

AGENDA ITEM 2-b

MINUTES OF SPECIAL MEETING OF THE UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH, FLORIDA, HELD MONDAY, JULY 28, 2008, AT 10:00 A.M., AT 200 CANAL STREET, NEW SMYRNA BEACH, FLORIDA

Chairman Allen started with an invocation and requested Commissioner Diesen to lead in the Pledge of Allegiance immediately following.

Chairman Allen stated as I call this Special Meeting of the Utilities Commission of New Smyrna Beach to order, I welcome you. He added and I welcome City Commissioner Plaskett, it's good to have you with us this morning.

Chairman Allen then requested for a roll call to be taken with all of the Commissioners in attendance as follows:

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

Others in attendance were as follows: R. Rodi, General Manager/ CEO; L. Klinkenberg, Director of Finance; T. Beyrle, Director of System Operations & Generation; J. White, Director of Engineering; P. Perez, Director of H.R.; B. Bilinski, Controller/Budget Supervisor; E. Mahle, Public Information Manager; D. Simmons, Executive Adm./Recording Secretary; B. Preston, Interim U.C. Legal Counsel; City Commissioner L. Plaskett; City Commissioner J. Grasty (came at 10:20 am); Michael O'Carroll and Coy Jamerson, and Daniel McNair* (*telephonically), representatives of Clean Generation Energy; and Bob Tolley, a member of the public.

(1) Approval of Consent Item:

Chairman Allen stated as we begin our meeting this morning, there are basically four items on our agenda. We have a consent item and proceeded to read the title of item 1-a. Chairman Allen then asked if there was a motion and a second to approve the consent item.

Commissioner Diesen made a motion to approve the consent item, item 1-a. Proposed Infrastructure Fee Return Agreement for Ingham Property Venture, Inc., to approve the agreement, and upon execution of said agreement, approve the return of \$158,609.50 of infrastructure fees paid by Ingham Property Venture, Inc. for the abandoned project titled "Smyrna South", and authorization for the General Manager/CEO to execute same on behalf of the Utilities Commission. Commissioner Reynolds seconded the motion and it passed unanimously on a roll call vote.

(2) R&D Project Presentation – Clean Generation Energy (via teleconference):

Chairman Allen then stated the next agenda item, item 2. is the R&D Project Presentation – Clean Generation Energy, and I'd like to turn that over to Mr. Rodi so that he can introduce everyone.

Mr. Rodi stated thank you, I'm really looking forward to this presentation and the future that I believe it will bring to New Smyrna Beach. With us today we have Michael O'Carroll who's the

(2) R&D Project Presentation – Clean Generation Energy (cont.):

Vice President of Clean Generation Energy, and Coy Jamerson who is the Regional Consultant for Clean Generation Energy. He added if he's still holding that title, I'm not sure.

Mr. Jamerson stated I'm actually the Vice President of Operations.

Mr. Rodi congratulated Mr. Jamerson. He then stated what we have as far as just the process we'll use today is Mr. Jamerson, I believe, will start off and then turn the presentation over to Mr. O'Carroll. Near the end of the presentation Mr. Jamerson will call Teresa O'Carroll who is the president of Clean Generation Energy, and Dr. Dan McNair who is the owner and inventor of the technology that you'll see. Then they'll be available for questions at the conclusion of the presentation; so did I get that right?

Mr. Jamerson stated you did very well.

Mr. Rodi stated good, and with that he requested for the lights to be dimmed in the back so that the presentation would be easier to see.

Mr. Jamerson then thanked Mr. Rodi and stated we certainly appreciate you allowing us to be here this morning. We've got something really exciting to show you, this has been in development for five years. I'm going to tell you a little bit about the people who have been working on this invention. It's actually an invention where we combine five existing proven technologies and we rearrange them and work with them a little bit differently than they've been use to be working with, and we have come up with what we call our advanced chemical reformer. At this present time, as Mr. Rodi said, Ms. O'Carroll is on a remote project in Alaska, she could not be with us, and we're hoping to have her on the phone shortly. And of course, Dr. Dan McNair who is one of the chief inventors, he has a doctorate degree in chemical engineering and has worked in the nuclear field, the plasma torch field, and has been in other government agencies where he has been versed in many different areas of application that actually go into what the advanced chemical reformer will do.

Mr. Jamerson stated the company and staff, as far as the ACR system, is backed by 24 non-provisional patents, three provisional patents, and 10 trade secrets. The technology has been in development for the past four to five years. We have been through bench scale, pilot scale, and test scale. We are ready for commercialization at this point, so no more testing really is needed as far as laboratory testing or on our quarter scale unit. We are prepared now to go ahead and put it into a true setting and to go ahead, and use the research that we have to go ahead and move forward. The skills that Dr. McNair and the staff have based on the ACR system, is in solid waste management, bio-chemical engineering, environmental remediation, energy efficiency, alternative fuels, gas to liquid system processes, and so on.

Mr. Jamerson stated the ACR system has gone through extensive peer review. One peer review consortium is SCT in Germany, they are affiliated with the German Academy of Sciences, Dr. Gerde Sandstede, he is a renowned scientist, in fact there was actually a movie about him, I believe Stephen Spielberg did the movie, if I'm not mistaken, several years ago. Dr. Gerde Sandstede, actually did a peer review on this unit and on the technology. EBS Engineering in the United States also did a peer review.

(2) R&D Project Presentation – Clean Generation Energy (cont.):

Mr. Jamerson stated the chemical reformer and the engineering has been modeled using ASPEN which is the most approved and most recognized software in the chemical industry (and then spelled ASPEN). He stated it has acceptability at 50% efficiency. Everything that we have done as far as the modeling of our unit, we've kept conservative. Some people come out and say well it does this, this, and this. We have kept our modeling at 50% efficiency. The unit will do 75% to 85%, and with newer technology we are discovering even weekly that we can incorporate into the unit, it will actually even have greater efficiency. But for conservativeness we're keeping it at 50% efficiency.

Mr. Jamerson stated we have gone through the Department of Energy commercialization check list and we have completed that check list all the way through. We have design packages completed and they are ready to build. So at this point, as a short introduction, I'd like to turn over to our Vice President, Dr. Michael O'Carroll, who would like to present to you a PowerPoint about the advanced chemical reformer.

Dr. O'Carroll thanked Mr. Jamerson and stated we are glad to be here today. This is exciting technology, we believe there are two buzzwords in America and in the world today, both start with the letter "e" - environment and energy. And we believe this technology can dramatically affect both of those words, energy and environment. You'll see in just a minute that this advanced chemical reforming is a technology that has many applications and the applications, as I've said before, can produce energy without greenhouse gas emissions. So we're still determining this, a R&D project or R&D technology, but as Mr. Jamerson said there are no more experiments, there's no more testing. We have all the data we need for the Department of Energy and the Department of Environmental Protection. So I'll go forward, if you have questions, you may want to hold your questions until the end. Dr. McNair will call in for a question and answer period and a follow up, and possibly Ms. O'Carroll as well.

Dr. O'Carroll stated I'm presenting to you today the advanced chemical reforming, clean energy for a new generation. He went to the second slide and stated ACR means advanced energy solutions. As the gas scare continues in America, people are scrambling for solutions to our energy crisis. You'll go on CNN news, FOX news, etc., and daily you're seeing people coming on board trying to rush to the forefront and bring a technology that can meet those needs. We believe this technology can do that.

Dr. O'Carroll stated the world has a dilemma and of course the United States of America has the same dilemma. Our world's need for energy continues to grow, there's a build up of carbon gases in the atmosphere, economic growth depends on producing more energy, and of course America is an energy based country and we're consuming more energy every year. And then the world and the U.S. relies on a volatile petroleum based economy with unstable, escalating prices as we have seen over the past several weeks.

Dr. O'Carroll went to the next slide and said hydrogen is a need. You're going to see more and more, some of these automobile manufacturers like Honda, etc., are going to be coming out with some kind of hydrogen based automobile in the near future. Honda's already announced that they're coming out with one, a commercial model possibly within four years or less. But there's a problem and the problem is how do we get hydrogen in America so that we can fuel these cars and other technologies. He stated 40 million tons of hydrogen is used world wide annually, 96% is user

(2) R&D Project Presentation – Clean Generation Energy (cont.):

produced, and 4% is made by others and sold; only 4%. We believe our technology can remedy that last point there. Primary users of hydrogen at this point in time, chemical refining, de-sulfur diesel, hydrogenating oils, float glass, electronics manufacturing, metals processing, clean room, and, of course as I mentioned, the automobile industry is coming on quickly.

