

The debate on SB2785 lasted almost an hour, speakers are listed in order:

Gabbard: I rise in support. We spend 4-6 billion to import oil a year, we have Tutu Pele on Hawaii island ready and waiting to share her geothermal energy with us. We depend on imported oil to generate 77% of our electricity needs. We must use low sulphur oil mostly imported from Indonesia. This bill is the result of a two-year long collaborative effort between Consumer advocate, DBEDT, HECO, the PUC, the Legislature and the Administration. It doesn't eliminate public input, the bill requires the PUC to hold a hearing on each affected island. Based on our clean energy goals, we could maximize solar energy and only generate 17% of the energy needed state-wide. Neighbor islands are blessed with more natural resources, and O`ahu with the largest concentration of people, has the greatest energy demands. But at the same time, O`ahu helps the neighbor islands through its greater tax base, to fund schools, roads and other infrastructure and social services for those islands.

While discussion may have begun with a simple tie from a wind project to O`ahu almost five years ago, the concept has evolved to a better understanding of the benefits that could come from an O`ahu grid to Maui grid connection. Maui is becoming increasingly important as the hub for renewable energy potential as well as an interconnection point with Maui County, and in the future to Hawaii island.

BAKER: While I rise in support of this measure, I want to acknowledge some legitimate concerns that have been raised by folks on Moloka`i and Lana`i. As a neighbor islander it is easy to feel like the concerns for our small, rural or less populated islands get short shrift from our big sister on Oahu.

For some neighbor islanders, Information may be hard to come by, it's expensive to fly over for face to face meetings and sometimes it feels like things are done to us not with us. Out of respect for those concerns, I had hoped we would be able to conference with the House on this bill. Then we could have developed a clear policy statement about where the cable would go and the need for community consensus as the Senate Draft had provided in the bill's preamble.

Our language stated "Nothing in this Act is intended to require the construction of an interisland cable from the islands of Molokai or Lanai to Oahu unless the communities affirmatively request an interisland cable." Such a simple sentence to acknowledge the concern.

The House draft was more generic: "Nothing in this Act is intended to require the construction of an interisland cable from any particular island." From the beginning we've tried to provide opportunities for input from communities potentially affected by this measure – that's why we started with a fresh bill this session rather than going back to conference on last year's bill.

It was important to vet the measure thoroughly and hopefully provide clarity and understanding in the process. I felt written acknowledgement in a conference committee report would advance that clarity and understanding. Unfortunately, the House did not agree to conference on this matter and we are here today to vote on the final version of the bill including the amendments made by the House to SB 2785.

This bill establishes the regulatory framework for developing, financing, and constructing an underwater electric transmission cable. It is important to note, however, what this bill does not do. This bill does not

require that an underwater transmission cable be built nor does it specify that certain islands will be the subject of a potential cable.

Underwater transmission cables have been deployed elsewhere and our discussion about one in Hawai'i waters is not new. As we move toward a more sustainable energy policy, it is important to be open to projects like this to help our State achieve its goals. Currently, each island has its own electrical grid and there is no interconnectivity among the islands. As Hawai'i moves to develop more alternative energy resources like geothermal power, it may be prudent to provide for the interconnection of these electrical grids to ensure that all our power needs are met.

It is desirable that the regulatory framework established by this bill be in place so that any potential bidders for a cable project know what the rules of the road are. The provisions in this measure will help to ensure that any project selected would be 'commercially reasonable,' as well as feasible. I simply don't subscribe to renewal energy at any cost and thankfully neither does the PUC. Again, SB2785 provides a pathway towards an underwater transmission cable but it does not in any way mandate one.

Although this bill is important for Hawaii's energy future, attention must be given to the concerns raised. Maui island has excess power and the capacity to produce more. Maui island is poised to become an energy exporter.

