

**LANA`I PLANNING COMMISSION  
SITE INSPECTION  
APRIL 16, 2008**

**APPROVED 05-21-08**

**A. CALL TO ORDER**

The site inspection of the Lana`i Planning Commission was called to order by Colleen Suyama, Deputy Planning Director, at approximately 4:15 p.m., Wednesday, April 16, 2008, at the Palawai "Miki" Basin site, Island of Lana`i.

**B. ELECTION OF TEMPORARY CHAIRPERSON FOR PURPOSES OF THE SITE VISIT**

Ms. Beverly Zigmond: I nominate Sally.

Mr. Dwight Gamulo: I second.

Mr. Stanley Ruidas: Third.

Ms. Sally Kaye: Okay. Let the record show that we have quorum for a site visit for Castle & Cooke, LLC – sustainability – I didn't bring – site visit – with Commissioners de Jetley, Zigmond, Gamulo, Ruidas and Kaye. I'll turn this over to the Planning Department. How do you want to do this?

Ms. Colleen Suyama: The site visit was requested by the applicant, and we would just turn it over to the applicant to make their presentation.

**It was moved by Commissioner Beverly Zigmond, seconded by  
Commissioner Dwight Gamulo, then**

**VOTED: To elect Commissioner Sally Kaye as Pro Tem Chair for  
purposes of the site visit.**

**C. SITE INSPECTION**

**LANAI SUSTAINABILITY RESEARCH, LLC requesting a State Land Use Commission Special Use Permit in order to construct and operate a 10-acre Sunpower Tracker Photovoltaic Solar Array as a renewable energy project at the Palawai "Miki" Basin area, TMK: 4-9-002: portion of 001, Island of Lanai (SUP2 2007/0011) (J. Prutch)**

**a. Applicant request letter dated March 26, 2008**

Mr. Timothy Hill: On tonight's agenda at six o'clock, one of the items is the Special Use Permit for the solar farm. So we thought it would be a good idea that to come out and actually see what we're talking about as an agenda point. And this is what it is. We have a few slides, and you'll see these again in tonight's presentation. But the few slides are talking about what the project here is about. This is adopting solar energy for the island. On the second page, we would just talk here about some of the key points of what the project highlights. Sunpower, John Crouch is here. I'll have him talk in a few minutes about some of the details of the project. But they have a lot of experience – a lot of experience in Hawaii – over in Parker Ranch, a similar type facility, not quite the size. And also in Mauna Lani over on the Big Island, I think, same thing with the power stocking system that we're looking to install here.

What we would like to install is a 1.5 mega watts solar farm. It would be the largest installation, single installation of solar in the State of Hawaii. And I'd have to confirm it again, but when we first dated this last summer as we started the project, this is the fourth largest system in the United States. Since then there have been other installations so I'm not so sure that's current. The largest installation in the United States is.

Mr. John Crouch: In Dallas, Texas.

Mr. Hill: And it's about 14 mega watts?

Mr. Crouch: 14 now, going to about 20.

Mr. Hill: 14 to 20. It's about 10 times the size of what we're talking about here. One of the limiting factors when we started looking at this project and working with the electric company, what the size it can be dealt with or try to bring on to the system and being able to look at bringing it on and looking at the reviveability and the way they wanted generators here. So we limited the size really at 1.5 mega watts, and what that is, is should produce 3,000 mega watts hours based on the day time day light. And that's about 10% of what the electricity demands here on the island are.

The next page of what we pulled together was an overview of what the island is. And this is a map to scale, just to give you kind of an impression of 10 acres on 90,000 acres of land is. And it's really just a dot there which is the solar farm. One of the key things in locating it here was that it's a relatively flat area. It's on old ag land that's been idled for about 20 years. And it's as far south on the plateau that we could go. It's close to the tower lines so that we can tie into. And going back to it being far south is that it allows us to catch the sun exposure and being about to put it out here.

