UNITED STATES DEPARTMENT OF ENERGY

PUBLIC SCOPING MEETING

RE: HAWAI'I CLEAN ENERGY PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

TRANSCRIPT OF PUBLIC COMMENTS

MONDAY, SEPTEMBER 17, 2012

5:30 P.M. - 9:00 P.M.

POMAIKA'I ELEMENTARY SCHOOL

4650 SOUTH KAMEHAMEHA AVENUE

KAHULUI, MAUI, HAWAII 96732

A P P E A R A N C E S

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TRANSCRIPT OF PROCEEDINGS

MONDAY, SEPTEMBER 17, 2012

KAHULUI, MAUI, HAWAI'I

FACILITATOR CHANG: Again, thank you so very much for all of you being here. There was someone who came up and said, "What if I wanted to -- I am going to talk longer than three minutes." What we've done in the past is, again, in order to ensure that everybody has an opportunity to speak once before someone speaks twice or speaks longer, if someone wants to speak longer than three minutes, we're going to let -- you can come back afterwards, if that's okay, and we'll have a second round.

But I need to be very clear, we need to vacate the cafeteria by 9:00, and we need to put everything away. So again, you are always welcome if you have prepared a statement to give it to the court reporter, and it's going to go directly into the record. You have up until October 9th to prepare a statement. You can submit your comments at that point in time too.

So normally what I'm going to do is I am going to call out three names. The first one will be the first person, the second please be prepared to come up, and the third person. So the first three names on our list are John Woodhouse, Richard Mealey, and is it Mikiu, Mack? I am so

sorry, I am massacring that name.

A VOICE: Melvin.

MS. CHANG: Pardon? Oh, my gosh, Melvin, yes. Now that I look at it, it looks like a Melvin. Okay, so John.

MR. JOHN WOODHOUSE: My name is John Woodhouse, J-O-H-N, W-O-O-D-H-O-U-S-E. Specifically I'm here tonight to address the issue of wireless Smart Meters, which are being pushed on the American public as part of the Smart Grid Initiative. I am going to open with a quote from Dr. Robert Becker, who is Professor of Medicine at New York University's Upstate Medical Center, who was also nominated for a Nobel Prize. He states, "I have no doubt in my mind that at the present time the greatest polluting element in the earth's environment is the proliferation of electromagnetic fields. I consider that to be far greater on a global scale than warming."

A number of eminent people have drawn attention to the possible dangers of Smart Meters, which are used to monitor electric usage. Blake Levitt, a science journalist with the New York Times, writes, "Nobody knows the long-term health impact of Smart Meter peak pulses." He explains, "Wireless Smart Meters transmit radiation 360 degrees approximately 23,000 times per day. Radiation transmissions from Smart Meters have the strength to travel well over a

mile."

One estimate by Southern California Edison puts Smart Meter peak pulses at 229,000 microwatts per square centimeter at eight inches from the transmitter. That means that if you sleep next to a wall with a smart appliance on the other side, strong signals could be spiking several times a minute all night long right into your brain. Compare this to cell phones that emit approximately only 250 to 300 microwatts per square centimeter when placed directly against the head.

Arguments are made with respect to RF exposure from WiFi, cell towers, and Smart Meters that, due to distance, exposure to these wavelengths are negligible. However, many invitro and Veevo and epidemiological studies demonstrate that significant harmful biological effects occur from non-thermal RF exposure. Genetic damage, reproductive defects, cancer, neurological degeneration, nervous system dysfunction, immune system dysfunction, cognitive effects, kidney damage, and developmental effects have been reported in peer-reviewed scientific literature.

It's important to note the FCC's safety limits have not been updated since 1992, and the standard only addresses acute exposure. It does not address what happens after long-term chronic exposure to this type of radiation.

Another point the industry touts the cost saving

benefit of the new meters. In fact, the only study so far of an actual Smart Meter system's energy conservation outcomes done on 10,000 homes in Toronto showed 80 percent of the households were paying higher rates than before Smart Meters were installed. In fact, there have been numerous reports reported across the nation complaining about skyrocketing costs after Smart Meter installation. So far overbilling due to inaccurate Smart Meters has led to two class action lawsuits in Bakersfield, California, and Texas.

And there's another problem of hacking. The FBI has warned Smart Meter hacking may cost utilities $400 million a year, noting only a moderate level of computer knowledge is needed. By the end of 2015, Computer World reported, the potential security risks to the nation's smart grid will reach 440 million new hackable points. Thank you.

(Applause)

FACILITATOR CHANG: Richard Mealey, and then Isaac Hall.

MR. DICK MEALEY: My name is Dick Mealey. I live in Kihei, and I spent 36 years working with pulse radar at the ballistic warning system in interior Alaska. The same kind of pulse systems as these Smart Meters. I live in a typical condominium building having in total 13 floors, each with 20 units per floor. The 20 electric meters on each floor are directly adjacent to the elevators at which

visitors and residents stand awaiting transportation. The aggregate power radiated from 20 of the subject meters will be highly inimical to the health of these people. Additionally, one of the bedrooms nearest these is 74 inches from this bank of meters. This, of course, is totally unacceptable.

I have witnessed first-hand the horrifying effects of radio frequency radiation on three techs at the radar site. While the power was extreme, their exposure time was only roughly a minute, and to this day they cannot walk or talk.

Due to the dangerous cumulatives and the effects upon human tissue of the meters proposed, their installation does not in my opinion warrant even the most cursory consideration. (Applause)

FACILITATOR CHANG: The next is Melvin, and then Isaac, and then after Isaac is Dick Mayer.

MR. MELVIN PATEO: My name is Melvin Pateo. I'm a Lana'i resident, born and raised there. My parents, I'm a third generation on Lana'i. I came from Lana'i to let the Maui people know how we feel about this project. I'm with the Friends of Lana'i, and the Hawaiian group Kupa'a no Lana'i. We are against this project because we are not going to benefit nothing. They're going to desecrate our island.

And, you know, somebody is going to make money out of this project. We, the taxpayer, they say we're going to pay a low tax rate. I don't think so. Somebody is going to have to pay for this cable, and that's going to be you, the taxpayer, or the Honolulu taxpayer. They said they're going to give us the same pay rate as Honolulu. I don't think so we're going to pay any lower.

Also, I'm against the project because it's not going to create any jobs, not for Lana'i. There's few people there, so that's why I don't see the union coming there and putting all these windmills. What for? Most of the workers work in the hotel. That's the main job. You are going to desecrate the land down there. People go down there to see the pristine beach, the archeological sites. So it's just like killing the goose that laid the golden egg. So to me, it doesn't make sense.

Also, I'm against that because I live and I hunt there a lot. When I go hunt out there, I was born and raised a hunter. Hunting is my life. When I go hunting I stay out there, I look at this open land, the panoramic view of the ocean, the islands. Now they tell me they want to build 179 windmills there. We have a picture of what the thing going to look like. And I'm really against that.

And part of the Hawaiian group too, Kupa'a no Lana'i, we are going to lose a lot of archeological sites.

Burial sites will be disturbed. We're going to have runoffs. The roads they're going to build is big. And there's no water for to hold the soil. It's a kind of a windy area, and it's kind of eroded right now. When it rains all that pristine beach area, marine life, endangered species, animals, all going to get, you know, all these bad things going to happen to them.

I'm not a public speaker, but I've been speaking for the last year because of this project. Usually I don't speak. This is the first time I'm speaking in public. But that's my opinion on this project. So I'm just asking you all, the people of Maui, please support Lana'i to help us abolish this project.

We're not against green energy. We can decide. Let the communities of each island decide how they're going to go about doing their own energy. Don't tell the developer, or HECO, or whoever, the governor, or somebody we are going to build this to support Oahu. There's no way we're going to desecrate our land just to support Oahu. Let each island do their own, you know, self-sufficient energy kind of projects. Let the community, the people decide how we're going to do it, not the government, or the developer who wants to make money out of this project.

So as part of the Kupa'a no Lana'i we're concerned about the archeological sites, the marine life, the plants,

native plants, and the native birds and animals. So thank you. (Applause)

FACILITATOR CHANG: Next is Isaac Hall, Dick Mayer, and Kelly King.

MR. ISAAC HALL: Good evening. My name is Isaac Hall, H-A-L-L. I represent Friends of Lana'i. This is a scoping session to establish legally acceptable contours for the programmatic EIS for the Hawai'i Interisland Renewable Energy Program. This important scoping function in the EIS process cannot take place, however, based upon this particular amended prep notice. The initial prep notice for the big wind project was fatally flawed because it was too narrow and constricted. It rejected almost all reasonable alternatives before a Draft EIS was even prepared.

This amended prep notice is also fatally flawed, but this time in the opposite direction. It fails to describe any program or project or action that could be the subject of an EIS. It simply lists every alternative under the sun that could help the state meet its renewable portfolio standards. It's too vague to provide a basis for proper scoping.

It's difficult to discern how and why the 2010 prep notice has been amended. It states it was amended in response to public scoping comments. I can understand that. But it also says it was amended based on regulatory

developments and policy developments, but it never says what those particular developments were. The public has a right to know what particular regulatory developments and policy developments they're talking about.