Dr. O'Carroll stated we believe we have a great solution, we have a team of scientists out west that have been working for the last, almost five years on this technology. They have come up with, over a laboratory situation and a lot of experimentation, a great solution and we need to consider these alternatives as an energy source. We need to consider hydrogen as the fuel of the future, a hydrogen fuel initiative will reduce dependence on foreign oil and greenhouse gas emissions. With the ACR technology, advanced chemical reforming technology, hydrogen can be used to produce electricity or high grade synthetic fuel and can do this with no greenhouse gas emissions.

Dr. O'Carroll stated we'll give you a little technology description of the ACR technology. Advanced chemical reforming provides advanced, state-of-the-art energy solutions. The ACR process utilizes water and carbon based material to produce low cost pure hydrogen gas. As you can see that's why it's termed the advanced chemical reforming, it's a chemical process. If you're familiar with the plasma torch technology, this is a chemical reforming process that creates an actual chemical plasma torch inside the vessel, inside the cell. But it's not like the plasma torch technology which is a technology using high heat, this is a chemical based technology. Our technology provides high production efficiency and low cost energy. The core processes integrate with existing systems and converts hydrogen to electricity or synthetic fuel. This technology eliminates pollution and greenhouse gas emissions. The process is a small footprint, is aesthetically pleasing, and is self-contained with no greenhouse gas emissions released into the environment. I think this is where you're going to find that our technology is different from every technology out there on the marketplace today, including plasma torch technology. The technology has broad applications with a focus on reducing independence on foreign energy reserves.

Dr. O'Carroll stated, and then the process in a simple explanation, we see the ACR process. The ACR process takes any carbonaceous feedstock, any kind of carbon based feedstock, whether its oil, natural gas, municipal landfill waste, coal, anything that is carbon based. Feeds it into the ACR cell or ACR process and the large molecules are disassembled into fuel building blocks. All the while this is a closed loop system, there are no emissions released into the environment. The greenhouse gases and those kinds of things inside the cell are recycled, put back through the system, eventually are broken down and taken out into a non-leaching slag; we'll talk more about that in a minute. But these fuel building blocks are what causes the production of the hydrogen gas. From there the hydrogen gas is sequestered off the top of the cell and either goes to a Fischer Tropsch gas to liquid converter, and that produces your high octane gasoline or diesel fuel, or the hydrogen gas can be sequestered and go directly to a generator, hydrogen generator, and can generate your electrical power which could be fed to the grid at that point in time. So your product, essentially, from the ACR process is hydrogen gas, pure hydrogen gas. From that product you can, at the site, make electricity or you can make gasoline or diesel fuel, high octane pure gasoline or diesel fuel.

Dr. O'Carroll stated again, any carbon based feedstock can be used, municipal waste is a great feedstock because it has a high carbon base in it. Also municipal waste is generally a wet

(2) R&D Project Presentation – Clean Generation Energy (cont.):

feedstock, this is a chemical reaction which likes a wet feedstock, it runs off a wet chemical reaction. So any feedstock with a water base is great, biomass is great, that has a high water content as well. Or you can use coal or any carbon based feedstock, off-spec oil, natural gas, etc. Again, that feedstock goes into an advanced chemical reforming cell, again, it is closed loop, it's recycled, and then you have no greenhouse gas emissions, no pollution. There you get your hydrogen boost and again, the final product could be either electrical power or liquid transportation grade fuel, gasoline or diesel fuel.

Dr. O'Carroll went to the next slide and stated this is a just a basic flow chart of the process. For instance, in the upper left hand corner you'll see municipal solid waste being used as a feedstock. It could be old waste that has sat there for five, ten years, it doesn't matter. Or it could be new waste, it could be brought right in and taken right to the system. Essentially it could be a recycling type of a format, although this system can take any kind of waste, it doesn't matter. Obviously if you put in non-carbon based material, for instance metals, those kinds of things, your efficiency will go down a little bit obviously. So if there's some kind of recycling of the metals, those kinds of things that are inert and non-carbon based, you might want to do that. But bottom line anything can go into the shredder pelletizer. That is not a new technology obviously, this shredder pelletizer will take the municipal solid waste, it will shred it and put it into about one to two inch size pellets which will be your feedstock pellets. The pellets will be fed into a closed auger system into the advanced chemical reforming cell at the bottom there, and then from there other things will be added. Process water will be added and some other chemicals, you see the GTLC at the advanced chemical reforming cell at the bottom. The GTLC is your gas to liquid converter, that's your Fischer Tropsch system. From there your hydrogen comes of the top of the advanced chemical reforming cell, goes directly to the gas to liquid converter, and makes your liquid transportation grade fuel, your gasoline or diesel fuel. With basically the turn of a switch, a knob, you can sequester that hydrogen to go to a hydrogen generator for electrical generation connected to a line and then you produce your electrical generation, if that's what you wanted rather than the gasoline or diesel fuel.

Dr. O'Carroll stated now in the near future we're believing that some application, some companies, municipalities, plants, will prefer to sequester the pure hydrogen and use the pure hydrogen in either a plant operation or for sale, storage, etc. Also, you see at the top, coal is a fantastic feedstock, coal is obviously carbon based and that is a very efficient feedstock. Biomass, crop residue, manure, wastewater sewage, those things can be used as feedstock because all those are carbon based feedstocks.

Dr. O'Carroll stated this is a little chart of your feedstocks to the left of the circle and your products to the right. You notice to the feedstock left, you'll see feedstocks that can be used for this system. Biomass, coal, municipal solid waste or trash, methane or natural gas, stranded oil wells, oil, shale, tar sands, petroleum sludge, pulp and paper waste, cyanide mine leach is a great feedstock, sewage sludge is fantastic, and polluted stack gas. This system can be attached to a polluting smoke stack and can clean up polluting smoke stacks, and clean up emissions from polluting smoke stacks. On the right side of the ACR technology you'll see the products, again hydrogen is your primary product. From that product you can produce electricity, gasoline or diesel fuel, and then there is an inert slag that comes off of the technology that ties up some of the sulfurs and things that is a non-leaching slag. It will not leach or pollute ground water, that has been totally tested for any kind of leaching and there is no leaching in that slag that comes off.

(2) R&D Project Presentation – Clean Generation Energy (cont.):

Dr. O'Carroll stated on the next slide, again, biomass is a great feedstock, biomass conversion utilizing ACR technology is a complete displacement of petroleum fuel. One ton of biomass equals approximately 60 kilograms of hydrogen gas in the ACR technology. The next slide is some of the biomass' that you could use, forestry crops and residues, agricultural crops and residues, sewage, sludge, municipal solid waste, and animal residues. For instance, dairy farms, you could use the manure from dairy farms, and industrial residues, for instance sugar cane crops; those kinds of applications.

Dr. O'Carroll continued with municipal solid waste, we are really looking at this one with a close eye because of the application, especially in Florida. We have met with the top officials at the State of Florida concerning municipal solid waste in Florida and they are excited because Florida is a place of a large population and growing landfills. This particular technology can kill two birds with one stone, it can clean up landfills. It can actually take a landfill down to soil base, we could remediate the soil and turn the soil and the landfill back over to developmental property. At the same time you can take the municipal solid waste in that landfill and turn that municipal solid waste into feedstock and produce hydrogen which you can then have your electrical production come off of that or your gasoline or diesel fuel. So it's a fantastic technology for taking care of municipal solid waste. Landfills are the single largest methane emissions source, the most potent greenhouse gas emitter. Municipal solid waste, on the average, contains 70% to 80% carbon. Landfill gas converted to hydrogen in the ACR provides five times the energy capacity of methane gas alone. In a typical landfill, even the ones you see that are trying to contain and capture the methane gas, they're only averaging about 30% containment and capture of that methane gas. With the ACR technology you can capture close to 100% of that methane gas because you're capturing the landfill waste before it becomes methane gas. We can even sequester the methane gas from the landfill and use that methane gas for the ACR technology.

Dr. O'Carroll stated coal, I said, is another fantastic feedstock. The current difficulty in using coal is obtaining clean, pollution free energy. And that's the cry right now, any kind of plant out there today is struggling with the pollution aspect of coal. With our ACR technology we have found that we can use coal as a feedstock and can reduce the greenhouse gas emissions totally through our technology which is closed loop and recycling. We can capture all of the greenhouse gases and take care of those within the ACR technology. Coal based feedstock and ACR provides a tremendous opportunity for environmentally sensible and economically viable energy solutions; so coal is a great feedstock.