And looking what at what the impact is surrounding, within the immediate area, there isn't much use of the land. So there isn't any impacts in the immediate surrounding area. So we looked at it from a view plain issue and from the town and we started looking at pictures and stuff like that. So here's a picture from above the town, up at Koele, looking down across the town, and pin pointing where the power plant is, where the run-way is, and where the project site is. Now, at the time this picture was taken, these containers were here. You can't even see it on the picture from town. As a matter of fact, these containers have been here since November. They've been here since November. And to give you some size and some view – that container on the statue is about 13 feet in height. And when we look at the solar panels, the solar panels sit on a platform that's about four-feet in height.

Mr. Crouch: 4 ½ feet.

Mr. Hill: 4 ½ feet, and if they're turned vertical, the top piece is going to be about seven feet.

Mr. Crouch: About seven feet. Correct.

Mr. Hill: So at the highest peak if they were all turned vertical – but they wouldn't be collecting much sun if they're doing that – but it were, they're going to be half the size and half the height of what those containers are.

Mr. Dwight Gamulo: It will be highest structure?

Mr. Hill: Yeah, I would think that's the highest structure that we have currently.

Mr. Crouch: Maybe if connect the transformer switch here, it might be foot higher of one foot – putting it over here going into the power line.

Mr. Hill: And John I'll hand it to you to talk a little about the site plan.

Mr. Crouch: Thanks Tim. Welcome everyone to the Lana`i Sustainability Research PV Site. We're very pleased to have you here and to take the time to take a look. Sunpower Corporation develops projects like this throughout the world. But we're very proud to be able to work with Castle & Cooke and the community here to develop this project site because it's so important to the use of renewable with local utilities. As Tim already mentioned that you will see important factors that this is going to be able to put more renewable energy – to show how to put renewable energy into a utility grid than anywhere

else in the State and in the United States. Because the largest penetration of electrical power into a given stationary local utility grid. It's important to that factor. That's why there's a lot of interest here. Not only will it help reduce the cost of power for Lana`i, but it's a technology achievement that being able to put that much energy on renewable into that grid system.

This particular site was chosen because of its location on the island. Southern part of the island – the leeward side – as you see, there's very nice sunshine this afternoon, even though we had quite a few clouds over town over that way. And so this is a very good site for photo voltaic energy.

While I have a few minutes, I'd like to introduce my team that's here. My electrical engineer is Lyman Morikawa from Maui; electrical contractor, Myles Hirata from the Big Island; and Robbie Sanches our local coordinator – Robbie, over here on the back side – Robbie Sanches. Very glad to have him and get his coordination here on the island. Pardon me, Chris, our planning consultant – Chris Hart from Maui, and Brett Davis working with him from Maui. So thank you guys for coming over and participating.

You see the site plan on your map here. And that's what you're looking at this way for 12 blocks of photo voltaic arrays. Each block is controlled by separate motor that tracks the PV panels from east to west during the day to make sure that the panels are facing directly to the sun at every hour of the day. That way you increase the amount of energy produced by about 30% as compared to a typical solar panel system that just sits flat on top of the house. That's why in this technology it's very important if you have a land area to be able to use a tracking system. This is just like the systems that are installed at Mauna Lani Bay Hotel for their golf operations, and at Parker Ranch for their livestock pumping operations. They both have been running for seven or eight years now. Those are supplied for those particular companies. Same technology.

This is, as you look over the horizon here, as you see, the grass are already several feet tall up there, but the system that you will see it on, it will be a few more feet above the height of the grass and like he said, about half the height of the container. This system produces PV power in what they called a DC form, Direct Current, from the PV panels. Then it flows into transformers and invertors that will change it to alternating current, or AC power, that will then go out to this power line here and supply power to utility that owns that line. It will feed whoever is on that line, including back to the substation, and down to whatever is being consumed on that area, and even through town too if it needs to have power going that direction. This is what we call an independent power producer system – sun power directed to the utility. Technically wise, there's not much else to say, it's a

very clean, simple system that collects the sun, changes it from DC current to alternating current, puts it on the power line that everybody can use.