Then what's been amended? The definition of the project or program or action under study has significantly changed. As I said, it's no longer the big wind project, it's meeting a goal. And what you have heard is we're being asked to do something that's absurd. We are being asked to speculate that any one of these renewable energy forms, forms of renewable energy might take place on any part of any of our islands, and we're being asked to tell them what the environmental impact of that might be. That's impossible.

There's a huge caveat here, however, and that is on the website for HIREP there's a road map that they haven't told us about, which they have got a road map for what they want to do. So what we have is one set of stakeholders here who know what the road map is, and the rest of us, the general public, who have no idea what the road map is.

What was a joint federal/state programmatic EIS, which the state would have been bound to follow, is no longer that. It's only, as they said, a federal DOE programmatic EIS which, as Miss Summerson said, the only

entity that has to follow that is the DOE. That's not going to do us any good. The goal of the EIS is significantly changed. All it is is to provide guidance for DOE in making funding decisions. That's it. It doesn't do anybody any more good.

The old EIS had a tiering provision. That is, it was a joint federal/state EIS, and it studied the cumulative impacts on the state and the federal government, citing the cumulative impacts of all the projects, and then all of them were tiered off. Now what they're saying is the only ones to get tiered off are the ones that apply for federal funding from DOE. That means there's no assurance there will be any tiering of those projects that don't apply for funding from DOE.

This amended prep notice does not provide us with any assurances to which we're entitled. We'll receive the comprehensive Federal and State Environment Review that our laws require for projects or programs or action of this magnitude. Most blatantly, there's been no commitment to integrate NEPA and HEPA environmental procedures, and to assure that such procedures run concurrently. There's been no adequate disclosure in the amended prep notice of the programs and projects that are in fact under consideration by federal and state agencies.

I found it strange today that these people up here

were talking about all the projects and studies have been funded by DOE and the state, studying different cable alternatives, studying cost benefit analysis studies. Actually, I disagree with Miss Summerson. Cost benefits and economics does have to be the subject of an EIS, and these all have to be brought into the EIS.

There's no provision for a state EIS studying the cumulative impacts of the program, or the action, or all of the projects as a whole. There's no assurance that all site-specific projects, not just those that might apply to the DOE for funding, will be tiered, and will be the subject of federal and state EIS's after the lawful completion of the programmatic and cumulative impact reviews.

Again, the road map laid out in this amended prep notice is so deficient that we're entitled to a further amended prep notice that addresses these deficiencies. Otherwise, the important role the scoping is intended to play in NEPA and HEPA will have been subverted once again. Thank you for the opportunity to comment. (Applause)

FACILITATOR CHANG: Dick Mayer, Kelly King and Janice Hill.

MR. DICK MAYER: My name is Dick Mayer, M-A-Y-E-R. I do want to thank you all for coming back. The previous hearings a year and half ago or so were faulty, and I'm glad you're coming back. I do agree with some of the statements

Mr. Hall just made. I think there's a real concern. The question I asked was, who were the decision-makers in the state that would have any obligation to follow any of the recommendations or statements made. We have the PUC, the legislature, the various county general plans, et cetera, in compliance with those. I hope those are all taken into consideration, and you can word your document, if you come up with a final document, that will address the type of decisions each of those make.

An important part of this process should be also community benefits. Not just the impacts of the technologies, but rather what benefits isolated communities or sensitive environments will be given, everything from employment, to pay rates, types of services, protection of the environment, to restoration of habitat, et cetera. Those should be important parts of the mitigation process, and spelled out very clearly in a process by which those can be decided.

A concern I have, and have had for a long time, is the concept of control of the grid itself to distribute the electricity. Right now we do not have any wheeling provisions in our state, and we need to have that so that entrepreneurs may have an incentive to operate power plants or distributed energy, and be able to utilize the grid, and to be able to do that without Hawaiian Electric stepping in

their way, which has happened in the past.

The rate structure is something else that needs to be discussed. It's not just a question of what the technologies are, but what incentives can be used in the rate structure. And I would hope that you will address that so that, for example, off peak midnight people will be able to charge batteries, do things in their homes, companies can use their refrigeration systems to store energy at night at off peak rates.

I would hope you would also do, when you are talking about not just state self-sufficiency and clean energy, but if you particularly look at Oahu's need to develop its own self-sufficiency as an island, so they don't draw on the neighbor islands.

With regard to Smart Meters, I would urge you to look at not just the systems, the things that people are concerned about, pulses going over the air, but the utilization of the wires themselves, cellphone wires, cable wires, to go to the largest motors on the island. Let's say we have 50 or 100 motors that the utility would be able to turn off and on again, a freezer in a hotel, the air conditioning system in a shopping center, things of that sort.

I hope you will also address, as Mr. Hall just mentioned, you are required, according to NEPA, to do a cost

benefit analysis. So I think there's an important role that needs to be played by who pays for various things that are going to be done, the taxpayers, the consumers, the utilities rate shareholders in the form of lower profits. I hope you will also look at lifetime costs of the equipment. For example, a solar panel -- and these aren't the right numbers -- let's say a solar panel lasts 10 years, a windmill lasts 20 years, that you hopefully will look at the long-run cost of these things. And that also goes along with the commissioning costs. If certain existing technologies are taken off the grid, who will pay for those legacy costs of large diesel plants?

One concern I have is that too often we talk about energy being put into the grid, as if it's all the same. We all know that wind power and solar are not permanent, but there are also some uses for electricity that are not permanent, such as water pumps and air conditioning systems. And I would hope that you will be able to match, for example, solar systems with air conditioning, wind systems with water pumping, and sewage pumping, which don't have to be done 24/7. They can go off for awhile when those sources are not available. I hope you will also develop benchmarks, what we exactly have today in 2012, so that we know that we're moving towards the standard. Not just look at the goals long-term, but what are our standards today.

And finally, in 1973 here on Maui an excellent full-volume study was done on energy flows on this island. So we really do know where the energy was coming from and how it was being used. It was a very comprehensive study. I would like to see that done by the state as background, to help us make better decisions. Thank you. (Applause)

FACILITATOR CHANG: Kelly King, Janice Hill, and Ron Saranz.

MS. KELLEY KING: Aloha. I also want to thank the Department of Energy for coming back with the process, and opening it up again so we can get a more realistic view of the types of energy that are available. Originally when this whole process started a couple of years ago, I was very disappointed, like a lot of people here, that it focused on nothing but big wind.

I'm actually involved in an organization called the Hawai'i Energy Policy Forum, and they kept talking about this and the potential for it, and somehow it went from the potential to it looks like this is what we're going to do. So I think this is a very good process to start looking at different forms of energy.

My background is in biofuels. My company is called Pacific Biodiesel, and we started in the islands with the used cooking oil model, and it just pretty much helped the landfill extend another six years, and now we're looking

at agriculture. So I wanted to discuss the great potential in the state for biofuels, but also to caution and hope that the group looks at sustainable biofuels and sustainability standards, because all biofuels are not created equally.

We have got a demonstration project that Pacific Biodiesel is doing on Oahu, which I will invite you to come and check out. It's funded by the U.S. government. We've been working for over a year now on these different prop models, not using any petroleum fertilizers, not using any pesticides, and we have been able to grow crops on land that was basically dead up in the Pioneer Mill up on the north shore of Oahu.

And even they came by, and they gave us a plot of a couple of acres that they didn't think we'd be able to grow anything on. But doing it organically with cover cropping, and paying attention to the laws of nature, we were able to do that. So I just wanted to caution that there are different ways of doing different types of energy, and there are sustainability standards out there.

My other hat is I right now chair a non-profit that I started with some other certification experts across the country, and some biodiesel advocates, and some scientists that were working on sustainability standards for biodiesel for the United States. It's a national organization with a board that is comprised of experts

across the country. So these standards do exist, and I think they exist in a lot of different industries, not just the biofuels.

My second point is that I think we need to really include the cultural sensitivity. I have been in hearings, well, I go to hearings probably once a month on different energy issues. But I just wanted to share with your group the experience I had at one of the clean energy hearings or meetings -- they called it a summit -- on Oahu where a representative from Castle & Cooke came and talked about the Lana'i wind project. And they were asked why is there so much resistance, and why is there so much protesting of it. The gentleman who was presenting held up a piece of paper and said, "I don't know why. Look at all the things that we're offering to Lana'i. We have all the benefits."

And I thought to myself there's no sensitivity to whether those are even in the values of the people who live on Lana'i. It was sort of a sarcastic and snide reaction, "They don't know what's good for them. We're offering all these things, and they just don't get it." And what really was happening was that there were people coming into these communities that don't get what the local values are. So this attitude of "We know what's best" has been permeating. I think that's a huge issue with a lot of these projects.

We're working in several communities on projects

for biofuels. In fact, this week we're meeting on Moloka'i to talk to the folks on Moloka'i. We are not going to do something on Moloka'i that Moloka'i doesn't want, and we've never done that. I think that's one of the things that's really missing in our energy development here, especially with the big wind and cable. Thank you. (Applause)

FACILITATOR CHANG: And I just want to remind everybody that if you are not able to complete your statement, please submit it as a comment, as a written comment. I've got Janice Hill, Ron Seranz, and Michael Hill.