For any cable project that moves forward, my preference and hopefully that of my Maui colleagues would be to establish a grid to grid cable that one day could tap the abundant geothermal on the Big Island and the excess wind and other power from Maui island and connect to energy needs on Oahu. Such a grid to grid project would provide the benefits of a reliable interconnected major islands grid that would allow ratepayers the benefits of economies of scale and not be a burden to any one community.

Any project that goes forward in my opinion must be pono, it must be commercially feasible and not saddle ratepayers with unreasonable costs. Fortunately the PUC shares my concerns about the cost of electricity and desire for affordable rates. They demonstrated that commitment already in turning down a project that would have been costly using unproven technology.

SB 2785 provides the framework under which an interisland cable can be considered, vetted and proposals for deployment reviewed and evaluated. As a part of our overall strategy to achieve energy security and independence from imported fuel, I believe such a cable should be thoroughly explored as a way to connect the grids of the major islands in our state. Because I believe there is merit to such an orderly, considered, open dialog on the merits of and concerns regarding an interisland cable, I will vote yes on SB 2875, HD2. Mahalo.

English: I rise in support but at the same time have to express the reservations of my constituents on Lana'i and Moloka'i towards this bill. And frankly, what it comes down to is lack of clear dialogue with them that has led us to this point. Let me be clear, the idea of an undersea cable between our islands has been one that is something we have talked about for a very long time. In 2002 we passed the landmark legislation that created the renewable portfolio standards and Hawaii's pathway to renewable energy. Fast forward to today, 10 years later, Maui has become the energy hub. We have excess wind, we have wave energy being explored, we have bio mass, we have solar, PV, all of these energies are being produced. But what is the one

thing we don't have, we don't have an abundance of firm power back up. Many of my constituents in Haiku, Makawao, Kula, Pukalani, who have wanted to put in PV systems on their homes, they have been told no by the utility, because the grid has too much renewables on it, the grid has become unstable. What this cable will do for us on Maui is that it will provide the firm power backup that we need to enable all of these technologies to go. So to be very clear, Maui seems to be the hub. Maui will produce the energy, and I have to add geothermal. In Hawaii we have a situation where most of the renewable energy is on Maui and Big Island, and most of the need is on Oahu. We have reverse situations, Oahu does not have the renewables, and yet has the firm power backup. Big Island and Maui have the renewables, but we do not have the firm power backup. It makes sense to do a cable between these islands. I'm only sorry that we had to go through such a convoluted path to reach this point.

I want to thank all of you for receiving the emissaries and the missions from Lana'i and Moloka'i to your offices to hear their point of view. To understand that these small communities really don't want to be overrun by large, large wind farms, by large energy producing technologies. They want to simply exist, and to simply be part of our society and contribute, yes, but not become the engine, the power plant for the rest of the islands. The reality is that with the advent of Kaheawa on Maui and Auwahi on Maui, we will have ample wind energy from that island. With the advent of all the other technologies coming on, Maui will be the island, along with Hawaii, I cannot forget to include the Big Island, these two islands will be the engines that are needed to supply the energy for Oahu. And we can't forget that the energy from Oahu, the firm power from here, will support all of our renewables on the neighbor islands. So I want to thank you members for bearing with all of us during the last few years as we went through this. But I especially want to say mahalo to the people of Moloka'i and Lana'i for enduring this, for the real fear, and the real kanalua and the real mix up inside that they feel. Because think about it, if someone wanted to come to your home and put in something, the biggest thing you've ever seen, in your backyard, you would have these same feelings, too. So I want to thank them for enduring this and for understanding all of what we went through, and most importantly for becoming active voices, and making sure that their point of view is heard. They did a very good job lobbying, coming down, talking to all of you, and I thank you all for receiving them.