Dr. O'Carroll stated here are a few production examples base on, as Mr. Jamerson said, a 50% efficiency with our system. One ton of feedstock into the ACR system produces about 30 kilograms of hydrogen. One ton of feedstock produces 600 KW of electricity and one ton produces about 40 gallons of synthetic gasoline or diesel fuel. The basic system that we're running is a 150 ton a day unit, so you can use your calculators and calculate what would happen there with a one ton times 150. We are calculating at 50% efficiency, if you run a basic 150 ton unit a day, for instance you run municipal landfill waste, trash, into the ACR system, a 150 ton basic unit a day will produce about 6,000 gallons of gasoline or diesel fuel per day; that's a basic system. We are working on miniaturizing the system and going down to below an 80 ton a day, right now 80 is our smallest, and some folks are asking for a 500 ton a day system. And we have some clients who are asking for us to put together a system in redundancy tying together several 500 ton units for large applications.

(2) R&D Project Presentation – Clean Generation Energy (cont.):

Dr. O'Carroll stated this is just a look at some of the processing equipment. You don't see the shredder pelletizer on there, that's a standard piece of equipment for industry. In the upper right hand corner you see the gas turbine, a hydrogen gas turbine which produces the electricity. ACR cell is a basic, just a basic vessel, it has a special lining obviously on the inside. These are large vessels, I'll let Dr. McNair tell you about the actual workings of the vessel, but it's a very simple system. Basically, for instance, you take your feedstock and process your feedstock into a storage system, the storage system feeds the ACR cell, the chemical reaction occurs within the ACR cell creating a chemical plasma torch scenario within the ACR cell. Certain elements are added into the cell, the cell is recycled, sequestering all the certain gases and cleaning gas, and from there the hydrogen is produced and goes to the gas turbine or in the lower right hand corner, if you desire, it goes to the gas-to-liquid converter, that's the Fischer Tropsch system. And you make your, for instance if you're running a 150 ton a day unit, you make 6,000 plus gallons of gasoline or diesel fuel which is very, very high octane.

Dr. O'Carroll stated Mr. Jamerson has been working with the State of Florida for getting approval for running syngas, using syngas, and we're making great strides with that; the State of Florida is very excited about that.

Mr. Jamerson then requested to take just a moment to talk about the synfuel. Synfuel is the short name, it's called synthetic fuel. Synthetic fuel was actually invented back in the 20's in Germany by a process called the Fischer Tropsch process. They basically take gases, hydrogen and carbon monoxide, and they're able to take those through a Fischer Tropsch process gas to liquid converter and they get out synthetic gas. During World War II Nazi Germany was actually using synthetic gas in most of their vehicles, their tanks, their jeeps, and things like that. As of about 16 years ago, the State of California has been utilizing synthetic gas, actually synthetic diesel from Malaysia, made by Shell Oil Company, and they have been using that synthetic gas or diesel in some water trucks in southern California. There has been no need to alter the engines or any of the fuel systems of the trucks. The synthetic gas is actually much cleaner than you would get normal gasoline because we are taking the building blocks of fuel which is hydrogen and carbon monoxide, basically that is hydro-carbons, and that's what we refer to as fuel, hydro-carbons. So you take the hydrogen, the carbon monoxide, you combine it, but in our process we are taking pure hydrogen gas and pure carbon monoxide off through our separators and we are feeding this directly and there's no sulfur, there's no contaminants, there's no additives or anything else needed, therefore you get a very clean fuel when it comes out of the Fischer Tropsch. The State of California, in fact Shell Oil actually has a website that you can go to that talks about their gasoline, their synthetic gas and diesel, and they have actually seen improvements in octane levels, improvements in the mileage of the vehicles, and also there is far less pollution coming out of the tail pipe than if you would have had conventional fuel; so just to let you know that.

Dr. O'Carroll thanked Mr. Jamerson and stated also South Africa has been using synthetic fuel for many, many years and is one of the largest producers and users as well. He then went to the next slide and stated this would be a typical facility layout. For instance, we had mentioned before that this is a system that takes a small footprint. This would be on three to five acres of land, typically it would be a building that would be climate controlled to ensure against dust and dirt, etc. You see at the top, your feedstock would come in at your top, and there are storage tanks for feedstock. You could shred, for instance if you're using municipal solid waste you could shred and pelletize

(2) R&D Project Presentation – Clean Generation Energy (cont.):

municipal solid waste, your trash, pelletize it and store it in feedstock tanks or silos. From there you would have a supply of feedstock ready at all times because you would want to run this system 24 hours a day. You would auger that feedstock into, if this is municipal solid waste, into the ACR cell or perhaps it would be sewage sludge or some other type of system. There will be several connections on that ACR cell depending on what type of feedstock you're going to use. Obviously there'd be a gas connection, some type of connection that would manage the sewage sludge, those kind of things. The feedstock would come into the ACR cell, process water would be added, you see the process water at the top right. That process water would be added to the ACR cell because there is a chemical reaction, and then from the ACR cell your hydrogen is produced. Your hydrogen comes out the top of the cell and either goes to the ACR gen-set to your right middle, and then to your power connection grid or your power grid. And then, or as Mr. Jamerson said, the hydrogen would come off the ACR cell and go to the Fischer Tropsch system which you were calling the gas to liquid converter skid, and you see that there on the right in the middle. If you're producing gasoline or diesel fuel, then you would have storage tanks there for some capacity of storage for your syn-fuel, at the bottom right. A gravel pad for your trucks to back up to and pick up your syn-fuel. There would be some process water impoundments, off of the system comes about 6,000 gallons of distilled water daily. It's pure water, you can drink it, it's not polluted whatsoever, it's totally distilled, but that water would come off the process and either be used in an impoundment to dry up or whatever you want to do with that water. You would see a basic shop control room and an office, that's a really basic layout, it's not a complicated scenario. There is a high tech control system, monitored by GPS. It would be operated by direction of an engineer status person and other types of technological workers.

Dr. O'Carroll stated let me give you a summary of some of the benefits. The advanced chemical process that recycles itself and creates heat, hydrogen and electricity is called the ACR technology, advanced chemical reforming. It does create heat, the heat is significantly lower than a plasma torch technology heat. The plasma torch technology heat, if you're familiar with that technology, is a super heat, not unlike the heat of the sun. The advanced chemical reforming heat is much lower, it's about 1,300 degrees Celsius. The pressure inside the cell, the advanced chemical cell can be run at atmospheric pressure or slightly above, so there's not an intense pressure inside the cell. There's no chance of explosion or anything like that inside the cell. Hydrogen comes off the top and goes over to your other technologies for gasoline, diesel production.

Mr. Jamerson stated just in case you have any safety concerns about this, we have built in many safeties into this system. As Mr. O'Carroll said, there's no real pressure inside the vessel and it can be run at atmospheric pressure or slightly above. The heat is anywhere between 900 to 1,300 degrees centigrade, which is as Dr. O'Carroll says much less than a plasma torch. We have several safeties built into the system, the system can basically be shut down completely by adding a simple chemical into the process and it basically shuts it down. And then it can be restarted again, almost as fast, by adding another chemical. The pad that is around the ACR vessel is a pad where it's like an eight inch concrete pad, there's nothing special that's needed as far as that's concerned because we're not talking about anything that's going to be a real hazard. If there is a breach in the vessel and any sort of chemical begins to come out, as I said we have safeties built into this that shuts it down. That was one of our foremost things to make sure that we don't have any issues in case there is a some sort of a breach. The lining that is built inside is very similar to that of the space shuttle tiles, that's inside. We have also been able to, during our testing, especially during the last six

(2) R&D Project Presentation – Clean Generation Energy (cont.):

months doing some further testing, we're able to use a standard household chemical to put into the unit that actually helps to build the lining up inside the vessel. That actually increases the sides or the thickness of the lining so that it actually creates a better barrier, and that actually becomes part of the process. So there are lots of things that we've been discovering, in fact almost monthly we're discovering new things. But just to address the safety issue, we had a very strong emphasis on that and we can explain that further later but that was the specifics there.

Dr. O'Carroll stated again this technology uses virtually any feedstock containing carbon, we're working with a lot of different applications. We have test data on all applications using coal, off spec oil, municipal solid waste, natural gas, sewage sludge, etc. This is a closed loop application, there's no pollution, no leaching to the ground, water or ground soil, and no contamination, no greenhouse gas released to the environment. As you've seen, it is a small footprint, now the footprint I showed you awhile ago was basically a 150 ton unit a day footprint. If you expand, the footprint would not be much larger than what you've seen there. We're looking at a strong focus on waste management obviously, and of course flexible sizing to meet needs. Eliminates petroleum dependence, it creates jobs, and provides strong economic returns. We are estimating at this time that we can produce high octane synthetic fuel gasoline at about 75 cents a gallon. Provides long term, cost stabilized, and affordable electric power and liquid gasoline or diesel. It matches government energy plans and the fuel produced is higher octane and cleaner than fuel currently used in automobiles and trucks today.