MS. JANICE HILL: Aloha. My name is Janice Hill. After teaching for the State of Hawaii for 28 years I retired, but I still work as a substitute teacher and a state licensed massage therapist. I lived and taught on Lana'i in the late seventies and early eighties, and was the founding director of E Malama I Na Keiki O Lana'i preschool. My husband Mike and I live in a modest home in sunny Kihei. Our 20 photovoltaic panels and solar water heater help keep our electric bill at its minimum.

I love Lana'i island for its pristine environment, rare cultural sites, unique history, and people who appreciate a rural lifestyle. It was difficult in pineapple plantation days envisioning its transformation into a world class resort. Now I cringe to imagine the impact and

devastation of a giant wind farm and undersea cable to transmit energy from Lana'i to Oahu.

Each island has sufficient renewable resources to supply its own people with energy. The goal in an island state like Hawai'i needs to be island independence, not more dependence on fossil fuels, mainland goods, and now wind. It feels like you would be robbing Peter to pay Paul to use Lana'i as a generator for Oahu's electrical needs.

The mantra of this decade is "Jobs and Clean Energy." Ideally, there would be both for the people of Lana'i. Yet, I doubt if that would really happen if an industrial wind farm is built there. Federal subsidies would go to the big businesses to build this fiasco, when in reality it would be more corporate welfare subsidized by the taxpayer and electricity consumers.

An undersea cable proposal seems ludicrous. It's unnecessary, costly, and threatens both the land and ocean ecosystems. The cost of this wind project could easily provide Oahu's homes with photovoltaic panels. It seems Hawaiian Electric Company is not equipped for this kind of grid use. Wouldn't bringing solar electricity up to date be more beneficial to the environment than an undersea cable from the Lana'i windmills to Oahu? Thank you. (Applause)

FACILITATOR CHANG: Next I have Ron Seranz, Michael Hill, Doug McLeod. Is Ron here? Is Michael Hill

here? Michael, Doug, and then Kay Okamoto.

MR. MICHAEL HILL: Thank you. My name is Michael Hill, H-I-L-L. I live in Kihei, and I'm a frequent visitor to Lana'i. I have been going there for almost 20 years, and I keep going back because I do believe it is such a special place. I'm also a firm believer in renewable green energy. The photovoltaic panels that we have on our house supply all the electricity that we use at our house. But I also think that the idea of generating electricity on Lana'i and Moloka'i, and then shipping it to Oahu with an undersea cable, makes just about as much sense as if I put my photovoltaic panels on the neighbor's house down at the end of the street, and ran an extension cord down to my house. (Laughter)

So I believe that the only reason these projects are even being considered is because there are some very wealthy individuals that have figured out that if they can get the government subsidies to build the project in the first place, and they can get the electric consumers to pay for the cable which has already been proposed, then they can just sit back and collect the money.

So I commend the panel for encouraging all the different types of renewable green energy, and I support that effort. However, I think that the energy should be generated as close as possible to where it's going to be

used. So I would hope that you would not support the big wind farms on Lana'i and Moloka'i. Thank you. (Applause)

FACILITATOR CHANG: Doug McLeod, Kay Okamoto, and Alana Kaopuiki.

MR. DOUG McLEOD: Good evening and aloha. My name is Doug McLeod. I'm the Energy Commissioner for the County of Maui. I'm here tonight on behalf of Mayor Arakawa. As many of probably know, Mayor Arakawa opposed both of the big wind projects proposed for Lana'i and Moloka'i. So in a sense, we view this as a move in the right general direction, away from a really narrow solution that tried to force a very unpopular set of wind farms on the people of Lana'i and Moloka'i.

At the same time, we have substantial concerns about this particular document and the approach. The biggest concerns we have are, number one, the failure to consider community acceptance and community benefit in the DOE's preliminary identification of issues. Number two, relying on undefined terms like "clean energy," which can result in confusion and perhaps unconstitutional vagueness. Number three, DOE's failure to disclose the pre-agreed positions of key cooperating agencies and the utility.

DOE says that they are doing this PEIS to help guide future funding decisions. And they also say that they're merely amending the existing EIS, rather than

beginning again. The problem with this approach is that it takes credit for the time spent in the last round of EIS hearings, without actually learning anything from those sessions.

And what are we talking about? The people of Moloka'i, for example, have spoken as clearly as they possibly can, every time they've been given an opportunity. And so we find ourselves asking, you know, at what point in the EIS process will we just look at the level of opposition in particular communities.

You know, if 90 percent of the residents of Moloka'i oppose big wind, is it appropriate to use federal money to support a project there? What about 95 percent? Surely if 99 percent of the residents oppose the plan, it should not be funded by the federal taxpayer. Does this DOE PEIS just assume that all of the options are acceptable to the community? And if not, where in the process are community benefits and costs considered?

The DOE says they will analyze potential impacts on an island-by-island basis "as appropriate." You know, on behalf of the Mayor, we would ask when would it not be appropriate? Shouldn't you always be looking at this on an island-by-island basis? We're just concerned that that sort of language looks like a way out of an obligation.

The DOE proposes to divide the HCEA into five

clean energy categories. The concern we have is quite simple. We've heard a number of speakers talk tonight about clean energy and renewable energy, but there's no definition of clean energy.

Embarrassing, but true fact, I spent the first year in my job always assuming that there was a written definition somewhere. I always figured I'd just never seen that regulation, it was buried somewhere in a document. But the truth is that we have a State Clean Energy Initiative that does not define clean energy. The Mayor supports renewable energy, and it really is an interesting distinction between clean energy and renewable. We would just ask that if the DOE is going to borrow this state program, you will need to supply definitions for some of the terms that are simply undefined.

The PEIS will analyze the potential environmental impacts of only those clean energy activities and technologies that are, quote, eligible under Hawaii's renewable portfolio standard or energy efficiency portfolio standard, 77 Federal Register at 47829. DOE specifically lists liquified natural gas and fossil fuel as a technology it will evaluate. We had this discussion earlier. We're still trying to understand. There is a 70 percent clean energy goal, so I guess by definition, 30 percent of the power is coming from non-clean energy sources. Is DOE

saying that LNG is eligible under the 30 percent side of the equation, and not the 70 percent?

The closest thing to a guiding document for HCEA appears to be the Hawai'i Clean Energy Agreement, HCEA. What does that document say? It seems to contain a number of commitments by the state that are not being disclosed to the public in the PEIS process, and maybe these statements are simply obsolete and things need to be updated. But right now the HCEA seems to be the only signed agreement between the state, the utility, and the consumer advocate. And DOE also signed this document in the role of a quote witness.

The HCEA commitments may be surprising to some of you. The utility has committed to install, quote, the maximum attainable amount of wind energy, unquote, and made a finding that, quote, to achieve substantially greater use of wind power on Oahu, where most of the electric power is used in the state, it is necessary to transmit the wind power produced on the other islands by undersea cable systems to Oahu.

The utility agreed in HCEA and the state to commit, and committed to conduct all studies and analysis relating to the undersea cable systems in a, quote, expedited manner. And again, there doesn't seem like there's been a disclosure. If there's still an ongoing

commitment by the state that these things are going to be done in an expedited manner, that should be disclosed to the people. The parties agreed in the Clean Energy Agreement that there will be no new generation fueled in whole or in part by coal. It may be a perfectly reasonable choice, but again, is that something that's binding on all of us? Is that part of the working understanding of what clean energy is today?

Finally, we just want to say that the HCEA calls for all the parties to support exempting Hawai'i from something called the Public Utility Regulatory Policy Act, or PURPA. And again, if that's part of what this process is, we would be concerned that we're just going too far afield here. Thank you for your time. (Applause)

FACILITATOR CHANG: Kay Okamoto, Alana Kaopuiki, and Walter Enomoto.

MS. LINDA KAY OKAMOTO: Good evening. My name is Linda Kay Okamoto. I am from the island of Lana'i. I've been a resident there for 45 years. My husband and my three children were all born and raised there. And I want to thank the people of Maui for listening to some of us tonight.

There are a couple of us who have come over from the island, but you are going to hear many people tonight who have a wonderful feeling about Lana'i, even if they

don't still live there. Many of them have lived there and maybe born there and have moved to Maui, but they still have that wonderful feeling for the island. And people, I'm sure many of you who have been over, understand that it is a different place.

I do also want to recognize that every island that we have talked about and we've heard about so far has different concerns, and we all need to help each other in those concerns. We're hearing about Smart Meters. On the Big Island they talked about geothermal, and the problems those energy systems produced for you, our neighbors, and I think we all have to help each other out. We are all neighbors in this whole process.

As I understand the process, it's to develop a plan for more energy efficiency on all of our islands. I think we've all agreed that we do need to be more energy efficient. We need to use less imported fossil fuels. But at what cost? Almost any problem can be solved if you throw enough money and resources at it. But is that what we need to do? And dollar cost doesn't seem to be covered. In fact, we have been told that it's not part of this process. But it has to be. Dollar costs are part of our environment. If we are having to pay more for everything, that affects your environment.