In summary then, Sunpower Corporation does this all over the world. Much of the work has been done in Europe, some in Korea, and a lot in the mid-west – I mean in the California area. And all together, we're running about 250 to 300 mega watts of this kind power throughout the world. Any questions? Thank was almost the last page. Again thank you.

Mr. Hill: One thing that we wanted to follow up with is as we've gone through this process over the last year and looking at renewables and bringing renewables to the island, we've tried to keep up with an out reach and keeping the community and public informed as we move through this. We kind of headed it up early in the Summer last year when we came out with – when we had a meeting in August of last year, I believe 150 people from the community came and we started talking some of these programs. We had a number of facilitators to help formulate a number of questions, and from that we put together a couple of newsletters and updates that we mailed those answers out too.

Ms. Kathy Best: Actually some of them are here. They were very helpful.

Mr. Hill: Some of the facilitators – Sally was a facilitator, I think Alberta was a facilitator. But it was very helpful in putting that out. We're starting to get some, what the issues are, what some of the concerns are, some of the things – so we try to address those and try to, as we formulate our plans, going forward to try to put that as the consideration. So we continued that effort. We added it down to here, the collection of the newsletters that we sent out specifically in the community, to everyone in the community. We've included it in the newspaper, The Lana`i Times, a number articles as we've gone through the updates. It brought us all the way up until today and the tour here and then tonight with the Planning Commission meeting. I'll open it up at point for the questions.

Mr. Chris Hart: I'd just like to say a couple of things to the Commission. My name is Chris Hart. One of the issues that came up in the context of doing the project was whether or not it needed a Special Permit because the State Land Use law which was adopted in 1962. It was amended back in the late 1970's and early 1980's to allow for a wind generation, wind power as a permitted use in the ag-district. But there was never any mention of solar power and solar generation in the State Land Use law. So as a result of this project, the State Land Use law is in the process of being amended and we'll talk more about it tonight. But the issue is that essentially the Bills have both passed. It passed the House and the Senate, and they're on the Governor's desk, to amend the State Land Use

law, which is Chapter 205 to allow for solar generation in the ag district. The conditions would be that it would be on class D & E land which this land is.

Mr. Hill: Class D.

Mr. Hart: Class D land. And so, it's definitely an initiative that the State of Hawaii wants essentially basically pursue as far as the sustainability is concerned. And it's something that we're basically as landscape architects and planners, you know, are very positive about and it would be good for Maui County. One thing that John Crouch mentioned is that the projects on the Big Island, one was at Mauna Lani and the other was at Parker Ranch. In the agricultural district, those uses that the power generation was considered accessory to permitted uses. In one case, Mauna Lani was a golf course. Another was at Parker Ranch, I believe was for irrigation well.

Mr. Hill: No. Public water for live stocks.

Mr. Hart: So, in this particular case, you know, we're basically generating electricity to go in to the grid. So the question is whether or not it's a minor utility facility which basically would be allowed in Maui County's Ag District Zoning Ordinance or a major utility facility. We believe that it's a minor utility facility. And maybe tonight, Lyman Morikawa might be able to discuss that a little bit with you. But it is something that we're looking at as a long term project. And I think it's important to realize that as far as the life expectancy of the solar facility itself is beyond 20 years.

Mr. Hill: The correct. The warranty is for 25 years.

Mr. Hart: You know, in terms of a special permit and time limits, it's important to consider that first of all it is, as far as State law is concerned, going to be a permitted use. And in terms of a special permit which we're going to, you know, time limitations are going to be an important consideration of some of the issues of basic financing of the project. So I just wanted to make those points while we're standing out here. Thank you.

Gentleman from the public: I have a question. Over time, it's going to help reduce the cost of that thing for electricity in Lana`i or MECo or what, and the other company will benefit and nothing would . . . (inaudible) . . .