Dr. O'Carroll stated this clean, long-term, low cost, renewable energy source, again, is called advanced chemical reforming. He then stated that is a wrap up of the PowerPoint presentation. If you have questions for Dr. McNair, Mr. Jamerson is going to get him on the line and he'll do a follow-up as well. He stated while we're getting Dr. McNair on the line, do you have any specific questions before he comes on the line.

Commissioner Diesen stated well, I'd like to know if at what point, how much time it will take to get it up and running.

Dr. O'Carroll stated our first unit starts production next week and the first actual commercial unit is going to take about eight months because it's basically going to be hands on with the scientific team. They're going to be tweaking it, putting it together, so it's going to take about eight months for the first full-scale unit to be put together. After that, probably about two months for the next few and then on down to weeks after that, so they will come off the manufacturing floor pretty quick after the first is built.

Commissioner Hall stated you've been developing this for about five years you said.

Dr. O'Carroll answered yes.

Commissioner Hall stated okay, so I'm going to assume it's been tested extensively.

Dr. O'Carroll answered yes sir.

Commissioner Hall then asked what's the downside to us; I mean it looks awfully good.

(2) R&D Project Presentation – Clean Generation Energy (cont.):

Mr. Jamerson stated there's absolutely no downside at all, this is the great thing about this. As I said the gentlemen who have been working on this system and the people involved are some of the tops in their fields, and I'll have Dr. McNair maybe explain a couple of more things, but there's really no downside to this whatsoever. He added I know that sounds strange but there really isn't.

Commissioner Hall stated if it were to break down for some reason, what's the back up plan.

Mr. Jamerson stated the only thing that we foresee in this case, as far as a maintenance issue, is about every three to five years the liner would have to be replaced. That's the liner, the inside that keeps the chemicals in and everything else. At this point we are looking for a lot longer term liner because as I said they're developing a chemical to where it actually begins to add thickness to the inside of the liner and that actually, we believe, is going to help us have a much greater life span on the liner. It takes about, I think, three to four days for a crew to come in and completely remove the liner and put a new liner back in and get the system up and running.

Commissioner Hall stated you answered my question about maintenance. You had a slide that talked about jobs, do you have an estimate on what the pay would be for those jobs.

Dr. O'Carroll stated the jobs would range from non-technical jobs, like for instance processing landfill waste, recycling, shredder pelletizer work, you know non-technical manual type jobs for your processing the waste, pelletizing it, putting it in the storage tanks, those kinds of jobs. And then all the way up to an engineer status that would oversee a local plant, you'd have some technical folks in there monitoring the controls. So a wide range of jobs from non-technical all the way up to an engineer status.

Commissioner Hall asked are we the first utilities that you have presented this to?

Dr. O'Carroll stated you are the first city municipality, correct.

Mr. Jamerson stated we have gone to the State of Florida and have met with three senators. Senator Daniel Webster who you may know, he's a personal friend of mine. Senator Constantine and then he asked Dr. O'Carroll if he knew the other Senator.

Dr. O'Carroll answered Bennett.

Mr. Jamerson stated Senator Bennett, yes, and added don't tell him I forgot his name. We had a very nice meeting with them, we did not go asking for money. Which they said you are the first people that came to this building that didn't ask for money. We were simply introducing ourselves and letting them know we're coming in to the state and we were just going to introduce ourselves. They immediately wanted us to speak to the environmental protection people which we did. Both of the ladies in charge of the waste management and the second in charge of the DOE there, they were very excited about this. We did a presentation with them and got into some more technical issues. They then wanted us to come and meet with their complete staff of waste management people, air quality people, and such. We've had some very good meetings with them, in fact the air quality people, it was said they were the least hostile with our group than they've been with any group. So we were very happy about that and our scientists on our team is actually working with

(2) R&D Project Presentation – Clean Generation Energy (cont.):

the air people and sending them information so that we can do some preliminary permitting issues that need to be done. I have been working with the State of Florida with the Department of Agriculture, with two gentlemen underneath Commissioner Bronson, and we believe probably sometime very soon we will have a preliminary approval on the synthetic gas and diesel. At that point we will simply take them out and give them some samples of the synthetic gas and diesel we produce through the Fischer Tropsch process and then they will give us the final approval on this.

Commissioner Diesen then asked why didn't you ask for money.

Dr. O'Carroll stated this is a very exciting new technology, we are coming out of the research and development stage into commercialization, we are debt free, and the company is debt free. We are trying to fly under the radar for various reasons, not hiding anything whatsoever but we know this technology is a great technology. Is an answer for, as I said before, for environment and energy and so we want to maximize the impact of this technology when it comes to market and it's coming quickly; so we do have funding.

Commissioner Diesen interjected that's what I was getting at.

Dr. O'Carroll stated so we prefer to take it wisely and slowly. It's been a five year process already, so we think we're right where we need to be.

Commissioner Diesen stated I want to ask one question, piggybacking on something that Commissioner Hall said, the lining that you were talking about, you said it was the same tile they use on the shuttle. Is that what I understood you to say?

Dr. O'Carroll stated a similar tile yes.

Commissioner Diesen stated because there's been a number of failures with that tile, that's what concerned me ever so slightly.

Dr. O'Carroll stated right, I think those tiles, the failures were mostly they were falling off.

Commissioner Diesen stated I mean I don't want the whole lining to be a problem.

Dr. O'Carroll stated no, no, no, not at all. In fact that might be a good question to ask Dr. McNair when he comes on the line, but this is a very safe technology, there's not a lot of pressure, not a lot of heat. The hydrogen is not captured inside the cell, the hydrogen is sequestered off almost immediately so there's never enough hydrogen in the cell to cause a problem.

Commissioner Diesen stated different conditions, I understand.

Dr. O'Carroll stated correct, yes.

Mr. Jamerson stated when you're flying a space shuttle in, at many 1,000's miles per hour from space, it creates a lot of serious pressure, drag and friction. In this case they're stationary, so you've got a whole different situation than you would in a flight situation.

(2) R&D Project Presentation – Clean Generation Energy (cont.):

Commissioner Diesen reiterated understood.

Mr. Jamerson stated to Commissioner Hall, on your question about the amount of people in employment, there's basically, we have tailored the system to be operated by three individuals, eight hours a day, three eight hour shifts. The unit can run twenty-four hours a day, seven days a week, and we prefer to have one trained engineer or somewhat equivalent to be on staff at all times. And at least two other non-technical employees at that point. So one unit in place will probably produce jobs for at least nine to eleven people.

Commissioner Zeller confirmed this unit was a 150 ton unit.

Dr. O'Carroll stated that's the basic unit, the basic unit is 150 ton, that's what we've done most of the modeling on.

Commissioner Zeller then asked where can we see one.

Dr. O'Carroll stated as I explained before, the first 150 ton unit is being manufactured starting next week, it's going to be manufactured out west. There's a demonstration unit that's been running, there's a one ton unit that's been running now for a couple of years, and there's a quarter scale unit that has been running for several months now capturing data, etc. So you can't see the first commercial unit probably for about eight months, up and running actually at a commercial location. But when it's finished we'd love for you to come out and see it.

Chairman Allen stated a couple of questions. The first one I'm looking at is in your design what size of a generating set are you looking at, for the 150 ton unit.

Dr. O'Carroll stated that would be a good question for Dr. McNair.

Chairman Allen stated okay. The other thing is looking and planning, what is the estimated time for return on investment if one would build a unit.

Dr. O'Carroll stated we're looking at, depending on what your product is, if your product is electricity it's going to be different than if your product is synfuel. We're looking at about a two to three year return, if it's electricity, probably about three to four years.

Chairman Allen stated one other comment, just looking at your slide show that you had and your presentation, under the process equipment slide there you showed a gas turbine in the gen-set side. Just my comment, I think it ought to just say electric gen-set because there's different applications. I believe that wasn't a gas turbine setting there it was a diesel engine. So you know the applications can vary greatly whether it's running diesel engines or running a gas turbine. I just want to throw that comment out there.

Dr. O'Carroll stated I appreciate that.

(2) R&D Project Presentation – Clean Generation Energy (cont.):

Commissioner Reynolds stated understanding your carbon based fuel that you're using there, I can understand sludge, I can understand cow manure and city waste. When it comes to landfills, to process as pellets, it must be a pretty intricate operation trying to separate all the goodness gracious things known to man that fill that landfill. It seems to me that part would be, if this is thinking of throwing nuts and bolts into this cell, that probably is a pretty refined system rather than just creating pellets and shredding them, is that correct.