SLOM: In opposition. I was privileged to be visited on several occasions by members of the neighbor islands, particularly Lana'i and Moloka'i. I didn't just see them, I listened to them. And what they have to say makes a lot of sense. And while it's true we can go back many years, and we can talk about, we have had this idea and that idea, and it's been a long time. But I think part of the problem is, in this process, that have systematically cut the people out of the decision-making. And made it more difficult for them each and every time. The good Senator from Maui talked about Oahu being the big sister - I liken Oahu as being Big Brother. And I think that for too long now, we have had kind of mixed emotions in this very body. In some cases, we don't like what Oahu does, and we all band together for the Neighbor Islands. But when there's something that there's a benefit, to some of our favored people within the community, then we say, thanks for your input, but no thanks, we're going to go ahead. The fact that we didn't go into conference, the fact that we accepted the house version, the fact that the public had no input in further deliberations, tells me there is something wrong with the project.

And when you have to spend so much time year after year trying to convince the people that this is good for you, take it, like it, get used to it, then there is something wrong. It's our job to make the project understandable, to talk about in ways in which it's a win-win situation, and that's not the case with this bill. And by the way, just listening to the discussion over the last few minutes, I didn't hear talking about just a

PUC framework, I heard how we are going to go ahead with the cable, and we're going to have the grid, and we're going to unite everybody together, and we're going to use all the resources of the Neighbor Islands, primarily to benefit O`ahu. That's what I heard. But then I look at the people that are supporting this bill, and the organizations, and they've never wavered, they want this bill. They want the taxpayers, the government, the ratepayers to be on the hook for this particular project.

Now some of you know I am an economist by trade, and I certainly acknowledge and believe in economies of scale, it certainly can be good. But here we are in Hawaii, with the highest electric rates in the nation, with the Neighbor Islands having even higher rates than we do here on O`ahu. We talk about clean energy, we talk about alternatives, but in the meantime we do everything possible to help our single monopoly utility. And in every bill were they're involved, we make sure not only that they get a guaranteed rate of return, but we're going give them an even higher rate of return, we're going to add surcharges, and more profitability to this monopoly.

This utility monopoly should be de-regulated and people should have choices. And while the grid is a good idea overall, connecting the islands, we've also learned on the mainland and other places, that if you have everybody hooked up to one grid, and all dependent on that, if that grid goes down for any reason, natural or unnatural, then everybody in the state is disconnected. With all the uncertainties and all the problems with individual electric and utility distribution by County, at least you've got that independence. And I've raised the issue before, the technology of putting this 2-3 billion dollar cable, I know we're talking one billion, but I'm talking realistic economic figures, it's 2-3 billion dollar undersea cable, we've been told we have cables all over the world, we have cables in Hawaii. And that's true, but none to this extent and depth as this cable would be. I've even have the environmentalists come in and worry and be concerned about the effect of the cable on our mammals, on whales and dolphins. I don't know whether that is true or not. I remember when some of these same groups raised a hue and cry with the US Navy about what the effect of the sonar and their instruments would have on these mammals, and I know the US Navy has now made changes in its policies.

The good Senator of the Energy Committee mentioned the other day that even if we don't pass this bill, private developers could go ahead. No they can't. No they won't. First of all, there would be adequate public input, but more importantly, if they could go ahead, the private developers would have done this years ago. They don't go ahead because they need the fiscal backing of the state, they need the power to the utility to guarantee that the ratepayers will continue to pay even more, and take in the shorts. And that's what this bill does, this bill guarantees that that's the path we are on, and this legislature, this Senate is behind this. And "boo hoo" for the people of the Neighbor Islands, yeah we listened to them but we're going to ignore them. They have not had an opportunity for a full and open discussion and debate. And while the PUC may have made some good decisions in the minds of many, the PUC is a changing body. And who knows who will be appointed in the next couple of years, or what decisions they will actually make? So here we are with a project that does not have public support, does not have the opportunity for thorough examination in a conference committee, we could obviously not get the House to come to the conference table and change some of their ways. So what's the rush, why don't we listen to the people, we don't we take the time to get real input on each island to find out if there are other things and other ways to do this, rather than to bow down to the monopoly utility as we seem to always do?