But I am not just referring to dollar costs, which

are gigantic, but costs include the loss of cultural and environmentally sensitive areas in our state, which we've all heard about, and the destruction of the environment, and the addition of bi-products that we do not want in our environment. All of these processes are part of the alternative energy, but we do have to look at the cost.

We need to study what has already been happening. We have wind energy on Maui. I feel that the study must say what did it cost to put it in, what is it costing to keep it going, how many jobs are produced, and how long are those jobs continuing. Are we willing as a community to see our future generations saddled with $2- to $3 billion to put a cable to Oahu so that they can have better energy? Thank you. (Applause)

FACILITATOR CHANG: Alana, Walter Enomoto, and then Lester Wong.

MS. ALANA KAOPUIKI-PELLEGRINO: Aloha. My name is Alana Kaopuiki-Pellegrino. My grandfather, Solomon Kaopuiki, who is sitting over there with the black hat on, he's 93 years old. He was born in the town of Keeaumoku, Lana'i. He grew up living off the land and was taught the importance of caring for it. He is known for being an adventurist and has told us many stories of his explorations around the island, leaving no surface untouched. My family is lucky enough to see Lana'i through my grandfather's eyes.

For those of you who aren't aware of the uniqueness of Lana'i, it has a vast open landscape that creates a sense of old Hawai'i. It is a feeling of history untouched, but valued. My grandfather saw what was happening to his pristine island and knew he had to protect it. He worked on countless boards and history committees trying to share knowledge to preserve areas around the state. He began Kanepu'u Forest Reserve in the ahupua'a of Ka'a to help the few rare native species that were left. This forest reserve is thriving today, but could see a decline because of this project.

The Big Wind Project will expand over a fourth of the island. This will limit access to the ahupua'a of Ka'a, the beautiful sandy beach of Polihua, the purple red dirt of Keahiakawelo, and possibly the entrance to Kanepu'u. It is difficult to envision a sense of pride for your island when it is covered with something so foreign, such as towering windmills.

I think back to my kupuna and the disgust that would show on their faces if they saw this project. They would never need this type of resource because they didn't live frivolously. The Hawaiian way would never destroy one resource for another. It baffles me that someone could propose such a ridiculous idea, such as transferring energy from one island across the sea to another.

First of all, the undersea cable would never be approved by our ancestors because of the respect that they had towards the ocean. Secondly, this project plans on transferring 100 percent of the energy made to Oahu. Hawaiian values would take care of their own aina and own people first.

This Oahu-centric mentality affects all of the outer islands, but I think this is a new blow. Oahu needs to look at its own sources and become self-sufficient by solving some of the problems on island before looking to destroy another. The state is looking at meeting the goal of 70 percent clean energy the wrong way. Instead, we should focus on conserving energy.

During my parents' generation they were taught important lessons, like hanging your laundry, turning off the lights when you leave the room, walking or riding your bike to get around. What happened to my generation? Many don't understand the ideology of malama or kuleana. Despite the lack of respect people have for the earth, the state should at least be educating individuals on ways to help conserve energy use. Our state government shouldn't spend the $1 billion in tax money that would have been used on the undersea cable, but instead should promote advertisements or plans to reduce energy locally.

Although it would be nice if everyone cut back on

their use, it most likely won't happen. So I do believe renewable energy is important to limit greenhouse gas emissions and prevent global warming. However, I don't believe wind turbines are cost-effective or efficient ways to make energy. There are less invasive forms, like solar and photovoltaic panels, hydro-electric power, bioenergy, and geothermal that can be utilized.

The ironic part is this project has nothing to do with saving our planet, but everything to do with profit. They have no interest in the people, just in making a buck. It's a profit scheme. We need to stand up and stop letting wealthy corporations dictate the ways of our state.

(Applause)

This project will do nothing for the people of Lana'i except to cut off access to a huge portion of the island. I have watched videos from people around the world who live near similar wind turbines. They describe the sound and shadows caused by the turbines to be detrimental to their health.

But the most important part is people need to understand the Hawaiian value of malama and taking care of nature. The land can't speak for itself. This project, if started, can never be reversed. It will destroy that portion of the island forever.

I humbly ask you to rethink this decision and

abandon it. You are all very bright people. Sure enough you can find another solution to solve Oahu's energy crisis. Mahalo. (Applause).

I just wanted to add I know I specifically spoke about Lana'i, but I don't believe that it should be on Moloka'i either. (Applause)

FACILITATOR CHANG: Walter Enomoto, Lester Wong, and Anita Hallard.

MR. WALTER ENOMOTO: Aloha and good evening, everyone. My name is Walter Enomoto, E-N-O-M-O-T-O. I am speaking tonight as an individual and professional in the energy field for now over ten years here on the island of Maui. I have been involved in the solar/photovoltaic field, energy efficiency, energy consulting field, and wanted to share some of my thoughts as someone kind of in the trenches of the energy field.

As you go through this programmatic EIS, there's a missing component in the energy efficiency side. And one area that really needs to be looked at more, not only conservation of course and energy efficiency, but also in the area of maintenance, retro-commissioning, real time monitoring, so that both businesses and industries can monitor exactly what they're using, and see if there are any problems.

Point in case, today I had to dress nice because I

was checking out a commercial solar hot water system that was not working for months, that nobody knew about, and was costing thousands of dollars. It was as simple as somebody had turned off the breaker that powered the solar controller that made the system work. That cost thousands of dollars to this entity, because they did not have a way until recently to identify that that energy use was being consumed. All they knew was that they saw their bill going higher.

So for residences as well as commercial entities, maintenance is critical. If you own it, take care of it, make sure it works right. Air conditioning systems, huge central plants and large facilities, all the way down to home systems, that's an area that is very lacking. Our corrosive environment on air conditioning components eats up and degrades the efficiency of air conditioning systems much quicker than in other areas.

Motors pumps, unfortunately because of the economic conditions, refrigeration, particularly on the island of Moloka'i and Lana'i where the energy prices are at least a dime higher per kilowatt hour compared to Maui, with the economic malaise that plagues both Lana'i and Moloka'i, their cost for basic things like refrigeration, freezing, are going to put them in a very tough spot unless we can look at more ways to engage energy efficiency measures, and

hard-to-reach communities that really need it for basic sustenance and survival.

Along those lines, in the area of transportation I would be remiss if I didn't speak about that. I have been involved with bicycling advocacy, and one area of alternative transportation is the non-motorized and non-fossil fuel area of transportation. Why do we need to even use a vehicle if we can walk, ride a bike or get around? Much of that has to do with proper planning of communities and layout, avoiding sprawl. Creating communities that you can bike or walk, and interact with everybody around you, as opposed to the urban sprawl that we have created in many communities of our island.

I just wanted to share these thoughts with all of you, and I hope you will consider them as you go forward in this process, and I look forward to seeing the draft document later. Thank you. (Applause).

FACILITATOR CHANG: Lester Wong, Anita Hallard, and then Kanoho Wailuku Helm.

MR. WONG: Aloha. My name is Lester Wong, W-O-N-G. Lana'i is a special place to me personally. My grandparents moved there in 1927. The Nahipu family, the Matsue family, to work on the plantation that was just starting out. On my Hawaiian side the family can be traced back to Kaonolu Village. I personally spent a lot of time

there as a child. I worked in the pineapple plantation. And most recently I retired from the Maui Police Department as the Lieutenant and the Commander of the Lana'i Police District. My time there was very special to me. The people there are very special to me.

What impacts the community, for this purpose, I would like to talk about the socio-economic impact. Hunting and tourism is very important. For me, as a hunter, as a person who goes out and likes the outdoors, Lana'i, through the State Department of Land and Natural Resources, and the cooperative agreement with the landowner, deer season and sheep season for hunting brings in monies for transportation, for food, lodging, shelter, amenities. And that takes place for 24 out of the 52 weeks out of the year. And you can ask, you know, the residents there how important that is.

If these windmills are to be built on that side of the island, which is the state hunting area, I can't see how that will continue. With today's technology, with Google Earth and 3D imaging, and movies, I'd like to see a 3D image of what the impact of these windmill towers would have on each of the roadways and valleys and access to the ocean for fishing or for recreation.

I also wanted to bring up about what was said earlier about Mayor Arakawa. While I was stationed there,

we had a community meeting, and somebody brought up a question about the road to Keeaumoku. How come the county road down from the city is only one lane, and why is it so narrow. Why doesn't it become a two-lane road paved with a linear divider. And Mayor Arakawa answered, "Do you want cars to go down that road in two directions, speeding, or do you want to keep it in a rural character?" And I had to agree with him.

You know, the County Department of Public Works, those highway division guys, they take care of the roads really well. The shoulders and everything is really nice, but it's still a one-lane road. People will drive slower on a one-lane road, as opposed to an asphalt road that is well paved.

I wanted to thank everybody for coming out and giving their comments and allowing me to speak. Thank you. Mahalo. (Applause)

FACILITATOR CHANG: Next I have Anita Hallard, Kanoho Wailuku Helm, and Sharon Rose. Is Anita Hallard here? Kanoho? And then after Kanoho, is Sharon here? And then after Sharon is James Pasqual and Jerry Wright.