Dr. O'Carroll stated well I think it would depend on your landfill. If it's a construction landfill obviously they're already separating concrete out and they're separating metals out already. If it's a normal municipal solid waste landfill, this system will take, the shredder pelletizer will take all the landfill together. Obviously if there's a Volkswagen bus in there you would pull that out but normally speaking though you would take all of the municipal solid waste, wet, yucky, stinky, shred it, pelletize it, and let it rip. It doesn't affect the system if there's some inert materials in there.

Commissioner Reynolds said do they just sort of fall out of the bottom.

Dr. O'Carroll stated the inert, right, exactly.

Mr. Jamerson stated with a 150 tons, the average is a 150 tons of feedstock that comes into the unit through the pellets. We are based on the ASPEN software and what we've done so far, we get about 600 pounds of a molten slag. It's like if you were to use a torch and you get some of the molten metal, it comes out like that. And then it comes into like a slag, we put it in like a slag, like a block. And that block is totally inert, any of the mercury that's inside, like if someone throws away their thermometer, sulfurs and things like that, we use a technology that was invented and perfected back in 1998 by another renowned scientist to lock those things in salts. That actually gets locked into salts and then into this inert material. This inert material can actually be used and broken down in a process to be used as fertilizer, it can be used in building materials, and there are a lot of other applications for that slag. Or you could just take the slag material and you can bury it in a landfill and you basically have many times less than what you actually put into the system.

Commissioner Reynolds stated one other question, I've got two actually. Assuming that 10 tons of carbon fuel goes into the system, and other than the synthetic fuel of hydrogen, what comes out the other end tonnage wise, just taking 10 tons.

Mr. Jamerson stated well if you take 150 tons and you divide that by 15 you're going to get 10, so if you take this 600 pounds and divide that by 15 you're going to get 40. So you're going to have 40 pounds, for ten tons you're going to get 40 pounds.

Commissioner Reynolds stated okay, small reduction. Obviously you would be telling us if you had priced these units already, which apparently you're not a point yet where you can say for New Smyrna Beach if we wanted "x" size, here's what it's going to cost.

Dr. O'Carroll stated he would say on the pricing situation that you would be thrilled to know that the price is far lower than any kind of plasma torch technology. This is great technology, it does not require the exotic metals that a plasma torch technology would require because it's not capturing the same kind of heat and so the price is going to be significantly lower.

(2) R&D Project Presentation – Clean Generation Energy (cont.):

Commissioner Reynolds stated when you switch your fuel source, are there any adjustments you have to make in a control panel or you just dump it in.

Dr. O'Carroll stated very, very little, five minutes, just control knobs and it's done.

Mr. Jamerson stated you do have to have, if you do switch it from the hydrogen going to the hydrogen gen-set or you switch to the gas to liquid converter, there's about a five minute change there that has to take place, but you have to have, purchase the generator and the gas to liquid converter, so those are two separate purchases that have to be made.

Chairman Allen then asked if there were any other questions. There being none, he stated I guess we're ready for a phone call.

Mr. Jamerson commented he's (Dr. McNair) out in Idaho so hopefully he has woke up by now. Mr. Jamerson called Dr. McNair on his cell phone and asked him to call in when he was ready.

Chairman Allen stated to Dr. O'Carroll that there were a few of the staff who wanted to ask questions from the floor, so we're open to doing that if they want to ask them.

Ms. Perez then stated her questions are not going to be technical, however, part of my job is in doing diligence with the people that come on board with us and we ...

At that point in time, the phone rang in the DeBerry Room. Mr. Jamerson introduced Dr. Dan McNair, the chief inventor and chief scientist for the ACR technology. Mr. Jamerson stated to Dr. McNair that they were with the New Smyrna Beach City Commission (sic Utilities Commission) and some staff people in the audience. He stated they have about two or three specific questions that they would like to ask you.

Dr. McNair answered okay, I hope that I can answer them.

Mr. Jamerson stated the one question which was from Commissioner Diesen, she was asking about the tiles inside. We were indicating that they were similar to the space shuttle tiles, and she was a little bit concerned about the fact that the space shuttle loses some tiles now and then, just had a concern to make sure those are stable and those are viable and there's no problems with those.

Dr. McNair stated the actual liner inside the ACR reactor is an integral liner. It's not really composed of tiles, it's the same type of material that the tiles on the space shuttle are made of except they're non-carbonaceous, and the shuttle tiles are carbon. So this is a caste piece that's one solid piece. I think that should answer that.

Mr. Jamerson stated okay, and I think that...

Commissioner Reynolds stated I have one question, it's a new one I guess, inside the chamber, what outside source do you use, electricity in the chemical process, or is this strictly all chemical and it stands alone. Or is there some kind of energy source necessary to work with the chemical.

(2) R&D Project Presentation – Clean Generation Energy (cont.):

Dr. McNair stated the vessel is pretty much an empty vessel, there's an outside heating source that starts the chemical reaction. Once the chemical reaction reaches optimum temperature, the reaction produces its own heat. The vessel also has a unique design such that it produces internally its own power, and that's a unique part of the patent. But when you have free ions in a plasma state, if you put the right type of connections inside the vessel, the vessel itself can produce power.

Mr. Jamerson stated just by virtue of the chemical process.

Dr. McNair answered yes, for example in the world today, if you take electromagnetic rings and seed a plasma with potassium and shoot that plasma through those ring of magnets it will produce electrical power. That's called magneto-hydrodynamics, that was developed by the Department of Energy. In our case we're doing something different than that, but similar. We're taking a chemical plasma that has positive ions floating in it and we're building the vessel such that it can capture some of the power from those ions that are in that plasma. And that's in addition to the power that's generated from decomposing hydrocarbons.

Commissioner Hall stated in one of the slides I wrote down, green, closed loop emissions, no leakage. Tell me how you can guarantee absolutely no leakage.

Dr. McNair indicated that he had a little bit of trouble hearing that but he thinks he heard the question. The system is green, meaning it's environmentally friendly. It's closed looped meaning that all of the unit processes are interconnected with piping. And zero emissions, zero emissions is an industry term and you need to be careful about the word zero. There are very few things that ever achieve zero but let me explain that. We do not emit in this process, we carefully capture any gases that are not hydrogen or carbon monoxide. They're all sequestered and brought back through the system in this closed loop sequence to form solids which are inert and those are tested by TCLP testing to show that they're inert. They don't precipitate, it's just a metallic glassified solid. Hydrogen and the carbon monoxide are then used as products, they're not waste. They're either combusted to produce electricity or they are re-combined under the right circumstances to create liquid fuel. When you compress hydrogen and carbon monoxide to form liquid fuel you also produce water. So in a typical municipal solid waste setting, we're producing a solid that has everything in it that's not hydrogen or carbon monoxide and we're producing water and you're getting fuel or electrical power out of this system. So there's no stack, you don't see an emission trace, we produce a lot of heat which we recapture. It's a closed loop system and we say zero emissions because we're using everything but there's not, it would be disappointing to your state regulator not to be able to find a place where he could monitor outputs and check things. You could put a probe on the stack outside of the generator that's producing power because you're using atmospheric air, it's going to come in the combustion process. You'll see the same thing that's in the atmospheric air but you're producing power. And then you could put a probe in the water that's produced to make sure there's nothing in the water and that water comes out as distilled water. You can also take the solids coming off the reactor and send them to a lab and have the lab analyze them to make sure they're not leaching anything into the environment. So from that perspective it's a zero emissions process.

Commissioner Reynolds stated this may be a question, but here we are looking to quote budget out five years for power and you're at a point where you're producing your first commercial unit. If

(2) R&D Project Presentation – Clean Generation Energy (cont.):

you had to give us a calendar from the time that you are able to demonstrate with your commercial unit the feasibility and the economy of operating the system, what would be the time frame that we would have to budget in order to have the first unit on site.

Dr. McNair stated I'm not sure what was said in the presentation relative to where we're at in this process but right now we've successfully operated at quarter scale and are at the point where we would like to build a first full scale commercial operation. We anticipate that being a six to eight month process for the first unit, after that they'll be much faster.

Mr. Jamerson stated so in about six to eight months the Department of Environmental Protection for Florida, DEP, wants to come out to the first site to see it, and we would welcome any of the Commission here who would like to come to see that site as well.

