456,000 MWH), same savings from the landfill, recycle costs, and same number of jobs, and annual power bill savings \$2.3 million. The reason it's not \$2.7 million like it was on the previous slide is because we're doing 30 MW of sales to the Utilities Commission as opposed to 36 MW. So those are how those options compare at a first brush.

Mr. Pullins stated so what we did is we took option four and drilled down a little bit deeper and looked at that a little bit harder. What we laid out was the first thing we'd do would be build the plant at the landfill or, and I really thank Mr. Rodi for taking me out to that site, the U.C. land there next to that substation on S.R. 44, that's a great site. What we'd do is put in three gasifiers, a purification plant, and a combine cycle plant on the first train. And then do a second module which would be essentially the second train, add two more gasifiers, add second train to the combined cycle plant. Then we'd also build a high capacity SSC plant, sorting, shredding and drying operation which is the front end of the power plant. At first we build it two trains, but we design it such that the second two trains, you just plug them in. So we do about 70% of the construction in the first train on the SSC plant. So that's how we would develop the facilities under this particular option (option 4).

Mr. Pullins then stated what the business model would look like. We would establish at least one LLC to own the plant, that's because we're bringing in equity and finance partners and they all expect a little bit of the pie because they're bringing the equity and the plants to the table and so what we do is we establish an LLC for the plant. Enerkem and Horizon are also looking at, there's a DOE grant that's available this coming year, and we have to express interest. If we are interested, we have to express interest by February 12th, it's a fairly simple process to express interest. But it could represent up to a \$40 million grant from the Department of Energy to develop new options on bioenergy processes and this would be considered a new option under those rules as we understand it today. So we're looking at that very hard, that could be a very nice thing for everybody involved. We would build the first module primarily to power New Smyrna Beach and build the second module primarily for the power sales to Progress Energy Florida. Tipping fee, zero dollars for New Smyrna Beach and in our business model we assumed a 50% rate for all others. So as I understand it the rate is about \$34 for municipal solid waste and a different \$23 for yard waste and things like that, so what we did, we just took a 50% rate on those tipping fees.

Mr. Pullins stated what would come out of all of this is an operating 60 MW power plant at the landfill of this S.R. 44 site the Utilities Commission's site. Two modules, unit one if you will 30

(8-a) Proposed Alternative Energy Project – Horizon Energy (cont.):

MW and then 2nd module 30 MW. Recycled metals and glass from the sorting, shredding, and drying process, that's available to be sold or bartered. Reduce the area of landfill needs, obviously we're talking about in this option, destroying about almost 1100 tons of waste per day. So you know you're looking at almost 4 million tons a year, so that's a pretty good dent on any area landfills.

Mr. Pullins stated we think there are several advantages to this approach using these advanced gasification technologies. Severe zero emissions plant, you can destroy nearly all of the municipal solid wastes, less the metals, glass, and concrete as I mentioned before, and you're not limited to the MSW. Mr. Rodi was showing me some of the areas around here that have been hit by the forest fires and there's some stands there that are probably going to create problems, eco problems down the road if not handled. You know somebody is going to have to do something with that and maybe this would be a good place to make that problem go away. Another thing this allows you to do is if you get into the cycle of using your bio-sources which are renewable and municipal solid waste, you get into that cycle of instead of burying it now, using it for some beneficial purpose like production of power or making a synthetic fuel, then I now have the ability to grow. I'm no longer chained to landfill restrictions or the costs associated with building a new landfill, it's like turning the landfill just into a transfer station. So all the associated costs that come along with the landfill are greatly reduced by going in a direction such as this.