MR. KANOHO HELM: I'll be quick. I'm looking into submitting written questions. I also would like to encourage everybody here who have a lot of concerns to submit written comments, because they want to look at that.

It's a very confusing process, the PEIS process. I Aloha Moloka'i has put out a simple little film called "When to Wear Your Malo." So if you guys want a kind of simple explanation on commenting on the PEIS, type in "I Aloha Moloka'i, When to Wear Your Malo," and you can kind of look at how to comment.

Basically I'm up here, and we are going to attend the Lana'i meeting as well, back on Moloka'i, and then back on Oahu and the last meeting. As the man stated earlier, there's been three different surveys actually on Moloka'i, all of which were 90 percent opposed to the wind farm that is being proposed there. I mean enough is enough already. We don't want to shout, we don't want to yell. We're tired of, you know, going out there and holding signs. This has been going on for years already that we've been fighting this. It's been stressful. It's been stressful on all of our families. And, you know, it's been heartache, because we know that this, the project that they're proposing, is not right. It's not the right thing to do.

Does anybody know what the status of the Kahuku Wind Farm is today? Anybody know? It's not functioning. It's not functioning today. Now we are going to waste our time on putting up these wind farms, investing in a billion dollar cable, and the wind farm on Oahu is not even functioning? That's crazy. That's crazy.

You know, I'd just like to say that we're standing solidarity with Friends of Lana'i and Kupa'a no Lana'i in our opposition to the wind turbines and the cable. And we will submit comments, we will submit many comments. Mahalo. (Applause)

FACILITATOR CHANG: Next is James Pasqual, Jerry Wright, Deborah Greene. After Jerry, is Deborah here? Okay. And then Keala Kaopuiki Santos.

MR. JERRY WRIGHT: My name is Jerry Wright, W-R-I-G-H-T. I'm here, I have been involved in the PV industry now for about four years. I got into it because actually I'm a paramedic as the full-time job, and I got into the PV industry because I have three kids, and renewable energy is what is going to get us out of the trouble we're in as a species.

When he gave his speech earlier and put up the clean energy agenda numbers, the 40 percent number jumped out at me. I realized that that number is currently unachievable because we are bumping up another number that MECO has put out there, and it's 15 percent. I don't know if you people are aware. If any of you have tried to put in a PV system in the last four or five months, across the island MECO has put a limit on the number of PV systems that will go in any given circuit, of 15 percent of that circuit power coming in through photovoltaic cells.

You folks, the Hills, put in a system I would assume sometime in the last few years. Two-thirds of your neighbors, if they wanted to do it now would be told, "I'm sorry, you cannot put in a PV system." That's the situation we're in right now.

So my proposal is that -- it's a very simple one. Right now, from a socio-economic standpoint, allowing photovoltaic to proceed to move toward that 40 percent, which could clearly really move us forward quickly. Three years ago if you went in to get a PV system, went to MECO, dropped off your paperwork, then went to the county, dropped off your paperwork on a Monday, the following Friday, two weeks later, you could have guys on your roof putting up your system.

Now if you go into MECO, drop off your paperwork, you have got a three week wait until they'll tell you whether they'll do it or not. They may say, "Well, we're going to have to do a supplemental review because we're pushing 15 percent." They could extend it another three weeks. Then if they're done, they will give that paperwork to the county. The county has got three weeks. So now we've gone from two weeks to nine weeks minimum to get these panels up. And the clock is ticking on the tax credits that make this whole thing very viable and financially attractive.

So what I would encourage basically is we have a member of the PUC here. I would like the PUC and all the policymakers to question MECO and ask them why is this 15 percent level that they have set not being followed. That limit is not there on Kauai, it's not being enforced on Oahu. The only place it's happening is on the island of Maui. It's putting sand in the gears of an industry that was growing from a socio-economic standpoint.

The company I work for has had to lay off a bunch of installers, guys that were up on the roof in the sun putting those things up. A bunch of them have been laid off, and it's been happening across this industry that was really starting to accelerate to provide this goal, the state goal that we are trying to achieve. MECO is now throwing sand in the gears of this whole process. I would just urge the member of the PUC back here, and people at the county to find out what's going on at MECO where this is happening. Thank you. (Applause)

FACILITATOR CHANG: I have Deborah Greene, Keala Kaopuiki Santos, and then Nani Watanabe.

MS. DEBORAH GREENE: Ron Shranz, Sharon Rose and Anita have all given me their minutes, because they had to leave.

FACILITATOR CHANG: Are they doing to be providing written comments?

MS. DEBORAH GREENE: I do not know. My name is Deborah Greene, G-R-E-E-N-E. I live in Kihei. My Ph.D is from Ohio State University. My area of expertise is energy management and energy kinesiology. It is scientifically unacceptable to deny the mass evidence regarding the increases in cancer and the other adverse health affects in people exposed to high levels of radio frequency, microwave radiation, such as that emitted by Smart Meters and a smart grid system. Bio Initiatives is an international consortium of concerned scientists and policy makers who have banded together and poured over more than 2,000 pieces of peer reviewed scientific research, and they have come to the conclusion that the current regulations are inadequate to protect public health.

The United States has some of the most lax regulations on the planet. But as lawsuits increase, which they are, this is bound to change. In June of this year, June 15th, the Federal Communications Commission submitted a proposal to re-evaluate cell phone radiation emission standards. And then in August a report from the U.S. Government Accountability Office found that FCC cell phone radiation standards are outdated compared to standards of international regulatory agencies.

The current levels fail to reflect the most recent research on cell phone radiation, and they do not identify

the maximum exposure that most users are subject to. These FCC guidelines were last updated in 1992, and they don't take cumulative effects into account. Do you think electromagnetic radiation exposure has changed in the last 20 years? Yes. Me too. A consortium of law firms is leading the litigation against cell phone manufacturers, alleging that manufacturers failed to adequately warn users about the dangers of cell phone radiation. The same could easily be said for Smart Meters. Same industry, same negligence.

The negative health effects from radio frequency, microwave frequency radiation is well documented. Breaches in the blood brain barrier, compromised immune systems, neurological functioning compromised. It affects our DNA, produces behavioral problems, insomnia, sleep disruption, ringing in the ears. Also lowered sperm counts in men. Also childhood leukemia, and other types of cancers and tumors. Individuals who experience such side effects as these may be entitled to compensation for medical expenses, lost wages, lowered real estate values, pain, and psychological suffering. Who will pay for all of this?

So far, 52 scientists and physicians from around the world have signed a document refuting the safety of Smart Meters. They say to focus only on tissue heating, or what's called thermal affects, is incorrect and reflects a

lack of awareness and understanding of the scientific literature. In fact, more than a thousand studies done on low intensity, high frequency, non-ionizing radiation going back at least 50 years shows biological mechanisms that do not involve heat. This radiation sends signals to living tissue that stimulates biological changes, which can generate various systems, and may lead to diseases such as cancer. There is no reason for this type of technology to be approved and used anywhere in the world, but particularly not in Hawai'i. Thank you. (Applause)

FACILITATOR CHANG: Next I have Keala Kaopuiki Santos, and then Nani Watanabe, and Jeanne Skog.

MS. KEALA KAOPUIKI SANTOS: Aloha kakou. My name is Keala Kaopuiki Santos. Although I no longer live on Lana'i, my ohana has been there for generations, and my heart is there. I have a deep love for that aina. At the last meeting I spoke on the areas of concern that you guys are looking for. I spoke regarding the cultural and historical resources, access to hunting, fishing, and gathering sights for Lana'i residents, and also disturbance of archeological and cultural sites. If they're disturbed, it's irreversible. Those are the sites of our kupuna, of my kupuna, and it's just really unbearable to think of that destruction. I spoke regarding water resources. Where will the water come from for the concrete for these massive

turbines? Lana'i is already struggling water-wise as it is.

A Moloka'i student brought up a really good point. He asked, "How deep down will these turbines go? Will it affect the water table?" And I thought that was a really great question. They were concerned about tapping into the water table, and the affect that would have on their hunting. How it would affect the animals in the area, not having access to water. So I'm concerned about that.

I spoke in regards to geology and soils. What will occur, as Uncle Melvin mentioned, what will occur during heavy rains when all this soil is disrupted as they build these hundreds of windmills. What's going to happen to our reefs, these pristine areas of Lana'i?

And then as I was trying to wrap my mind around these undersea cables, I was starting to do research that I think is really interesting. And so I would encourage you all to look at this report done by the U.S. Department of the Interior, Bureau of Ocean Energy Management. It was done in 2011, and it's on the regulations -- sorry, it's a long title -- "Regulation and enforcement on the effects of the electromagnetic fields from undersea power cables on a Elasmobranchs branches," which are sharks and rays, "and other marine species."

The study looked at how the electromagnetic fields of both AC and DC undersea power cables affect the electro

and magneto sensitivity of marine mammals, sea turtles, and fish. In this study it was determined that the magnetic field emitted from these cables may cause navigational mis-cues in dolphins and turtles, and it was determined that it may affect turtle hatchlings and feeding behaviors.