Mr. Hill: I can't speak for MECo. We're in negotiation and finalize what we will charge for electricity going to them. And whatever stays and comes from the other side of island is a question mark. I don't know what they end up doing with that. Our goal is that this would

be an initial project to see and to start to demonstrate the ability in working with the electric company and demonstrating the ability to move beyond 10%. And that we can really start to see more and more savings. At least more stability in our electricity process which over the last –. One of things we started this for Castle & Cooke – the reason why we starting looking at all these renewable energies or any of the energy initiatives is because it's the number two cost that we have here. And when I first came to the island in 2003, we were already looking at it, and looking at that cost at that time, and we put a number of measures, conservation measures – and at the hotels, changing out pumps, changing a lot of the different electrical systems there and hoping that we were going to see a lot savings coming in. In the last five years, we've seen our annual electricity cost go up by over \$2,000,000 a year. So it has not helped at all, and your cost keeps going up. The fuel surcharge has gone up. On Lana`i, the fuel surcharge has gone up over 30% in the last year, and the electricity cost has gone up by over 15% in the last year. And it just keeps going up faster than we can conserve or build an energy system. We definitely need to look at energy efficiency to save electricity. But we've got to look at projects like this and the ability to move generating electricity locally so that we can control the cost.

Ms. Zigmond: We're painfully aware of that also in our electric bills and I was curious because John had said that this would reduce the cost of power on Lana`i.

Mr. Crouch: Let me explain my statement there. The cost of power has many components. As we all we all know, operations, overhead, and they go into the cost of fuel. The idea being that they can buy power from this facility at less than what it cost them for the same amount of power using fossil fuel. I don't know . . .(inaudible) . . .small impact. So let's say if they're able to buy 10% of their power they need for fuel at a lesser amount by buying it from a renewable energy facility than buying fossil fuel for that 10%. So there should be a savings there. Like I said, we can't speak for utility, but some of that savings could come in the form of how they compute the cost of power, after the adjusted cost on your power bill. But they will have a lower cost on that part of the bill. How much of it is passed along to the rate payers. It will be less than that for at least some us. And as Tim said, as you go and develop, that spread, that difference between what it cost them to get their power from bunker C or fossil fuel is – today it was \$114.78. This is a fixed price. Once you go in and put your facility in and make that contract, whatever that contract is, it should be less than what they have to pay to produce that from fossil fuel. If it's not, there would be no point in doing it. So those savings should be passed along in the formula of cost to the rate payer at some degree.

Ms. Zigmond: Should be the operative word, and I understand that's not your kuleana. I totally understand that.

Mr. Crouch: Conceptually the idea is to be able to buy the energy that they need to send the rate payers, and the less money from this facility than from buying from fossil fuel. And as that portion of the bill decreases from use of renewables, then that's a greater impact on the savings of stabilizing the power plant.

Mr. Hill: And our electricity cost has gone up 15% and so if 10% came from solar, and maybe it's going to 12%, but you're still going to feel the impact. This is a step to moving to change that.

Ms. Kaye: I'm sure you're going to get some of these questions tonight, but just while we're here and we visually think about it, this pole 60 is where it's going to tie in, is right here, correct?

Mr. Hill: Correct.

Ms. Kaye: And Manele's project is basically what? A little over 1.5 mega watts a day use of power?

Mr. Hill: Probably that much.

Ms. Kaye: Okay, and that's what this is. So why would you not just send it right down there? That's two miles back to the grid. It doesn't make sense to me how that would be efficient.

Mr. Bill Park: My name is Bill Parks. I'm with the U.S. Department of Energy, and I'm on loan to the State. I'm actually working in DBEDT, in the State Energy Office. I'm here as an advisor to the Governor, to the Mayor, and as an independent kind of facilitator to try and see if we set a goal to say could move the State of Hawaii to 70% renewable by 2030. It's a major, major goal. And part of what we're going to do is what is the reality of that? And projects like this, looking within and the trade offs among them are critical to understand what are the trade offs so people locally, and the County level, and the State level can make their decisions about what they want to do. We're not dictating to anyone what their choices are. And when I look at that, and I look at 70%, I see that you have to come fundamentally re-do the regulatory policy structure here to really obtain that impact. And the fact is it's against the law for him to wheel power across those lines down to the hotel. And so one of the things that's being investigated at the Legislature is to allow that kind of wheeling to happen because it does makes sense. And the question is what other things makes sense? And what kind of policy changes should happen or regulatory changes to happen to allow things that makes sense to happen and move everybody