Mr. Pullins stated also under this option four we see the ability to sell excess power to Progress Energy Florida so that gives New Smyrna Beach a little buffer and it also helps us meet our commitments to Progress Energy Florida. He stated we think this moves New Smyrna Beach to a significant renewable energy content, depending on how you measure it, it could be you know 70% renewable city. I don't know how you monetize that but in a lot of places that's a real good economic development draw and things like that, and it obviously puts you in a position to meet any of the state's requirements for renewable portfolio. The other thing I really like about the utility scale approach of developing biomass is that it really flattens the cost curve. One of the things that I track around the smart grids is the cost of energy for the electric system and we've seen substantial increases in the delivered cost of energy that are driven by fuel costs and also driven by the fact that we've seen almost a doubling of the capital costs to build power plants at the utility scale, since 2003. So what I see with this is because the fuel source is known and it is steady and all the CapEx happens at one time, you end up getting into a situation where this is a slowly increasing cost of power on a much lower ramp than any kind of fuel cost or fuel driven cost of electricity that you have; certainly much better than anything associated with natural gas and coal. He stated so that, to me, helps drive an energy independence and security picture for a city, for a county. It also enables you if you're in a situation where you are, let's say you're doing a plant like this with base load, and you have other peaking needs, you have some hedging ability here, you have some cards you can play at the table to get better contracts for those peaking resources and the fuel associated with those peaking resources, because you don't have to take it, you can do it another way with such a plant like this.

Mr. Pullins stated going a little deeper into the financial picture, capital costs on this option four which is the 60 MW, is about \$202 million. There's about \$1 million worth of pre-engineering costs, environmental impact studies, and associated permitting, in all. Equity, which is coming in at about \$61 million and finance about \$141 million. We're looking at a target interest rate of about

(8-a) Proposed Alternative Energy Project – Horizon Energy (cont.):

6.5% to 8%. I've got some financial institutions who have already said that they would come in at that range. Power contract 25 years, 60 MW output, and there's how much they're going to destroy (1060 TPD - 353,000 TPA). Our tariff that we have with Progress Energy Florida (\$64/MWH) with an escalator (2%/yr), we would expect that to stay the same. Looking at a first year revenue from the power production is about \$29 million, annual revenue from taking the waste in about \$5 million, annual O&M is about \$3 million, and taxes about \$5.4 million. Anyway, that works out to be an internal rate of return of about 22%. He stated we've got to fine tune this and all because we need to get to about 25% to actually attract the proper investors on this, so we have to work our numbers better but we're close, we're only 3% off on the IRR. So that's where we are on that and the plan, this is about from the time that we start, the detail, design to the time we go ready for operations, is about 21 months.

Mr. Pullins stated I have some ideas I'd like to throw out on the table about what to do next. I'd like to invite anybody and everybody to the Westbury plant near Sherbrooke in Canada. I checked with Air Canada, there's some good dates, February 17, 26, 27 are some good dates. The right people will be around, and you'll get the chance to talk with Dr. Chernot.

Mr. Rodi commented you know you're talking to Florida people, we get cold at 28 degrees.

Mr. Pullins stated okay, we'll have to solve the winter coat problem because it is 25 degrees below up there right now, I was talking to them today.

Commissioner Diesen jokingly suggested a fly over.

Mr. Pullins then stated we would like to further explore working with the Utilities Commission to select and refine the whole business model and then that would drive us to refining some of the facilities model, based on the kind of model that we select. And then if all of these things are up checks, then it would be time to start looking at how we would form agreements and move forward from that standpoint. He commented I'm sorry I've taken a lot of time but I was hoping to kind of lay everything out on the table for you. He then asked questions, I'd really be interested in taking questions so that we can discuss this.

Chairman Allen asked if there were any questions.

Commissioner Hall stated yes, how realistic is the 2011 starting date? I mean to have this thing up and running?

Mr. Pullins stated well like I said, 21 months from the time we start the detail design to completion, I'm real certain on that. The uncertain part is kind of the front end, establishing the agreements, the environmental impact study, getting all the right permitting and permissions and all that; that's the variable part. We're at the beginning of 2009, 2011, I doubt we would make January of 2011 frankly.

Commissioner Hall then asked what about December of 2011?

Mr. Pullins answered I think that's quite doable.

(8-a) Proposed Alternative Energy Project – Horizon Energy (cont.):

Commissioner Hall stated my next question, and my last question is, how long would it take just to recoup the \$202 million for the capital output, if we went into this business with you.

Mr. Pullins stated so we're looking at what's the pay back?

Commissioner Hall stated yes, how many years to pay that back.

Mr. Pullins stated I don't have that number off the top of my head, but based on what I see in the IRR, it's probably about, it's going to be between eight and ten years.

Commissioner Hall stated that's that 25% in the IRR.

Commissioner Diesen interjected 22% now.

Mr. Pullins stated right, that's an IRR of 25%.