That's a huge concern for me, because one of the beaches that's right at the bottom of this proposed development is called Polehua, and it is a well known area for turtle nesting. And of course the whole area is a sanctuary for hump back whales. So they found that there's currently insufficient information to determine the electromagnetic affect on whale species. But we can imagine that if it affects dolphins, it affects whales. So, you know, along with the major cultural and historical and environmental impacts, this is huge, what an undersea cable could do to marine life. I'd like to see what types of studies are going to occur on that end.

The study by the Department of the Interior suggested that the following proposed studies occur. They suggested that you track how the movement patterns and distribution of marine organisms are affected by wind power generation equipment. What are the long-term effects of offshore wind project facilities on local marine populations. Where will wind generation systems be constructed, and what marine organisms are most likely to

encounter them. And again, just really looking at what will occur long term, and so not going into it blindly. Some studies need to really occur before that undersea cable is implemented.

I just wanted to say I'm all for clean energy. I think it's wonderful. But when you look at this artist's rendering of what the windmills would look like on the island of Lana'i, this doesn't look very clean to me at all. It's a huge eyesore. Definitely the way of life will be altered. I think we really just need to look at distributed renewables on a small scale. People taking care of their own. Not at these large utility scale resources that are used to help other islands manage their crazy growth. It's ridiculous. So mahalo. (Applause)

FACILITATOR CHANG: Next is Nani Watanabe, Jeanne Skog, and then Julie Signore.

MS. NANI WATANABE: Aloha. My name is Nani Watanabe, and actually I was born and raised on the island of Lana'i, and I live in Maui full time. You have already heard about preserving our energy, but I'm really coming here to talk to you about the preservation of our island. And I was once on the Commission on Cultural Resources, and it was a very hard commission to be on. You know, how do you balance and work out peoples' needs.

All of the places that Keala showed and the

pictures, you know, I worked on Lana'i for ten years and came back to Maui in 2008. I continue to do activities and events on Lana'i, and when I go to Lana'i I share with the people about the history of our island. And I know that right now the windmills seems to be the number one topic.

So I talk about our preservation of our island. Uncle Sol is my uncle, my mom is the youngest of the Kaopuikis, and I was raised with my grandparents. It's so hard because, you know, they really instilled a lot of history about our island. You know, if you look at the pine trees on the island, my grandfather was originally from Korea, and I remember seeing a certificate that he got for being one of the planters of those pine trees.

And when you go to Kanepu'u, and Uncle Sol took us on a lot of tours there, you know, we had our opios, our other groups that went on a tour to Kanepu'u, and I look at all of the hard work and the history that our kupuna had actually put into our island, it's so valuable. It's something that you can never replace, you know, it's history. And we shouldn't be, you know, blocking these places from people to go and see and learn about our island.

When I would talk to the visitors I say you can enjoy fishing, hunting, golfing, or doing nothing, because people live in such a chaotic life. When you go to Lana'i your adrenaline, you just become -- you get so relaxed, you

know. At Koele I was born and raised, and I lived all my life at Koele. So we were known as the Koele Kids. And today, you know, I continue to support the Four Seasons at Koele with a lot of these cultural activities at the resort that we can continue to share with our visitors and our community.

But at Kanepu'u, if you haven't gone there, I think you all should go and visit our island. Go to our cultural inheritance center. They have done an awesome job in preserving the history of our island. In fact, people would say, "Nani, how can somebody buy an island?" And, you know, it's really hard, because it's like the person that owns the island has the power, you know, and the money to do it. And all we can do is speak up and say we want to preserve our island. You know, I want to be able to go to Polehua, I want to go to Kanepu'u, and I want to see the dry land forest, you know. I want to be able to preserve our native plants and our native birds.

Hunting is the lifestyle on Lana'i. I remember I used to get so mad at my mom because I had to hang laundry every single day. And when I worked and I babysat for the managers that lived in Haole Camp, I loved it because they had driers and I didn't have to hang clothes, and I thought that was so cool. But now we're trying -- we have driers, but it's eating up our electricity, so now we want to go

back to basics. I think we have to go back to basics and hang our laundry. My husband is very into that. We have a drier, but I have to try to hang my clothes within my house. And I think it's wonderful, though, you know.

So the lifestyle is getting back to basics and preserving how our kupuna had actually laid out our island. When I used to fly back and forth I would pass Lana'i, and it's so beautiful because there's no distraction. And when I saw that photo, it's so devastating. When I was in California I saw all these windmills, but somehow it matches there. (Laughter) but here it's just -- it just matches there. It's like, oh, yeah, it matches. But we have too much beauty to waste.

So I'm really against this, and I will stand up for not only myself but for the people of Lana'i who don't want to see this happen. But first and foremost is our kupuna that actually live there and came to share their island. Mahalo. (Applause)

FACILITATOR CHANG: Jeanne Skog. Is Jeanne here? Julie Signore, and then John Naylor.

MS. JEANNE SKOG: Good evening. I'm Jeanne Skog, S-K-O-G. I'm representing the Maui Economic Development Board, which is a non-profit organization focused on economic diversification in our community. And really, it's all about the new opportunities or other opportunities for

our youth, especially those that might otherwise have to leave the island because of professional or personal reasons. So that's what we're all about.

But as we seek to conduct economic diversification, we do so within the context of our communities cultural and environmental values. We are seeing the promise of renewable energy activity and jobs unfold as part of our economic base, which is really very exciting.

But as this sector continues to grow, the Department of Energy, State, and private sectors should be required to pay attention to the human infrastructure in our community in a couple of ways. One is contributing to residents acquiring the skills they need to fill the jobs created by this sector that is growing. We do a lot of work, MEDB does a lot of work in our schools. We have over 10,000 participants our programs in the Maui County level alone, and the 21,000 statewide. And a part of that work is in clean energy and the skills that are important to sustaining that sector.

Our students are fascinated by the opportunities that are unfolding before them, whether it's working at Maui High on hybrid vehicles and learning about how energy intersects there, or setting up their own solar array as part of an experiment. Even as simple as seeing the impact

of changing an energy appliance to an energy saver appliance, and the impact that has to the bottom line. I mean they're really fascinated by all of this. So the capability and the intelligence is there, we just need to help facilitate them becoming part of the workforce.

And secondly, we've got to devote more resources to engaging our community, and find ways to have regular ongoing dialogue versus just coming once every year-and-a-half, or whatever the case may be. It's got to be regular, it's got to be ongoing. Energy is a very personal decision on all of our parts, and we just have not had adequate channels for having the dialogue, having the exchange. I mean it's great to have everyone here today, but who is not here, and who will not be heard because those channels are not in place. So I want to encourage the state and federal and private sector to do that. And some have done it to great effectiveness more than others, but you just cannot do enough of it.

And finally, last comment, the status quo in terms of our energy resources and costs are just not sustainable, so we must get creative on solutions. We're excited about the work of companies like Pacific Biodiesel. So we hope that this PEIS really helps to facilitate and guide our community's search to looking for community accepted actions. Thank you. (Applause)

FACILITATOR CHANG: We have Julie Signore and then John Naylor.

MS. JULIE SIGNORE: Aloha. First of all, I just want to say everybody who has spoken -- I'm sorry, my name is Julie Signore, S-I-G-N-O-R-E. Everyone who has spoken tonight came from their heart, and I think that's something that really needs to be heard by this panel. These islands mean so much to us, and that can never be taken away. The studies that our people are putting forward, I am not going to elaborate on anything further there.

I do want to say thank you to the panel, and with all due respect, I'd like to also just quickly mention it's time to think outside the box. With all the items that I saw in those lists tonight, I was anticipating something completely outside the box, because I can find that if I do research on my own. I would invite everybody here to look into the Keshe Foundation, K-E-S-H-E. They're located in Belgium. We're talking about renewable energy. What if there's free energy? Tesla has had his work out there for decades. What happens every time any inventor gets close to doing something for us? Unfortunately, they disappear.

Dr. Keshe has created this foundation. There is free energy available now. Every country has been approached to send an ambassador to Belgium to be trained in how to utilize this. It is a box so big (indicating) that

everyone can attach to their home. No converting any appliance. And you tap in to the energy that's already out there that we don't see. It's the plasma energy. It's not polluting anything, it's out there, we live with it all the time.

There's a problem with the United States, though. Our President said no, under no circumstances is this technology allowed into this country. In the meantime, Africa has sent their ambassadors over. Take a look-see at what's going to happen over in a country that really needs help on so many different levels. The problem I don't know for sure. The only thing I can think of with this country is the problem is lobbyists. So unless and until we get them out of the picture. There's so much talent with each person in the State of Hawai'i, let alone the entire United States, to be creative.

I wasn't going to talk this long, but I am going to give you a quick example. My husband is a tinkerer in his spare time. For under $20 he's gone to Radio Shack, he bought some -- I hope I say these words right -- capacitors, a couple of wires, a rod, and he has played with this on his own. And there is free energy out there. He can charge a 9 volt battery with something that's this big (indicating) with a couple of skinny wires.