towards a place where –. And I would hate to say, again I’m speaking independently that, in a short term this all is going to be cheaper. I think the real benefit is it’s going levelize the cost of electricity and you’ll be able to have some control on how much variability you get as oil goes up and down. It hit \$115 a barrel today and that’s a huge cost. Some people think it will go down. Some people think it will be at \$200 a barrel by the end of the year. So you can get some control of your future by doing projects of this type by levelizing that cost. We’re also going look and work with the model of the utility grid including this grid to see if we can recommend improvements and efficiency, and improvements in how the blend of renewables that are put together could work to give you a more efficient system, and then a hopefully a cheaper system.

Ms. Kaye: Okay, follow up question then. If the regulatory scheme would change to allow a more direct service, I’m going to assume that MECo has a different rate agreement with the corporate structure than it does with the residents. So you’re going to get that question, “how will we benefit” even it is more efficiently delivered.

Mr. Park: The key to that from my view point and there’s been discussion in other counties as to extent to which the utilities to want to be a champion to do those things. And so it’s to their benefit as well as to the consumer benefit. Can you find those win-win scenarios? To be determined. Can you stand here and promise that it will absolutely happen? But the key is can it happen? Are there models? We’re holding – we’re bringing an ex-commissioners from around a country next week which we’re holding a three-day training sessions through the PUC, the Public Utility Commissioners, and their staff on what are best practices from around the country in the world that they can look at as they start to think about changing for the good.

Mr. Hill: But to follow up and maybe answer his question a little bit differently. Here on Lana`i, and part of the reason why we talked to DOE and we looked at this is an opportunity to look at. Overall how do we bring all of these things together for the community and for the island is that on Lana`i, Castle & Cooke and our operations are very tied to the community, and that –. 1.5 mega watts down there, 25% of the grid – if I shut that off from the grid, it abandons all these others assets up here. So then the rate payers up here are going to – and it’s a lot higher rate pay – will have to be covered by the electric company. And your electricity cost as a consumer or rate payer in town will go up. So if I turned off the power down there at the hotels, then the power up here is going to be more expensive. So that’s when we started looking at it and going well, we have assets up here, we have a community up. Now the best way to move forward is to look at how we adopt this as an island and to provide the power across the whole island and not just the isolated places.

Ms. Kaye: How much more will that cost to send electricity back to the grid and then back down Manele?

Mr. Hill: Well I don't know - MECo - it's not a huge difference in cost. But there's other plans that we have and that the electric company has for expanding what they're going to do the grid and all of that moving forward. And part of that program that the electric company is looking at, they're actually at putting a facility down at Manele.

Ms. Kaye: Are they going to do that, and speak to this tonight?

Mr. Hill: I don't know if anybody is here from the electric company.

Mr. Crouch: If I can add two cents. When they probably get into the line, then it's actually going on to the whole grid system because the lines that are up there they'll take the power from the solar electric and it fed up to the entire island for this one large grid. And that helps. At the power plant which a mile and ½ away, they are able to reduce the amount of fossil fuel they have to burn to meet the needs of the grid. They're able to do that by the power being up in from the solar electric farm here. And that impacts everybody, not just the hotel down there or any particular place. It's the entire grid system.

Mr. Gamulo: This 10 acres is going to provide 10% of the island's needs, is that correct?

Mr. Hill: Yeah.

Mr. Gamulo: So if we wanted . . . (inaudible) . . . of 50% would be 50 acres? It's not the maximum density of solar panels?

Mr. Hill: It's a pretty straight line.

Mr. Gamulo: Another question is how much electricity is being used for one house member?