Dr. McNair stated certainly, that's correct, they could come, walk through, and see the facility. We could provide them with data, answer any of the questions they have. Unfortunately a lot of the exciting things in the process that go on you can't see but you could certainly see a unit operating with feedstock coming in and energy coming out the backside. You could be provided independent data from our regulatory officials showing what they're looking for and confirming that they have not found anything.

Commissioner Reynolds asked do you foresee any challenges by EPA and other federal agencies that might delay your schedule.

Dr. McNair stated no, we've looked very carefully at that and have talked with numerous regulatory agencies. The facility itself is a solid waste processing facility and usually it's sub-class, meaning it's closer to what a transfer station looks like and how it's permitted. We've already met with the State of Florida and discussed this scenario with them and they agree with that. Then there are some minor permitting applications that are completed relative to providing them the ability to look at the solids, the water, and any air coming off the generator, but that process is a short duration permitting process. That same process in Florida also covers any aspects of the Federal Government's desire to look at what we're trying to accomplish.

Commissioner Diesen asked how much water does it take. I noticed the one slide where you had the water coming in, you talked about wetting the biomass or whatever. How much water, for the 150 ton, would it take.

Dr. McNair stated if you're putting 150 tons of biomass in the front of the process, we like to make sure that feedstock is wet so usually the feedstock can carry the water that you need and water is an integral part of helping us produce hydrogen in this process. So we use about 3,500 gallons of water coming in so you can, depending on how wet the feedstock is, you can determine how much more that represents. This does not have to be clean processed water, it can be sea water, sewer water, anything with chemistry in it is actually beneficial to us. On the backside you're producing water, if you're making liquid synthetic fuel, you actually can develop a scenario where you make your own water and in reality if you're making fuel you're actually producing 3,000 gallons of excess water a day in addition to what you need to run the facility.

(2) R&D Project Presentation – Clean Generation Energy (cont.):

Commissioner Zeller asked how noisy is this, the whole process.

Mr. Jamerson asked what was the question and then repeated the question to Dr. McNair.

Dr. McNair answered very quiet, we're using a lot of electromagnetic pumping equipment, it's equipment that works on the outside of the pipe not inside. It's also inside of a building and those are made so that it's noise proof. The actual movement of gas and some of the pumping creates a typical noise but this is not like an industrial scenario where your decibel volumes are over 85. They're far under 85, so in essence it's almost a silent process. The noisiest part of the operation, the facility, is the preparation of the feedstock. If that occurs at a transfer station, then the noise stays wherever that transfer station is at. If we bring raw material to our facility and shred it, then there's noise associated with that, but that noise can also be easily controlled. In some cases where we're using crop residue or human sewage or we're pelletizing them, that noise is minimized.

Chairman Allen stated another question is, in your scaling of the generator size for generating electricity, what is the gen-set size.

Dr. McNair asked Mr. Jamerson to repeat that question, as he did not hear it.

Mr. Jamerson stated Commissioner Allen was concerned about the output of the generator for a 150 ton unit, and how much power we can produce.

Dr. McNair stated a 150 ton per day unit, depending on the type of feedstock and its percent organic content and the efficiency, would produce anywhere between five and fifteen MW of power. The output of the power is a function of who purchases the power, meaning you can regulate the voltage into the line however you'd like.

Mr. Jamerson asked Dr. McNair what size generator would there need to be for a 150 ton per day unit.

Dr. McNair stated well let's see without getting into, I'm talking to electrical experts I'm assuming here so they probably know a little better than I do, but we modify a typical GE gen-set we're using. They're gen-sets just in the mid-size, mid-range size, skid-mounted and sit on a 40 ft. trailer, so it's fairly small.

Chairman Allen then asked if there were any further questions.

City Commissioner Plaskett stated I'm not sure if Dr. McNair realizes he's at the Utilities Commission meeting, I'm a City Commissioner and my question is when this unit is set up for the Utilities Commission or City Commission or any other interested parties, is that location a secret.

Mr. Jamerson stated as far as the New Smyrna site?

City Commissioner Plaskett stated wherever you're going to have the new unit set up.

(2) R&D Project Presentation – Clean Generation Energy (cont.):

Mr. Jamerson stated the first unit, it's not completely a secret no, but we're keeping everything low key until we get it up and running.

City Commissioner Plaskett stated all right, thank you.

Dr. McNair then asked if she got the answer she needed.

Mr. Jamerson stated yes she did, she got her answer. He then stated if there's nothing else we appreciate Dr. McNair getting up earlier over on the mountain time and helping us out. If there's nothing else we'll let Dr. McNair go.

Dr. McNair then stated thank you for your interest, thank you very much.

Chairman Allen stated to Ms. Perez, you were in the middle of your question, if you want to go ahead with that.

Mr. Jamerson interjected I apologize about that.

Ms. Perez stated somewhat to piggyback on Councilmember's Plaskett's comment, us being a municipal entity and I'm the H.R. Director for the Utilities Commission, and the diligence that we have to do on the people that we work with, and we have the Sunshine Laws, Freedom of Information. You've mentioned several times that you're trying to fly under the radar, I certainly understand because everybody would want to go out and grab a piece of this. Funding, obviously you gentlemen must be paid in some way, shape, or form to be here, and I'm not asking right now but I'm saying for the future when you make your presentation will there be a prospectus of like do you have a board of directors, are you funded by venture capital or angel investors, whomever it may be. Are these people that we would see and know, like who are we in business with and who are we working with and who might be influencing number one what we do. She reiterated which I'm not asking for an answer I'm just throwing it out there because we're a public entity and people will want to know. Secondly, the staffing piece which would be my issue. You have mentioned three individuals per shift, eight hour shifts, a trained engineer, I'm guessing some sort of an operator, some sort of a maybe what we would call a UE III, I think you called it a recycling person, and we might need a clerical. She stated so I'm just guessing because I kind of think about our staffing costs at maybe \$70,000 or more for an engineer, \$45,000 for an operator, \$27,000 for a manual person, another \$28,000 for clerical. Possibly and I could be way off here because I'm guessing, \$147,000 per shift times three, we're in the \$500,000 bracket, and then we don't know you know to maintain it, maybe other things that are going on. So again, I'm just tossing out what we're thinking about is how we're going to staff it, the technical needs, and how we advertise for these people.

Mr. Jamerson stated right, and that's a very good question, and what we have done in order to help any municipality or any company that we have a partnership, we are actually providing those people in the beginning. So we have our staff of people who would come in, and I think Mr. Rodi had an interest in gradually training and rotating out and things like that. So that's the kind of scenario that he had mentioned and so I think what we can do at the time we come closer to some sort of a contract, or you know the interest is there, that we can pursue this area. Then we would sit down

(2) R&D Project Presentation – Clean Generation Energy (cont.):

and talk about a long range plan to help you to be able to do your planning for HR development.

Ms. Perez stated okay and my last question is the government. When they see an idea that they think maybe at some point down the pike should be mandated or they would want some involvement or control in, and I don't know as far as if there becomes government funding that's involved, and that's left for Finance, but are you seeing kind of working hand and hand with the government or staying private.

Dr. O'Carroll stated we are working with several class in several different scenarios. Private funding, we're talking with some government entities about government funding, so we're not closing the door on any kind of funding. Currently we do have funding from a certain entity, but yes, we're not closing the door on government funding as well down the road.

Mr. Jamerson stated we were actually asked to come back to the state a second and third time and they expressed to us that they would like to talk about some way to fund this because they're all very excited about what we've shown them. Obviously, when we were in the DEP meeting there were some very technical questions asked. Mr. Rodi is very familiar with the technology, he has a little ..., he's an Einstein, and he understood the technology in a great way. In fact he asked some questions about the technology that were actually questions that Dr. McNair had a little bit of a concern answering because those are some very highly technical questions that delve into how the chemistry works; so Mr. Rodi understands it very, very well. So those types of people who have that type of mind set, a very scientific mind, were some of the people at the state, and they want to fund this. There was not money, like I said we didn't go asking for money, they asked us to come back and said we'd like to give you money, I said well, okay. So they did not have any further money in the budget for this year but they are either slating this for one of the Governor's projects, they have an interest in doing that, or putting this in funding in an energy bill next year.

Ms. Perez stated you have private funding now.

Mr. Jamerson stated yes.

Chairman Allen stated I'd like to kind of make one comment that might clear up some of the questions that Ms. Perez was asking, and I'd like to pass it over to Mr. Rodi to explain. Just talking about open communication trying to share how we got here and being that it is R&D there are some real needs that you need to explain to the group.