Mr. Rodi then asked Mr. Pullins if he would put the rendering of the plant back up, you skipped past that.

Mr. Pullins stated yes, there's a couple things here that I want you to note. You notice that you don't see a stack here, this facility will look pretty much like a heavy commercial or light industrial facility. This is our 36 MW design and that sits on four acres. A 60 MW would probably sit on about five to five and a half acres, so it's not a big footprint, and the max height is about 30 to 36 feet.

Chairman Allen then asked Commissioner Diesen if she had questions.

Commissioner Diesen stated I do. On the DOE grant and the Letter of Intent, I think that includes, I believe, Mexico and Canada as well in that. So you would go as a partner with Enerkem?

Mr. Pullins answered yes.

Commissioner Diesen stated okay, go ahead.

Commissioner Reynolds stated if you've had a chance to do a study, that's a significant amount of biomass that we're processing in the area here. What would you estimate, or have you had a chance to estimate within southeast Volusia County how much biomass is collected in these landfills.

Mr. Pullins stated what we have observed and through working with Mr. Rodi, we see about, as a total Volusia County is probably around 1800 tons per day of municipal solid waste. Obviously we would need to work, I mean to get to that level because we're talking about almost 1100 tons for option four, we would need to work with the Tomoka landfill and they would need to benefit from this somehow as well. In you know taking waste at a lower cost and that may generate interest as far as they're concerned. The other thing is that one of the things that we know is that there are several cities and counties in central and north central Florida who are shipping by rail their wastes to Georgia, in the order of about \$35 a ton. We understand there's a decent railhead here, down the

(8-a) Proposed Alternative Energy Project – Horizon Energy (cont.):

east coast of Florida, so it's not impossible that waste would be sought or that people from a distance would seek to deliver municipal solid waste and wood waste or whatever to this by rail. So you could establish a siting, do an off load as a transfer station and bring it right straight to the plant and destroy it immediately; so I could see that almost making the source endless. But to answer your question specifically, around the southern part of the county, what we've looked at looks like about 600 tons a day.

Commissioner Reynolds stated a follow on question that I might ask you, would this be burning sludge for instance out of a sewer processing plant.

Mr. Pullins stated it can, as long as it has hydrogen and carbons in it.

Commissioner Reynolds well that would do it, yes.

Mr. Pullins stated the issue is getting the moisture content down to the right level. We need it down to about 10 to 12% and we can do some of that through our own drying processes but there would need to be something for waste treatment and wastewater treatment sludge there would need to some process in the front end to dry it down to our appropriate level.

Commissioner Reynolds stated in looking at the long term impact, if this goes over so well, there'll be some competition in an area so we would have to somehow come up with some long term agreements on delivery of these biomass materials I presume.

Mr. Pullins stated yes. It's important for our investors to have three things, secure site, secure power contract, and secure source.

Mr. Rodi stated I might add, again, the approach with this technology is a multiple fuel source, and you're not held hostage to any one so it does provide some flexibility. Even some of the Miscanthus can become a crop, so there are a number of alternatives, and that in the past has always been a weak spot in trying to move a technology forward. If it was natural gas then you're tied to the pipelines and you've seen what has happened to us with natural gas. Same thing's going on with coal as a fossil fuel and we really don't know what's going to happen yet with carbon emissions and all of those requirements as far as taxing potential, additional costs for generation.

Mr. Pullins stated I don't know the exact numbers but Miscanthus eats carbon dioxide.

Mr. Rodi stated yes.

Mr. Pullins continued with typically a stand of about 300 acres give you about a MW of output for a year, that's the numbers that we've worked, and that's what the UK has experienced where they have Miscanthus farms that are feeding a power plant. Using fallow land, I would not suggest you replace, you know, produce farms with Miscanthus, we don't want to get to the corn to ethanol problem. But the idea is that this is a high energy plant and it's very clean, you can use the whole stalk and it's a 30 year perennial. It's almost too good to be true but it's been proven in the field to be the right solution for energy crops.

(8-a) Proposed Alternative Energy Project – Horizon Energy (cont.):

Commissioner Diesen then asked what is the University of Illinois trying to do with this, you said they were experimenting.