He also in his spare time created just one crazy

little thing with hydrogen, which is how he's running his car, with a mixture of gas and hydrogen. Anybody can do it. The research is out there. We need to approach our government and let our people bring it here. Thank you very much. (Applause)

FACILITATOR CHANG: John Naylor. John is the last person that's signed up. Is there anyone else? Okay, all right.

MR. JOHN NAYLOR: Thank you. My name is John Naylor. I'm glad I'm not the closer. (Laughter) I am concerned about pretty much everything that people talked about here today, and I want to really thank everyone for coming up and, as the last woman said, speaking from your heart.

I'm concerned about Smart Meters. You know, we've heard a lot of testimony tonight, and there are so many of those fields now with cell towers, with our own computer systems in our houses, and now these Smart Meters. There's so much unknown about these things, and they're essentially being forced on us. So that's one of my concerns.

I'm also very concerned about what's going on with the aina, the islands of Lana'i and Moloka'i. We've heard about those. I wanted to once again bring this up and have you look at this (indicating). And then on the little flier, and I think these are still available over there,

there's a picture. And I don't think you can probably see this, but it's a picture of a windmill, a picture of a tree, and a picture of a human who is six feet tall. Well, I'm six foot three, so I did a little math. I don't have a calculator, hopefully I can still do long division, and this wind turbine at its peak is 410 feet. So I'm six feet tall or a little over. That would be 68 times me.

So just if you can get an image of how massive that is, and then look at how many potentially would be on the island, I think you can begin to grasp the impact on the aina. And then the people who live there and have lived there for generations, it just blows me away that we can do that and they don't even get any of the energy. It gets shipped off to Oahu. And then we heard that Oahu's wind farm is not even functioning. That's just, you know, it's inconceivable.

And then all the impact that that is going to have to -- you know, can you imagine the foundation that has to be in the ground in order to hold that up? So all that earth is going to get moved. As people have said, it's going to rain, there's going to be erosion.

You know, all over the world our coral reefs are in jeopardy, and coral reefs are where the marine life begins, you know. The little things, bigger things come along and eat those, and that's how we get our food. And so

many people on those islands actually live off the aina. They're supplementing their meager income with hunting and fishing and gathering.

So please, please look at this impact. Consider all the cultural aspects. I mean so many people have, so much better than me, spoken to these things. I'm just saying put me down as also supporting these people. And then, you know, think about the fact that how many people are on Maui that didn't even see the article, you know. It was in today's paper. It's not a heck of a lot of notice. I don't know whether there was another article, but I do go through the Maui News every day, I'm a subscriber.

The people that spoke here today represent a lot more people who, if they weren't working two jobs, weren't raising their kids and so forth, would be here if they knew about it. And all the other things that are going on while we're too busy to take notice, or just can't get there.

Let's see, I've got a few more notes. Nobody is standing by me. I know you are going to come and give me a hug here in a second. Well, anyway, thank you all for coming, and thank you all for listening, and I will give the closer a chance. Thank you very much. (Applause)

MR. HOKUAO PELLEGRINO: Aloha. My name is Hokuao Pellegrino, H-O-K-U-A-O, last name, P-E-L-L-E-G-R-I-N-O. (Hawaiian language spoken). My name is Hokuao Pellegrino,

and there was a number of things I would love to speak about. I'd like to first off just say real briefly that I am definitely not for any type of wind farm, wind farms on Lana'i or Moloka'i, and I support the efforts of my wife's family, the Kaopuiki family, that have lived on Lana'i for generations.

I actually want to speak on something a little bit different in regards to renewable energy, and that is sustainable food systems. One thing that nobody has talked about in regards to the sustainable green energy, renewable energy initiative is the fact that we import so much of our food to Hawai'i, about 80 to 90 percent. And where does the fuel come from in order to fuel these ships, planes, fuels for our equipment, and so on and so on. And I think that's really something that you folks should look into, is sustainable food systems.

Prior to the current job that I do, I work for Kamehameha Schools, I worked on a comparative study on sustainable food systems, where we looked at the overall initiatives that are going on in the state in regards to food, sustainable food systems, growing food, our consumer who is consuming the food, where it's coming from, and so on and so on.

I mean we could look at a prime example here in Maui. One of our large commercial agricultural companies,

which I am not going to say, utilizes coal for running their sugar mill. I'll just leave it at that. (Laughter) And yet on the other hand they're using bagasse to offset some of the costs here in the island, and I think that's something that we need to look into. Because if we were able to grow more of our food, and even if we were to cut that 90 percent in half and grow 45 percent of the food, we'd be able to eliminate a lot of the fossil fuel that we're dependent upon in order to bring these foods into Hawai'i. That comes from my farmer perspective.

On the other hand, I'm also an educator pertaining to cultural resources, and one thing that has troubled me for many years in the position that I'm in -- and again, I'm definitely speaking as an individual, not for the organization that I work for. But as an educator, I'm baffled by the constant curriculum and programs that I and my sister-in-law and my co-workers need to develop and teach our students about the constant impacts that projects such as this are having on our cultural resources.

For example, if something were to occur on Lana'i in regards to these mega wind farms, we would have to create a program to teach our students about those cultural resources that once existed, and how we as Hawaiians need to figure out in this grand scheme of things how to perpetuate our culture. I would much rather be able to create and

educate our next generation about how to perpetuate a tradition that is still alive via our aina.

If we eliminate the cultural resources, our archeological sites, the birthplace our aina hanao, where our kupuna came from, then we will constantly be playing a catch-up game in order to teach, and have a very fragmented cultural landscape in how to teach the people of our aina where they came from. We won't be able to show them where they came from. In fact, their kupuna that are buried in those places will no longer be in those places where they were buried by their kupuna.

So I am completely for renewable energy. In fact, I guess I have a pet peeve in all of this, where we're going to spend $1- to $3 billion on an undersea cable, when my wife and I, who just started building our house, because of the saturation rate that Hawaiian Electric, Maui Electric Company has established in our community of Waikapu, Wailuku, and it's also occurring on Moloka'i, we are unable to generate as an individual any form of renewable energy. So my wife and I can't even put photovoltaic panels, yet I am going to have my own taxpayers dollars spend $3 billion to put an undersea cable from Lana'i to Oahu. I don't think so. (Applause).

So you need to look at how individuals want to manage these resources, and be able to structure ourselves

in a way that we can be self-sufficient. Because we want to do that, but we are held hostage by corporations and initiatives like this that don't allow us as individuals to want to do good for our aina. I mean I can grow my own food, but I would like to know that I could put photovoltaic panels or wind turbines on my house, so that at the end of the month I can pay my bills. But I can't do that.

So again, I'm not going to support any type of large corporate alternative energy if we as individuals cannot make a difference for ourselves and our community. Mahalo. (Applause)

FACILITATOR CHANG: Is there anybody else who would like to speak that hasn't spoken?

MR. JOHN DUEY: Aloha. My name is John Duey, D-U-E-Y. Three quick things. Number one, the gentleman earlier spoke about MECO and not taking the power. We had a 250 KV system all signed and ready to go in Ukumehame in a 500 gradient area. People finally went to MECO and they said, "No, we don't want your electricity," so we couldn't proceed.

Number two, no hydro-electric plants in the Nawaiha, period. Number three, we're going to spend probably billions of dollars on this renewable energy that we are talking about tonight, and by 2030, or whenever this 70 percent happens, we'll be paying more energy costs than

we are right now. So I can't see going through all this process when there will be incentives and tax breaks and everything given to all types of individuals and companies and corporations, whatever. And in 2030 we'll be paying more than we are right now. So it seems to me like a big waste of money, in my mind. Thank you. (Applause)

FACILITATOR CHANG: After this gentleman, is there anyone else who would like to speak who hasn't spoken? Okay.

MR. BRIAN SARASIN: Hi, good evening. My name is Brian Sarasin, S-A-R-A-S-I-N. I appreciate everybody being here and I appreciate the Commission being here. The one thing is I agree with all the testifiers. The one thing that really gets my dander up is all these windmills and all these other things, what -- excuse my French -- what in the hell is going on with the peoples' community plans?

The people in every area need to have their community plans, and have whoever is coming in abide by that. Never mind these big corporations coming in and they're going to do what the hell they want. No, I'm sorry. Each community's community plan needs to be adhered to. Right, wrong or indifferent, that's what the people want.

Now, the people that live there deserve what they choose and what they do not choose. Regardless of whether it's a small community or whether it's a huge community, it

really doesn't matter. So that's the one thing I want this Commission to really look at, is each area, whatever alternative energy, to really look at their community plans.

I am not against green energy, but I am against what the community does not want. If the community would open their arms and say, "Hey, you know what, this is excellent," as far as I'm concerned, go for it. But that's not the case. So each area of the community plan needs to be addressed, looked at, dissected. And at that particular point if the answer is no, then the answer is no.

And when I am talking, I'm talking 51 percent. I'm not talking 90 percent, I'm not talking 95 percent, I'm not talking 100 percent. I'm talking 51 percent. Because if the community does not want it, it should not be rammed down their throats. And that's the part that I just wanted to say that I didn't hear addressed earlier. Thank you very much. (Applause)

FACILITATOR CHANG: I have one more person. Does anybody else want to speak?