Mr. Rodi stated what our approach with this is that, as you well know for those who are more familiar with our operations than our guests. We had gone out for a request for qualifications early, and then we went out for a request for purchase for renewable generation. From that had come a number of R&D projects as opposed to a direct project like a gas turbine gen-set combo, which is pretty traditional. We were fortunate enough to have been contacted, Dr. O'Carroll had contacted us and made us aware of this technology. We had some preliminary meetings to find out what is the capability of the technology, where does it stand, and as the Commission may recall I had asked for participation by Commissioner Allen to meet, which he subsequently did, and also Tim Beyrle. Recently we added Jim White, who's our Chief Engineer, into the meetings.

(2) R&D Project Presentation – Clean Generation Energy (cont.):

Mr. Rodi stated the purpose of this meeting today was to introduce the technology. We wanted the Commission's view because you've not had a chance to hear any of this previously. We're formulating our business approach with this and part of our conversation has been we were probably more interested in a purchase power agreement. So that if we receive electricity on the grid, renewable source, then we would buy that energy, and we could also buy the syn-fuel. Now understand that we have a number of generators that can run on the syn-fuel and I think Dr. O'Carroll mentioned a price for a gallon of syn-fuel. Our least efficient generators at \$2.00 a gallon, and the BTU's value is a little bit less for this material, we were looking at 25 cents a kilowatt hour with \$2.00 a gallon. So if we're substantially under \$2.00 gallon, where right now the market's at over \$4.00, you can see that even our least efficient generators could provide a competitive source on the ground.

Mr. Rodi stated so part of what we've been talking about and it's very important because of our load profile, in the evenings, 2:00 a.m. or 3:00 a.m., we don't need a lot of power. We have our nuclear generation, we have other power coming in off the grid on our new contract, but the minute we get beyond that low load period, it ramps up very quickly. And what happens to us, like most utilities in Florida, but it's especially true this year, is that when you reach the peak periods, buying power during those peak periods is just exorbitant in costs. And by being able to toggle between making syn-fuel or generation, that becomes a very powerful tool for us because if we can then have competitively priced peak power on the ground then we don't have to pull it off the grid. If we're not making power, then we could end up using the syn-fuel when we do want to make power or you can sell the syn-fuel.

Mr. Rodi stated we have yet to talk about that relationship other than we wanted a purchase option with this. So it becomes important to understand that this is the last stage of their R&D project where they're moving to commercial status. So some of the questions about well, show me the traditional application you have, is non-existent by definition but the technology is so different. Part of what Dr. McNair just started to talk indirectly about was having a generator that is not traditional, he was talking about no moving parts. So there are extreme advantages to that kind of a generation technology which can provide multiples of efficiency. So this is some of the potential for this in the future.

Mr. Rodi stated one other element is it's small scale, almost all of this, if you will, trailer mount. The vessel itself, the Fischer Tropsch system, the generator, when you're finished with it you pick it up and move it around. So there are, and this is why I thought it important enough to bring it to the Commission, when you see the potential, this is such a difference in the way technology operates in the electric industry today; that's what makes it so different. First of all, it's chemically based, it's not a combustion product. He stated so there's much, much more for us to do. We've been very careful, we have a confidentiality agreement, there are details that I know that I can't reveal, and over time I think we have begun a relationship where there's trust and we will go through the financial review; we're doing some of that now.

Mr. Rodi then stated just so everyone understands Ms. Perez' question. Ms. Perez has a non-traditional H.R. role, part of what I have charged her with is a business application of how H.R. expertise supports and helps to promote and develop the business. So her questions were very non-traditional, she had asked before she got up if she could ask those questions from a standpoint of

(2) R&D Project Presentation – Clean Generation Energy (cont.):

sensitivity. But what they're intended to do is show that H.R. has gone much beyond the traditional do we have a position description, does it have the qualifications and duties, etc. The question becomes how does this position actually deliver value to the entity, to our enterprise. So I wanted to, because I saw a few folks wondering where she was coming from, and that was part of the reason for the question. We do have our due diligence, if you heard one of the numbers, I think we have very good potential. I have requested that a manufacturing facility be located in this general area, you know not only thinking about the jobs that could eventually become U.C. employees, but also because of the opportunity. You know Canaveral is going to be shutting down here, there are many high tech people who live in New Smyrna Beach and it's unusual to have access, in Florida in particular, to this kind of person. So they're here, it's not just me trying to promote economic development in my community. He stated that's some of the background with this but I really felt it important at this point in time because there's a good fit between the technology and the needs of our community and also the Utilities Commission. He then asked Chairman Allen if that answered his question.

Chairman Allen stated yes, and stated the one thing I see, and you hit on some of it from different times that we've talked, and I've seen it in the slide, the emissions coming off a lot of our plants, and the smallness of this plant, this production. I mean you're talking about cleaning up stacks and you look at coal sites, it makes them even more a greater potential and the feedstock is already sitting there. Not only are you cleaning up your emissions, but the product that comes off of it along with clean up. As it proves out in the next year, year and a half, there's going to be a great demand that I can see. The plant really turning out these packages to be able to utilize in many different areas; so I just see a great potential.

Mr. Rodi stated the fuel flexibility means that you aren't held hostage to any one fuel. You know we started talking about a biomass plant a couple of years ago. The first thing I mentioned, hogged wood. A lot of farmers have very, very wet woody product that they can't find a place to get rid of it. The minute I started talking about it, they were talking about they were driving it hundreds of miles to get rid of it, then all of sudden it was we'll sell it to you for "x" price. What that means is if there's hogged wood available we'll use it, if there are wood chips we'll use that, if there's some municipal solid waste we can use that, if we find some old coal product, we can use that. And what that allows in this technology, and I know for our guests I'm preaching to the choir here, but what it allows us to do is not be totally dependent upon any one approach. So that in and of itself has great potential, especially in Florida and other parts of the world. I know that Dr. O'Carroll does have in mind other parts of the world as far as helping there. He stated so, that's my spiel.

Chairman Allen confirmed there were no other questions or comments. He thanked Dr. O'Carroll and Mr. Jamerson for coming and spending time with the presentation and providing the information to kind of open up where we can start moving forward.

Chairman Allen then started to proceed to the next agenda item.

Commissioner Hall requested a brief break.

Chairman Allen recessed the Special UC Meeting at approximately 11:32 a.m.

(3) Status of U.C. General Manager/CEO Contract of Employment:

Chairman Allen reconvened the Special Meeting at approximately 11:37 a.m. and stated we will now consider item 3, status of U.C. General Manager/CEO contract of employment.

Commissioner Diesen distributed a copy of the proposed contract to the U.C. Commissioners and U.C. legal counsel. She stated we'll make this short and sweet and to the point. At the last meeting I asked and was affirmed to be able to work on Mr. Rodi's contract. We discussed it and we brought it back to you. This will be a new contract, you have it in front of you with the few changes. We're looking at the original 2005 contract, the revisions in 2006, and so we'll go through the changes that we're proposing for this one, and it's on the front. She stated the term of course changes, it will be one month short of four years in the new contract, that will be in the first paragraph. In the second paragraph, in paragraph 8, the change before January 2, 2010 to July 21, 2012, and add immediately after base salary, "plus one month base salary for each full year or portion thereof of employment at the Utilities Commission", and then change January 2, 2010 to July 21, 2012.

Commissioner Hall stated may I ask a question right here.

Commissioner Diesen stated you may.

Commissioner Hall stated adding the one month starts when, is it retroactive to when he first came to us or retroactive as of 2008.

Mr. Rodi stated it states term of employment with the Commission.

Commissioner Hall interjected maybe I should read it right, okay, good.

Commissioner Diesen stated okay, and then to the end of paragraph 8, which is the one we're really working on, add the sentence, "If the ROBERT J. RODI receives a suggestion, whether formal or informal, by the COMMISSION that he resign or reduce his salary or benefits under this contract or refuse to comply with any other provision benefiting the ROBERT J. RODI then, in that event, the ROBERT J. RODI may, at his option, be deemed to be "terminated" as of the date of such reduction or such refusal to comply with any provision benefiting the ROBERT J. RODI or receiving a suggestion of resignation. In the event the ROBERT J. RODI exercises said option, the ROBERT J. RODI shall immediately provide written notice to the COMMISSION. In the event such termination occurs, the ROBERT J. RODI shall be entitled to the severance pay described and any personal leave benefits as applicable to other employees." She stated those would be the changes that would come forward in this new contract that would be dated whenever it's approved by this Commission, for a term of three years and eleven months.

Commissioner Hall stated to Mr. Preston, there's a situation with the school system where the current Superintendent is reopening her contract and reducing it by 2%. What if Mr. Rodi wanted to do that, he has the option of doing that.

Mr. Rodi stated I think I have the option with the concurrence of the Commission.