ESPERO: In support. It's not unexpected to have individuals who are against this measure. And the residents of Moloka'i and Lana'i have been heard. And all the other advocates who are against this bill have been heard. But this is an important discussion for the state of Hawaii that will affect us for generations and decades to come. I believe the figure thrown around is 7 billion dollars spent each year to purchase oil and if the cost of this undersea cable, which has not been decided yet, let's make that clear, it's not going to be built next year, it's not going to be built in two years, it's not going to be built in five years, so the discussion is just beginning on one of the most important issues facing our children and grandchildren. Many people remember when gasoline was \$1 a gallon, the kupuna our elderly of course. For our generation it is \$3-4 per gallon. Imagine when gas, and it will be, is \$6, \$7 and \$8 a gallon? The desire and need for alternative energy will be so important that all forms of energy will be considered. Again, this is the beginning of that discussion. Nothing will happen overnight. The people of Moloka'i and Lana'i and the Neighbor Islands will be heard, they have been heard. And this is the beginning. It sort of reminds me of the rail debate that began 30 or 40 years ago. We've been talking about alternative energy for decades, as the Senator from Maui suggested, and yet how much closer are we to reaching that 70% that has been stated, of which 30 or 40% is conservation. This is a bill that begins the discussion and keeps it firmly alive. And we know those that oppose it will stay in the forefront to make sure it is done right and properly.

HEE: I rise in opposition. I've waited the whole session to agree with the minority leader. He finally makes sense. I wanted to ask the Chairman of the Energy Committee who I'm sure he was only kidding when he said he only had bird brain college math degree, when the minority leader suggested that the project would be \$2-3 billion, but I would yield to a question: what would it cost if it were to be built today, as opposed to majority floor leader saying it would be 4-5 years from now?

GABBARD: The cost is one billion dollars.

HEE: In today's dollars or 2017 dollars? But no matter, a billion is a billion is a billion as the floor leader has indicated. I am presuming, and I'm happy to be corrected, that the cost of the installation of the cable will be borne by the ratepayers, and by extension, therefore, the tax payers. I'm also presuming that the Chair of Energy who characterized Tutu Pele as waiting and willing to share, that he must have a pipeline to Tutu Pele. I frankly find that a little offensive. Any suggestion that this is pono I find offensive. Actually I find that tragic, not offensive. I have been here long enough to have lived through Super Ferry, which is a connector of O'ahu to neighbor islands, part of the debacle to rush to avoid environment and other review, clearly enunciated the hostility between Neighbor Islanders and O'ahu people. The best example of which emanated from the rule of no coolers on trucks. And then was graphically displayed when in one of the first Super Ferry cases, there were 3 trucks from O'ahu that were confiscated at Kahului loaded with imu stones. The interconnector called the Super Ferry resulted in graphic hostility between Neighbor Islanders and O'ahu.

I think many of you know that I have lived on Moloka'i, still own a house there, and but for that island I would not be here. I think it's time to change the way we think in Hawaii. I think it's time to take a lesson from other islands who learn to go without. I have a generator in my outer barn, and that's so when the electricity goes out, I can fire it up so the refrigerator stays cold. I haven't used it once since I bought it, several years ago. Because I figured out that when the electricity goes out, better to sit quietly and wait for it to come back on. As soon as I scrape up enough money, I will put PV on my roof, so that instead of paying whatever I do pay, I can be like my neighbor who pays \$16 a month to HECO. That seems like a more economical way to proceed as civilized people who may or may not have a bird brain math degree. It's not stupid, as was later

shared with this august body, in fact it makes perfect sense. I don't think this bill does anything more than encourage, encourage the development of a system and discourage common sense thinking on how to proceed. This reminds me of the mayoral debate, on-going, and I believe common sense will prevail in August, and if not in August, then in November. That way, this issue will be given a fair evaluation on what taxpayers think of higher rates for an interconnected system. This should not be passed at this time. I vote no.