MS. DIONNE SANDHYA: Hi, I'm Dionne Sandhya, S-A-N-D-H-Y-A. Can everybody hear me in the back? Okay. I'm not even sure why I'm up here. I didn't plan to be. But I think that listening to everybody up here kind of instigated me to come up and at least say my piece.

As I was sitting there I was remembering the

Hawaiian ferry. And I remember all the good things they said it was going to be doing from Oahu to Maui and, you know, then all the environmental things it wasn't going to do. And it's just the same thing as the cable. It's like we don't learn. We're like rats, we keep going up and down the same thing. We don't learn from it. Everything affects our environment, and our environment affects us.

I've lived here since 1986 on Maui. Life brought me here, and life keeps me here for some reason. And I keep seeing the island change for the good and the bad but, you know, change happens. But I think what that man just said is absolutely correct. It's like if we don't have a say over our own island, our own place to stay, then what do we have? And, you know, we can give all the facts and all the studies and everything like that, but it comes down to our emotions.

You know, what do we want? We want health. We want to be able to live in a nice environment, and we want to be healthy to do it. And all these things keep impacting us, and we don't have a choice.

Remember back when we were -- the smoking thing, and they told us it was all safe, and everybody was in the bars, and everybody was here and there. Now all of a sudden everybody is paying the price for it, including us, the ones that didn't want it. And they say now they're trying to

limit the smokers, and where they can do it, and this and that. Well, you know, why not in the beginning? You know, how could it not? A lot of this is just common sense.

This is what bothers me so much. They do all these freaking studies, but a lot of it is just common sense, you know. What do we need a Smart Meter for? We know when to use our electricity. We know what causes it more or less, or what makes it stronger or weaker. We're not stupid, and why do they treat us that way, as if we don't know what we want.

We keep telling them what we want, we want health. Give us healthy things, that's all. You are giving us dirty electric energy. You're limiting what this young man just said, you know, suddenly it's like we can't even do our own when we want to do it. It's time people started listening to us. We keep electing these people to speak for us. I'm wondering who the hell they're speaking for. It doesn't seem like us, because everywhere I look it seems like people are just like me, they want health, they want beauty, they want to be able to live without having to pay out so much. My God, MECO is just killing us with our electric bills and water bills.

Some guy in Maui Meadows just recently, his bill was like this, this, this, and all of a sudden it went like this (indicating). Nothing changed. It's got to be

something. I heard that other people in Maui Meadows had the same thing. You know, what's going on? Now I heard about satellites, the electric meters are read by satellite. So when there's a screw-up we don't even realize it. It's like, you know, I don't know machines are good, but human nature is better. (Applause)

FACILITATOR CHANG: I'll let this one gentleman speak.

MR. KEOKI MEDEIROS: Aloha. My name is Keoki Medeiros. I'm a registered nurse. You know, it's good to see all these people come out here today. Basically, in my mind, honestly in Hawai'i we're at war. We're at war with what's going on in our communities. You know, the gentleman earlier mentioned regarding our food supply. It is true, we get 85 percent sent to Hawai'i from outside. You know, we live in a paradise where there's three seasons, we can grow all the food we want. But yet for some reason corporations continue to control us.

I just came from a protest in front of Monsanto to basically fight for what's going on in our islands, and it blows me away. Tonight we were told that the Maui Police Department was surveilling us with cameras across the street. There's come a time that we're citizens and we're being monitored for basically trying to protect our aina. So, you know, it just blows me away.

I mean we pay these scientists and all these smart people to come together, and the best thing they can come up with is an interisland cable. Seriously? You know, seriously? Earlier a brother showed us a picture of all these hundred windmills taking over the whole countryside. What's going on with us? What is going on?

Tonight we came out to speak our minds. I've been starting to come to these community meetings and speaking testimony and blah, blah, blah. And to be honest with you, I feel like my words fall on deaf ears. So tonight we come forward once again to speak and say what we're thinking and what we're hoping for. But my question to you is what happens when it falls on deaf ears? Because that's where I feel I'm at right now.

We come out and we say what we've got to say, but for some reason I wouldn't be surprised if five years from now there's a cable going to Oahu. So we talk about it, sustainability. Why are we having to provide for Oahu? I'm from Oahu. Screw Oahu. You know, I'm from Oahu. I'm from the west side of Oahu where, you know, at one point in time I came out of my house and ashes were falling from the sky. And my parents and everybody in the neighborhood was amazed, wow, Hawaiian snow. And now I'm older and wiser, and now I do my homework, and I look at it, and it's like the sugar barons are pissing on the public, pissing on us, but yet we

continue in our daily lives 9 to 5.

Where is the community? They can't come to these meetings because they're working. They're running the rat race. Our government contacted us? How many of you knew about this meeting? I just found out a couple of days ago. So, you know, hey, I hope we continue to fight, and we understand what we need to be here for. It is on all fronts from energy, to our food supply, to what's going on with development, you know. Come speak your mind.

But at the end of it all, ask yourself if it falls on deaf ears, if our government is not listening -- and I won't even go into our government. You know, it's not my government. But the bottom line is, what are we going to do. Because I'm scared, you know. I'm new to all this. I'm finally starting to do my homework and paying attention. But I'm telling you, I continue to feel like our elected officials, our government has forgotten about what's the aina, and what's real estate, and what's pono. So thank you, and I'm against this by all means. Please, you know, listen to the people. Aloha. (Applause)

FACILITATOR CHANG: If there's anybody else, we have got 15 minutes to close. Last comment.

MS. DEBORAH GREENE: Deborah Greene. I think I can easily fill 15 minutes.

FACILITATOR CHANG: But you can't. You have got

three minutes.

MS. DEBORAH GREENE: Why?

FACILITATOR CHANG: Because that's what we've asked everybody else to abide by.

MS. DEBORAH GREENE: It's hard to pick off of these pages and pages. All right. Well, okay, even if I opt out of a Smart Meter, I can still get radiation exposure from my neighbor's Smart Meter, because radio frequency microwave radiation easily travels through walls and buildings. How will the radio frequency radiation be contained from the Smart Meters and smart grid technologies?

Smart Meters and smart grid technologies are not UL safety certified. They even lack safety standards approval. Safety standards exist and are applied to other electrical components, but for some reason there's no evidence of any UL or CSA certification for Smart Meters. How will the safety of these unregulated meters be ensured? Isn't moving ahead with untested technology risky?

An electrical contractor on Kauai recorded a Smart Meter installed at a business on Kauai that showed the pulsed microwave emissions were over 1,300 percent greater than KUIC's claim. How will Smart Meter and smart grid manufactures be held accountable? Who will oversee testing of individual meters and meters all linked together to communicate with each other?

Smart grid technologies sometimes interfere with other technologies, and can cause medical implants and other medical machines to fail. Who will be held accountable for this? What about potential loss of life? The Maine Judicial Supreme Court ruled that the Maine Public Utilities Commission failed to resolve health and safety issues related to the installation of Smart Meters, and should do so now.

What will be done to address health and safety issues related to the smart grid in Hawai'i? What about residents who are electro-sensitive, will you create a refugee zone for them to live? Won't they have to be relocated? Who is going to pay for this? Who will compensate the refugees? Where will they go? That is very legitimate question, and so far France and Italy have created EMF refugee zones for people who are electro-sensitive.

How will underwater electric cables be laid without damaging the reefs and marine life? We already heard testimony tonight about the dangerous affects on turtles and other sea creatures. Smart Meters actually raise power bills. How will these increased power bills affect the poor and lower income people?

People on fixed or low incomes generally live in smaller dwellings, and so they're going to be in closer

proximity to the Smart Meters. They also tend to live in multi-tenant dwellings, which means that living next to banks of multiple Smart Meters is a reality for them. This will unfairly penalize people with lower incomes.

Also, people with lower incomes or who are retired or unemployed or on fixed incomes tend to be home during the daytime. Smart Meters tend to charge a higher rate for daytime energy. This will unfairly penalize people with lower incomes. People with lower incomes also tend to have older appliances that are less energy efficient. Smart Meters are designed to interface with new, higher priced smart appliances. This will unfairly penalize people with lower incomes.

There have been many reports from around the world in every region of the United States of Smart Meters causing fires. How would people be compensated for Smart Meter fires, and what about loss of life? Thank you. (Applause)

FACILITATOR CHANG: I want to thank everybody for attending tonight. You have up until October 9th to submit your comments. You can do them by fax, by email. We have a meeting tomorrow on Lana'i, the following day on Moloka'i, and then the last day on Thursday on Oahu. All right, thank you everybody.

(Hearing concluded at 8:50 p.m.)

C E R T I F I C A T E

STATE OF HAWAII)
) SS.
COUNTY OF MAUI)

I, JEANNETTE WALTI IWADO, do hereby certify:

That on September 17, 2012, at 5:30 p.m. this public hearing was taken down by me in machine shorthand and was thereafter reduced to print by me.

That this 74 page transcript represents, to the best of my ability, a true and correct transcript of the proceedings had in the foregoing matter.

Dated this 24th day of September 2012, in Maui, Hawai'i.

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JEANNETTE WALTI IWADO, CSR NO. 135