Mr. Pullins stated they have been developing several different sterile hybrids because Miscanthus is indigenous to southeast Asia and we don't need another Cutsoo attack. Okay, so they've been very successful in the last six years in producing several sterile varieties and they're working on it for the output.

Commissioner Diesen asked is there any being grown in the United States at the present time?

Mr. Pullins answered yes, there's been Miscanthus farms in and around northern Illinois for almost six years now.

Commissioner Diesen added and they haven't taken over Illinois that I've heard or maybe; maybe Chicago, just kidding.

Mr. Pullins stated no, and added that's different.

Mr. Rodi then stated I have some comments I'd like to make. He thanked Mr. Pullins for going through the presentation and all the background work. He then stated part of what we've been trying to do with this generation project is not only find the right technology and being renewable, which is something that we started on when I first came here, but what we're also trying to do is benefit our City. In the set up with this, especially with the economic conditions we're all looking at, we had to try to find ways where everyone can win. So that if you're avoiding tipping fees or having reduced tipping fees as a city, and the recycling is done as it had been done before, you just throw everything into the garbage and they pick it up and they bring it here. And if you can get a better value by selling a recycled product out in the market versus the fuel component, you have the best of both worlds; so you eliminate another operation. Then there's the tax base, you know this is a lot of money and so obviously we're bringing an increased tax base that would just be the equivalent of the \$130 million, would be the equivalent of something almost the size of Venetian Bay built out. Think about that, \$130 million. We're also trying to have new manufacturing come in here. Obviously if you have something that's functioning, whatever components that can happen, rather than having service level jobs.

Mr. Rodi stated so there's a lot that we're trying to accomplish here and there's a great deal that we have to talk about yet, obviously. We're still talking about where and how and the details of this but you can see there's been a lot of work put into this already. From a generation standpoint, what we're also trying to do is have renewable sources here, and we're still having ongoing discussions with some companies that deal with maybe synthetic oil coming from algae. We're still talking with some solar providers for thin film, which is becoming of age with the plant that's in San Diego. So what we're starting to see is some tipping for competitive pricing. You can't support a \$32 MWh because it happens to be solar. If everyone did that, and no one wants to pay \$ 0.32 a KWh, we don't want to pay what we're paying now. So what happens with us at the \$64 MW is if you think about that, if it's fixed for a 25 year period, and that's the point I think Mr. Pullins was making, you have some flexibility about what happens with the energy future for the community and also how it might become a valuable asset elsewhere. So all of this is tied in with a lot of long

(8-a) Proposed Alternative Energy Project – Horizon Energy (cont.):

term analysis and I'm very grateful Mr. Pullins and others have taken my call. You go through this business, I mean for example getting generators, that sounds simple but in 2003 the market was bombed, no one was buying generators. But now, you've got to stand in line to get into the production schedule, that's what happened in the late 90's that ran up all the costs. And so as the economy swings back and forth there's some significant issues to overcome, and we went through our nuclear analysis and what happened, it's turning out exactly as we had thought it might well turn out. So many times companies like Mr. Pullins', that are leading edge and have great promise, usually don't take phone calls. And for those of you who have tried to develop projects, you send in your request, you call them on the phone, you send them registered letters, and most times, okay, fine, waiting lists. But we were treated very graciously and on a short time frame we developed just a look see and we wanted to bring this forward because we think this technology has a great deal of potential. It obviously doesn't look like a power plant but it does provide generation on the ground which we're trying to get back to.

Mr. Rodi stated so I wanted to make some comments in support of our City, in support of what our approach is here as the U.C. in trying to move this generation project, but a great deal of work needs to happen yet. So we're at this stage and it's real. He then added I wish Commissioner Zeller had been here, he can go kick the tires, and he will too.

Commissioner Diesen stated send him to Canada.

Mr. Pullins interjected well, there's not many choices, in Canada there's two seasons, there's winter and two weeks of bad sledding; going in January or going in April is not much different.

Commissioner Reynolds stated I guess a question would be, let's just assume we said this looks well enough to make some kind of a commitment to get that number one process going which is the paperwork, what needs to happen to do that.