[Gabbard, in rebuttal (essentially): I went to Lanai and Moloka'i, had a listening tour, shared what I learned with my colleagues, apologies for the Tutu Pele remark, and remember, the bill doesn't do anything.]

SLOM: As much as I would really like to jump to the bait and talk about rail, the good Senator from Kahalu'u has seen the light. There is a difference between hearing and listening to what they said. I don't think we have done that. Maybe the good senator from Kahalu'u would join me in a floor amendment that would seek to capture the hot air from this building alone and send to neighbor islands?

[We missed Senator Solomon's statement, tape ran out, but she was in support]

GREEN: I rise in support because this is a way for the Big Island to become an energy exporter. I see it as a way to have lower rates long term, and I think the people of the state want and deserve clean energy and there's no other way to achieve that without bringing us all together, with an energy system that unites all islands, if they chose to opt in. I am cognizant of the concerns of Lana'i and Moloka'i, we are extraordinarily respectful of them, and will protect their interests going forward. But I do think the Big Island will have to be connected to Maui and O'ahu over time to achieve our clean energy interests.

HEE: I think the comments I've heard in support are one-sided. For example, the previous speaker, he makes good sense. And he says that, you know people can choose to opt in, well that's true, but only if they're forced to pay for the cable. Then you have no choice to opt in, because you certainly can't choose to opt out. And to me that's the foundation of the issue here. Having lived on a small island I can clearly understand what it means for people to be heard and not listened to. If the Big Island and Maui have all the energy and power, that's terrific. Then the Big island and Maui should be focused on why the cost of their electricity is so high. Why aren't MECO or HECO, why aren't they responding to the over-abundance of energy? And if their system can't handle the over-abundance of alternative energy, why isn't the discussion focused on handling the over-abundance of energy so that Madame Pele can assist that island? The proliferation of housing on this island will continue with more energy. And the dependence, the mental dependence of people on energy will only exponentially grow. We don't need electricity- our kupuna, and I say this with great reverence, got by without electricity. I'm not suggesting we go back to kikepa and malo, but rather redesign our thinking so that we take care of each other ourselves. This cable is emblematic of much more than an expensive cable that will end up costing everyone more. I don't want to get into the rail debate, but you get the idea. I vote no.

ENGLISH: I would just like to make sure certain points are entered into our record. First, the hub is Maui and the Big Island. This bill is a regulatory framework, it does not authorize a cable, there are no bids before us for a cable. The Big Island and Maui have an overabundance of renewable energy, this makes the grid unstable. This is what the utility companies are dealing with, an unstable grid. Especially on the Big Island, and now it's beginning on Maui. With Kaheawa we now have 30% of our power from wind, and with advent of Auwahi wind, in the next few years, there will be another 15 or 20%, but already at this point there is

curtailment, they're stopping the windmills because there is too much intermittent power and not enough firm. That's why the concept of the cable becomes important. The production is on the Big Island and Maui, the need is on O'ahu. If there is a link, all of that excess renewable power from Maui and the Big Island will be used on O'ahu, and likewise all of that firm power from O'ahu will support Maui and the Big Island.

As for Lana'i and Moloka'i, and this is most important point of all, the economics of it simply says that more than likely they will not be connected to any grid system. Simple economics. If the power is already produced on the Big Island and Maui and the need is already established on O'ahu, who will finance something to put in wind generation and a cable if it already exists? The economics will drive this one. At least for Moloka'i, I'm excited watching what they're doing, looking at cutting edge technology and how to create their own energy independence. To be clear, and to make sure that on the record we know that the intent behind the bill is to allow the regulatory framework, nothing more, that this body has supported all along, an opt in option for Moloka'i and Lana'i. And we continue to do so.

NO votes: Senators Clayton Hee, Sam Slom and Suzanne Chun-Oakland

Yes, with Reservations: Senators Wakai, Fukunaga, Takuda, Ryan, Ihara, English, Shimabukuro, Nishihara, Kim, and Ige.