Commissioner Hall stated okay.

(3) Status of U.C. General Manager/CEO Contract of Employment (cont.):

Commissioner Diesen stated I didn't ask for additional money in salary for him, I thought that was pretty good.

Commissioner Hall then asked why didn't we ask for additional money.

Commissioner Diesen stated Mr. Rodi is comfortable with the contract he has. I think it would be up to this Commission if they want to do anything extra over and above incentive wise.

Commissioner Hall stated well I think in the near future we need to talk about that.

Chairman Allen stated I'd agree with that also.

Mr. Preston asked to just elaborate on that point a minute. If you look to the contract Mr. Rodi has, he has a base compensation which is then affected by the consumer price index annually.

Commissioner Diesen stated right.

Mr. Preston stated should you wish to address this issue, you either should address the base compensation rate today in this contract or if you also see in paragraph three of that contract dated September 19, 2005, that you may at any time provide merit or performance increases by your action. So that if you consider at a later time any additional monies for services, it would be considered merit or other increases, not salary increases tied to the CPI; just for clarification.

Commissioner Diesen stated and we talked about that, he's ...

Commissioner Zeller interjected to Commissioner Diesen, is Mr. Rodi happy with this contract.

Commissioner Diesen answered I think he is, jokingly commented I didn't get hit or anything, and I would take that as a yes.

Mr. Rodi stated just straight on, so you understand, the provisions that you see here are basically a new contract that adds two years to my current term. I'm including the language that is in other city contracts, so that's where that language came from and I think it's a matter of parity there. The implication about my salary, you know I can give you references that I can well argue that I'm underpaid. Despite the fact that, you know, this is not a taxing unit and the comparison is with other utilities. If you want to compare to other CEO's in Florida and Volusia County, I'm still underpaid. So I'm taking your question, Commissioner Hall, head on, and I can produce those documents; that isn't my interest. Part of what I was trying to show today is this kind of technology that I brought forward, the return to the community on the addendum alone is almost as great as our total senior debt. Now that's a significant contribution that has been made here, in addition to the cost avoidance for the WAV issues, the desal issues, and we're talking about hundreds of millions of dollars – I've done that. This isn't something where I've come forward and said, well, you know I'll do these things, I've already done this. So my interest is simply to maintain what it is and provide a little more protection. I would hope that you all stay here too.

(3) Status of U.C. General Manager/CEO Contract of Employment (cont.):

Commissioner Hall stated well, I agree with what Commissioner Diesen has done but I'm just looking towards the future and as one Utilities Commissioner I think that we need to reassess the base salary, as I said at some point in the not too distant future. And that means within the next four to five months. I think that somebody needs to take the lead or we need to put it as an agenda item and discuss it openly because we have to, and then go from there with it. Because I know that you're in a debate, I've done some investigation, I've asked around, and I was in those shoes before for eight years. He added, never got out of them.

Commissioner Diesen then stated I'd like us to move forward with this new contract today however, because it does give Mr. Rodi parity when he's dealing with other entities and I think that's very important. I have no problem with addressing incentive or whatever at any time, that wasn't his pleasure at this point.

Commissioner Hall then stated I move acceptance of the changes in the contract. Commissioner Zeller seconded that motion.

Chairman Allen stated okay we have a motion to accept and a second.

Mr. Preston stated could I ask at this point just permission to do some wordsmithing. And that is if you look at the third bulleted paragraph, and in particular the last sentence which contains the word "below". I would remove the word below because there is no severance package specified below. So either incorporated herein or...

Commissioner Diesen stated and I didn't read it "below" either, and added you may.

Commissioner Reynolds stated cross out below, right.

Mr. Preston stated that would suffice, that I think would then convey the intent of what the contract wants.

Chairman Allen stated okay and confirmed all was in agreement. He then asked if there were any other questions.

Commissioner Reynolds stated I have a discussion, but I'm with Commissioner Hall, if you'll recall the last meeting I brought up the fact that Mr. Rodi was working on an incentive program for the whole Commission. And I think that's really the way to go because we want outstanding producers and Mr. Rodi will be obviously the person implementing those policies and obviously under those policies, so I think his performance is performance based in terms of bonuses or other compensations. Because that truly, when we can show the utility users and the citizens of this city that Mr. Rodi in fact did these things, and here's why and here's how much money he saved each one of us ratepayers, then that certainly is something that everyone understands; so I'm definitely for that part of it.

Chairman Allen stated yes, and the other thing I wanted to comment, and I'm somewhat in agreement with Commissioner Hall, we look at industrial, whether it's industrial and also inside of the governmental agency as far as having a high quality Chief Executive Officer and you look at the

(3) Status of U.C. General Manager/CEO Contract of Employment (cont.):

levels where we're at. Municipal utilities are always below where industrial standards are as far as their CEO's, and so often what happens is because of keeping everything at a minimum and staying minimal and not keeping with some level of industrial standard, one of the things that comes to play is when you move forward, because we know as life goes on, you're Chief Executive Officer's not going to be there forever. Then all of a sudden you're sitting here with this low standard and you go out and try to bring in someone of that caliber or even greater, you have a hard time accomplishing it because you're used to keeping someone suppressed, and how do they put that, you're dumb, fat, and happy. And you just continue like that for years and you kind of blind yourself to understanding what you're getting and the quality that you have until after you've lost it and you try to replace it. So I think somewhere along the line there needs to be a looking at that ratio where we're at and being honest, up front, and properly compensating. You know I think incentives are a great thing, it's a great tool to keep employees motivated, but when you look at the big picture, I mean let's be real. So that's where my concern lies and I appreciate Mr. Rodi and his effort that he's put in here and his dedication and his vision and his foresight for the Utilities Commission and for this community, that it would be a much better place in the years ahead; so with that.

Commissioner Diesen stated I tried, I tried, and added I failed.

Chairman Allen stated well as long as he's happy we're there, but I'd just like it to be on the record that I think it should be a little better on looking at compensation as far as there. So with that, any questions.

Mr. Tolley stated did you finish the vote on the motion sir.

Chairman Allen stated not yet.

Mr. Tolley stated okay.

Commissioner Hall commented stay awake.

Chairman Allen stated with no other questions, he requested the Recording Secretary to call the roll.

Ms. Simmons confirmed Commissioner Hall made the motion and Commissioner Zeller seconded the motion. Commissioner Hall's previous motion then passed unanimously on a roll call vote.

Mr. Rodi thanked the Commission.

Chairman Allen added to Mr. Rodi we appreciate it, and moved on to item 4.

(4) Possible Other Business – Time for Commissioners:

Mr. Rodi stated I think as you will hear more and more coming from the state with regard to renewable portfolio standards, and whatever this technology, and we have other R&D projects that leverage with this project, I think that it will be very helpful not only for our citizens but give us enough energy independence that we won't continue to be victimized by the grid.

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

Commissioner Hall then asked is it possible for us to get a copy of their presentation.

Mr. Rodi stated yes. They presented this morning and they said after the release, then it's a public document now.

Commissioner Reynolds stated just in your own opinion, what would you say the time would be from today until the earliest feasible time that we could actually see that in operation, to assist us here.

Mr. Rodi stated I had been asked that question at the City Commission meeting, and I just made a guess and it was 12 to 18 months out. What you heard here today was that they're 8 months out on having their first commercial unit a couple of months after that. The set up for this is not complicated from a standpoint of the physical environs, you know we're talking about like a 60' x 60' building that has 20' ceiling working height. And so, you know, it's not going to be a big deal. As we get information about connections for the grid, the storage tanks, all of this, it will emerge. But before we ever get to that point, this Commission will have to act upon a commercial contract and we're doing our due diligence, I mean right now we're doing our due diligence. So we know a lot and we're trying to work our way carefully through all of this so that none of us are blindsided. Commissioner Plaskett made the comment when you hear something that's too good to be true. This is really wonderful, but like anything else we'll do our due diligence to bring it back here. I have not left you in the dark at any time that I'm aware of, so we'll wring this thing out.

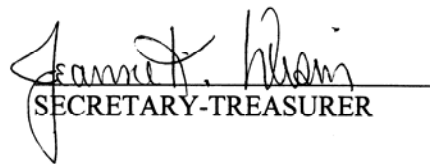
There being no further business to come before the Commission, Commissioner Hall made a motion to adjourn and Commissioner Reynolds seconded the motion. Chairman Allen closed the special U.C. meeting at 11:55 a.m.

APPROVED:

ATTEST:



CHAIRMAN



SECRETARY-TREASURER

These minutes were formally approved by the Utilities Commission at their August 21, 2008 meeting.