Mr. Rodi stated well we've been talking about those what if's. I think what we're doing now is looking at the viability of certain sites and trying to work some of the economics out. But what we will do is put together, just like we did the Progress Energy contract, with your approval, and then we will also request the City's approval. Part of what we're trying to do, and we'll have to have other public meetings so that people can understand what this project is, but each step that we take will have to be validated. One of the first steps here is to show you what it is and to see if okay this looks good enough to keep chasing, and staff would suggest that it probably is. When we start to get draft contracts, that's when you'll look at them, legal counsel will look at them, and the City also will look at them because we're talking about a 25 year commitment but it's more than that. It's also an opportunity for benefit for our City as well. That's why we were very interested in this kind of an approach because it is renewable, and as opposed to just trying to chase a standard natural gas gen-set. I mean you can do that but you don't have anything that is going to provide not only the energy independence but some hedge against some cost issues and maybe some availability issues. Like anything else, it's new, it doesn't look like other things, but what's really behind this is something very normal. I was telling Mr. Pullins from my days in the steel industry, all of this makes great sense to me because of crucibles and molten metals and what happens when organic materials get into them and how you deal with so many parts of this. And then the generation set is pretty much a standard combined cycle, you have a turbine that runs on syngas and you put a steam

(8-a) Proposed Alternative Energy Project – Horizon Energy (cont.):

generator behind it. It's not anything that is unknown, we have combustion turbines ourselves, they're not efficient, and even we took a shot at can we do anything with those. So we will have to keep bringing back bits and parts of this, but we certainly would like to move forward with it if you think there is some potential here with this.

Mr. Pullins stated we also had an opportunity to discuss some of the other synergies that comes along, associated with the water, so there's a whole another side of that equation. When you get into the multi or poly-plant type application, where you can do more than just power, then it opens the door for some things associated with water production or cleaning.

Mr. Rodi confirmed and added it's our alternative water project.

Chairman Allen stated yes, I believe it's important as we look at it, to the multiple processes, as all of that starts rolling out in the future. Do we need some type of motion or something, if the Commission feels so to continue to allow moving forward on that.

Mr. Rodi stated all I want is the consensus of the Commission to move forward because we're not asking you for any approvals at this point but trying to get your reaction to what you've seen and already what you know in retrospect.

Chairman Allen stated okay, well I think you have our consensus to continue to discuss and bring forward and keep us informed with it. He then stated to Mr. Pullins I appreciate the information this evening, I know everybody kind of enjoyed understanding the technology this evening. He stated we look forward to hearing and seeing again.

Mr. Pullins thanked the Commission.

(9) Possible Other Business – Time for Commissioners:

Chairman Allen then stated we are coming to possible other business, for Commissioner time.

Commissioner Diesen stated I would just like to make a comment. I appreciate all of the hard work that went into this and all the ground work that was laid by Mr. Rodi. We've been looking at this for some time and I think it looks like it's beginning to pay off for us. Then I'd suggest you call Palm Beach because they're looking to start a second landfill; tie up their trash quick.

Mr. Rodi commented you know that barge that used to float around New York City and they didn't know where to put it for some time.

Chairman Allen then asked Mr. Rodi if he had anything further.

Mr. Rodi stated yes, I just wanted to make one comment about what had gone on a little bit earlier in the meeting. Part of what I was seeing was information that was presented to me that didn't turn out to be valid and that was very troubling. If there's some way to work through and help and fix we certainly will try, but there wasn't enough to work with. So I just thought I needed to make that statement.

(9) Possible Other Business – Time for Commissioners (cont.):

Chairman Allen then recognized a man in the back of the room.

The man stated Mr. Chairman if I may ask for a slight deviation from the normal order of business, I apologize, I missed the public portion. I would ask that I be given a few moments just to give a slight input, so I could have a little say here.

Chairman Allen stated okay, you've got three minutes.