Mr. Hill: At any given time? The Manele Bay hotel is about 25% of the grid. It uses about 25% of the power.

Mr. Parks: If I may. The answer has to be mitigated a little bit. You're right in theory that since it's producing electricity during the day, because the next time, you do not necessarily know when you're going to need the electricity. And so you may have to do things like energy storage which could raise the price. You could still be dependent that

much solar, but frankly no one has ever done it. And part of what we'd like to look at is what would it take to do it? And then say, what would that implemental cost be and how does that off-set the fuel that would have been used otherwise to do that. So the other trade off as you start to go higher and higher levels that no one has ever done before.

Mr. Gamulo: So you're going to be storing electricity?

Mr. Park: Yeah.

Mr. Gamulo: So there going to be other facilities out here besides the panels? What else would be out here that you're building?

Mr. Parks: At this point, nothing. We're going to look at the feasibility of that and frankly talk to people about what they want, want do they want their feature to look like. We're not probably not going to make a single recommendation. We're going to say, here's your scenario, and what do you want? So people should understand their choices, and part of the whole power producing . . .(inaudible) . . . is to empower people to understand their choices and then let them move on that. . . . (inaudible) . . .

Mr. Gamulo: And if you do it . . . (inaudible) . . . it will be in the same area?

Mr. Hill: Not necessarily.

Mr. Gamulo: . . . (inaudible) . . .

Mr. Hill: Yeah.

Mr. Ruidas: What kind of conditioning system you're going to have between the PV system and the grid?

Mr. Crouch: The DC power that comes off the photo voltaic panels are also an invertor, a power state invertor. It will change that DC power to Alternating Power, three phase, 480 volts, which is a typical commercial kind of power. Then that goes put into our setup transformer, which takes it from 480 volts, three-phase, to 12,000.47 which is the voltage level of the power lines here. And that goes to a switch gear system which has the safety relay that says which by Morikawa Associates Design and Utilities, to safely put it on the power line. So they're power state invertors conditioning system.

Mr. Ruidas: Any storage capacity?

Mr. Crouch: No. Not in the invertors.

Mr. Ruidas: So if the power dies, then the power plant has to pick up the load loss?

Mr. Crouch: That's correct. If the solar farm goes off line, then the generators will pick up the difference at the power station. The solar farms are, they historically are very dependable, the invertors are very dependable. The area that you might want to have a concern about power generation is the cloud comes, a portion of fuel might go down. In which case, the generator of the power plant will come up to make up the difference. That's not regulations. That's part of the control system I've been working utility on – control for . . . (inaudible) . . . This is not a, what they call a stand by power system. When the utility goes down and the 50 cycle which is a signal that comes off the lines, and that is 50 cycles lost, this will not operate. This is not a stand by emergency self generating system. Does that answer your question?

Mr. Ruidas: Okay. If the power plant can't pick it up, that will affect the rest of the system, like in town?

Mr. Crouch: Yeah, if there's a condition where this goes off line, and the power plant can not pick up the difference, then it will have to do what it does ordinarily when it loses a generator which is going to be the same thing – it goes into a load management schedule which will drop, cycle off or whatever so it's necessary.

Mr. Hill: But we're in the process of working with the electric company and going through the final phases of negotiating with them, and going through an interconnect review study. And some of the issues that you're bringing up are the issues that are being identified in that study and how it's best to manage when you're managing the grid operation or the power generation over there and how do we set up a system over here to manage it. Whether it's software in the invertors that need to be adjusted based on that. Whether there is some battery type of system, or small battery type system to help hold the charge for a limited amount of time while generation is picked up over there. And those are some of the key things that, again, if you're looking at just tying it into the hotel and taking that off, it wouldn't be necessarily things that you do or work with the electric company and doing, you just put in the panels in lieu of that.

Mr. Crouch: Historically defined in generations from a renewable site has a little power than the standard generation from the utility. It has, in the invertors itself, it has some power cleaning that helps push up and actually improve the voltage level to a certain rate especially on lagging long lines like we have on many of the islands. The operations at

Mauna Lani and at Parker Ranch, both have been doing very well. The facilities have been very happy with their involvement in the utility grid system. It's been very good.

Mr. Ruidas: So, 1.5 meg would be max capacity or average capacity?

Mr. Crouch: That's the maximum DC capacity. The actual AC pull on the line, the maximum at any one time, optimum operations would be 1.2 mega watts AC. Most of the time it will be less than that.

Mr. Ruidas: Thank you.

Mr. Gamulo: . . . (Inaudible) . . .

Mr. Crouch: If the utility lines or utility plant goes down for whatever – and everybody has experienced that on every island –sometimes the facility plant goes down. This is not to be considered as an emergency stand by power facility. This will shut down also because the federal IEEE regulations that require any renewable energy facility operating to not operate when the power line is down. That's a safety feature so you wouldn't generate back into the power line.

Mr. Gamulo: So if you loss power here, from this whole farm, they got the difference right?

Mr. Crouch: If we're producing 500 KW for example, and we lost that power, they would have to supply that power. That's correct.

Mr. Gamulo: Now, I hear that you have to keep generators going in order – say if this plant goes down – in the case of electricity, how long does it take for you to replace it? It takes a while for generators to fuel up.

Mr. Ruidas: I've seen it go up in ½ hour.

Mr. Gamulo: ½ an hour?

Mr. Hill: I don't know this. According to the studies that have, the generators here can turn on and be up and running as soon as nine minutes.

Mr. Crouch: In some times it's considered a short time and some time it's long time. But there is a delay time in order to be able to recover that if you don't have generators already online running. You could have one of the megs, one of the one megas online running as

a supplemental power. And as part of a study, what types of things do you do to ensure protection of power for the rate payers and the difference scenarios of PV systems on the line. Again, like I said, the incidents of total failure of a PV farm is very, very low. There's multiple invertors on the site. If you had a problem with one inverter they wouldn't take out the entire site. They would only take out the panel associated with that inverter.

Mr. Gamulo: So, if this plant goes down –. Normally, they would have to keep a one mega watt generator operating even though it's not going to be generating electricity? We have to keep running.

Mr. Crouch: I didn't say "normally they would." I said that's one of the options that they can look at or manage it to bring it online.

Mr. Gamulo: But they don't have to keep it running?

Mr. Crouch: No. They don't have to keep it running.

Mr. Hill: And that's part of what's going on right now with the electric company. It's that they're going through the entire system. They've actually been out here and they've done tests about what – when you turn on a water well, what the effects does this have on the system? What the effects of this solar farm and everything else? And will the solar farm be able to hold up to that? And those are the studies that are going on as we look at the invertors. We've got (inaudible) who is the inverter manufacturer involved with the electric company. And the engineers are looking how that will all look.

**D. NEXT REGULAR MEETING DATE: April 16, 2008, 6:00 p.m., Lana`i School Cafeteria, Lana`i City, Island of Lana`i.**

**E. ADJOURNMENT**

Ms. Kaye: I think if there's anybody who's not going to be at the meeting tonight, maybe if you want to ask questions now, but we're getting to the point where we should probably break off this and meet at six for the formal meeting. Does anybody have questions or concerns? And testimony from the public? You're all going to come tonight? Okay.

There being no further discussion brought forward to the Commission, the meeting was adjourned at approximately 5:00 p.m.

Respectfully transmitted by,

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LEILANI A. RAMORAN  
Secretary to Boards and Commissions I

Lana`i Planning Commission  
Site Inspection Minutes  
April 16, 2008  
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**RECORD OF ATTENDANCE:**

**PRESENT:**

Dwight Gamulo  
Beverly Zigmond  
Sally Kaye, Chair Pro Tem  
Alberta de Jetley  
Stanley Ruidas

**EXCUSED:**

Matthew Mano

**OTHERS:**

Colleen Suyama, Deputy Planning Director  
Joseph Prutch, Staff Planner  
James Giroux, Deputy Corporation Counsel