The man stated I appreciate it. He then approached the podium and stated as you know Mr. Chairman, you've seen me in the building, my name is Dan Raymond, I'm the Business Manager for IBEW, the Union that represents this Commission. He stated I don't mean to be anti-climatic, it's really good stuff and I think it's a really good thing to be headed for. What I am asking for, as you well know, this Commission and the employees here are based upon the law, and that is the public employees. Under PERC we have only a few variable options to us and when we have a problem that we possibly foresee, the normal grievance process that would go through, could go through a process of a situation, a grievance, go to arbitration, go to Special Master, but ultimately it would come back to you. And that's just the way the process works and if we can't come to an agreement, then it would come to that. So I'm actually trying to bypass just a little bit here, save money for everybody here, save time for everybody here, and ask this Commission to take a look at a couple of issues, and one would be very specifically would be considering the seniority issue that is found in the Collective Bargaining Agreement, under section 7 of the Collective Bargaining Agreement. I'm not asking for an answer tonight, I'm asking for you take a look at it, we are at a variance on how we believe something should be seen. This is not a slap to anybody but it would come back to you ultimately anyhow and I think it would wind up going there. So I'm asking the Commission, we had a great relationship a couple of years ago but I see it starting to degradate a little bit now and I'm just asking, I see this coming in the future again where I may have come back to you on some other issues and try to bypass.

Mr. Raymond stated again, this is not trying to circumvent you Mr. Rodi, this is in the process of just trying to make sure that we just get to a quick resolution on certain issues and that seniority is a big and growing issue. Actually if you look in the back of the room you will notice that there are several union represented employees back here and it was because of the multiple phone calls that I got that I asked for this exception. I do apologize for being late. That is where I come from right now, we have other growing issues but as I see right now that seniority is a very growing issue that I would ask you to take a look at. We have a situation where people have gone from hired on under represented, went into management, and back to represented again and right now they are reflected as having only their seniority when they went back again. In today's times of economic times when potential layoffs maybe coming up and other issues that are along the way, we just need to get a resolution to this situation on seniority. Again I apologize for the anti-climatic side of things because this is some good stuff here, but I would ask you to take a look at that please.

Chairman Allen stated I would appreciate you to follow through your normal person that you go through and make that documentation available that it would flow through to Mr. Rodi, that we could get the information.

Mr. Raymond stated yes sir, I'll do that.

(9) Possible Other Business – Time for Commissioners (cont.):

Chairman Allen then stated okay, thank you.

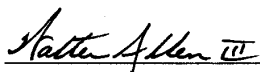
Mr. Rodi stated I have something that needs to be said, Local 2088 sent us a letter opening negotiations for this year. We negotiate and we have a principal agreement that was completed last year. The normal process is, according to the contract, to submit one item in addition to wages which were previously agreed to as being negotiable for this year. The item that was submitted, as I understand it, dealt with safety, okay so it was wages and safety. Now, if you negotiate an agreement that is the agreement. Prior to this, there's been a discussion about seniority and we had indicated, because as far as we're concerned that isn't opened again until the next principal agreement is opened. There's a disagreement over what contract says, not so much the practice but the contract. What I had said to Mrs. Di Chiara is that we're willing to talk about that issue and outside of the negotiations because we recognize it's an important issue, but if indeed we're going to have open negotiations like this, I'm not going to be as quiet as I normally am. So I think there's been opportunity here, and it awaits, to talk openly about this, and I see this as somewhat not constructive tonight. So we still would intend to move forward and talk about that issue because what we've said is we're willing to talk about it, regardless of the contract. He stated to Mr. Raymond, I respect the importance of your question and from our perspective we're doing all we can not to have reductions in force. So our first objective is not to have reduction in force and that's why we're going after savings. I wanted to comment, I respect what you've said, but I think it needs to be handled in the typical way of dealing with our personnel and human services group.

Mr. Raymond stated I did do that sir, and again, I mean no disrespect to anybody. That's where it would normally go, through a grievance process and/or arbitration, and this might have circumvented the time and money.

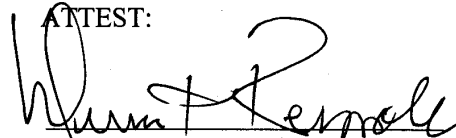
Chairman Allen stated to Mr. Raymond thank you. He then stated I just have one comment before we close our meeting, as many of you know Walter Glenn passed away a few weeks ago and our thoughts and prayers are with him and his family as he chaired this Commission in the past. That was just a comment I wanted to make as he served here. He then asked if there was a motion to adjourn.

There being no further business to come before the Commission, Commissioner Diesen made a motion to adjourn. Chairman Allen closed the regular U.C. meeting at 7:53 p.m.

APPROVED:


CHAIRMAN

ATTEST:


SECRETARY-TREASURER

These minutes were formally approved by the Utilities Commission at their February 23, 2009 meeting.