C O R R E C T E D V E R S I O N

ECONOMIC, EDUCATION, JOBS AND SKILLS COMMITTEE

Inquiry into community energy projects

Melbourne — 21 November 2016

Members

Mr Nazih Elasmar — Chair
Ms Dee Ryall — Deputy Chair
Mr Jeff Bourman
Mr Peter Crisp
Mrs Christine Fyffe
Mr Cesar Melhem
Mr Don Nardella

Witness

Mr Tobias Geiger, Managing Director, WestWind Energy.

The CHAIR — Welcome to the public hearing of the Economic, Education, Jobs and Skills Committee's inquiry into community energy projects. All evidence taken at this hearing is protected by parliamentary privilege. Any comments you make outside the hearing are not afforded such privilege. Hansard is recording today's proceedings. We will provide a proof version of the Hansard transcript so you can correct any typographical errors. You might state your name before you start, and when you have finished we will have some questions to ask you.

Mr GEIGER — My name is Tobias Geiger and I am the Managing Director of WestWind Energy.

The CHAIR — Do you want to say anything to us or shall we go straight to questions?

Mr GEIGER — I was thinking about that. But I would rather you have more of an opportunity to ask me questions. I am pretty sure you would have read through the submission that I have made.

The CHAIR — Yes. Mr Geiger, your submission recommends that governments can support community energy projects by providing certainty of electricity and large-scale generation certificate offtake. In what ways can the Victorian Government achieve this?

Mr GEIGER — I guess there are a number of ways. The easiest way for a community would be the knowledge of a price — a value — for those certificates over a significant term, say, 10 or 15 years, or even longer if possible, like the Canberra, ACT, reverse auction has done. In that way the community but also the other investors in the project, such as debt providing banks or super funds or impact investors or developers that want to invest with the community, have the certainty of the cash flow, which will help with their investment decision.

That is one way that the Government provides a price in a certain offtake period, and the other one would be that the Government perhaps actively trades those certificates on behalf of the community, because you can imagine that a community project really does have the capabilities to trade those certificates on the market. That is part of why solar is so successful, because a lot of the solar projects have less than 100 kilowatts and effectively they have a certainty of price and term and offtake for those certificates, with their having being purchased at the point of purchase for a solar project. So I think Government can play a very instrumental role in that to help those communities with that certainty of value.

The CHAIR — Your submission suggests that network service providers should be incentivised to find low-cost grid connection options. How are grid connections handled overseas and could these approaches be adopted in Victoria?

Mr GEIGER — Depending on where you go overseas, there are different ways of how the grid connection process is handled. In Australia typically what happens is a generator would apply for a connection of the generation assets to the national electricity grid, and you need to determine who the party is in whose assets you are going to connect in, whether it is going to be at the distribution level or the transmission level. At the distribution level you would be connecting to someone like a Powercor or Jemena or the like; that goes up to the 66-kilovolt level here in Victoria. Transmission would typically be to AusNet Services; that goes from 220 kilowatts and above.

Those parties will look at an application and then they will look at all the rule books, and then they come up with suggestions. The first suggestion is a big bill in order to look into it in detail. So they will not really assess your application unless you are prepared to pay up-front for them to do further design or look at the application in great detail. Now, that obviously presents a big impost for a community energy project to have to fork out hundreds of thousands of dollars just for the network service provider to look at their application.

In other jurisdictions, like Germany where our company has a lot of experience, the network service providers are actually obliged by the renewable energy law to do that without the proponent putting forward any cost towards that. Inherently the network service provider has an interest in keeping the cost of those connections reasonably low, whereas here we see a tendency on the part of the network service provider to have very little interest or no interest in keeping the cost of a connection low, because their remuneration is based on the value of their asset base, so the more valuable connection assets are, the more they get paid from the electricity bills basically through the network charges and the like. So they have very little interest in keeping the cost low. Also a lot of that cost has to be borne up-front by the proponent, and at that stage, without even the certainty of

whether they can connect, of course most proponents would do their own studies first to determine whether they can connect in order to protect themselves from an expensive process with a network service provider that then fails.

I think if there was a clear compulsion on the network service providers that they do need to take on the technical complexity and the cost of those connections, that would help greatly. It would also provide an incentive for them to keep the cost low. At the moment there is little incentive for them to keep costs low, and that is where the term gold plating of those connection assets is coming from.

Mr MELHEM— Just to follow on from that, if you make it compulsory, for example, to match the German model, who would pay the cost? If there is a high level of compensation, I take it the State would have to chip in, because the value of the business, as you said, is based on how much you charge for connection. Would the State have to step in? It is like smart meters: they had to step in and pay for that.

Mr GEIGER — At the end of the day the State should not foot the bill for that. I will make that very clear. I do not believe in government having to foot the bill for something like that. What I do believe in, and there is a general understanding in the electricity industry, is that the current model of compensation for those network service providers needs a review. It should not be rewarding expensive infrastructure; it should be rewarding smart infrastructure. So there needs to be a change in the rules and regulations. At the moment there is a compulsion that they have to connect you. It is just nobody says how much that can cost and so they charge whatever they like for it pretty much to make sure they comply with the rules on security of supply and the like. Whereas if the connection would have to happen without rewarding the most expensive asset but actually rewarding a more smart, future-proof asset at the lowest possible cost, then that would be a far better outcome for everyone.

Mr MELHEM — Can you give me a specific example — I mean, it has been broad to a degree — of how you make that change and how you effect it? Is it a technological thing?

Mr GEIGER — What happens in the German system, for instance, is at the end of the day it is still the consumer of electricity that pays for those connection fees, through the connection charges that form part of the electricity bill. Now, the consumer obviously wants to pay as little as possible for their electricity, so what the regulations need to achieve is to have prescribed in their rules that you cannot charge whatever your asset is worth but you need to determine what is a reasonable charge for those network charges, based on an estimated cost of those assets. That then gives the network service provider an incentive to keep those costs low, because they are not getting paid more than X, whereas at the moment the more their costs are up, they get X-plus.

Of course there is now a discussion every year, when they put forward their proposed network charges to the Essential Services Commission, and there is an argy-bargy going on every year, but at the end of the day there is very little incentive for them to do it most cost efficiently.

Mr MELHEM — Sorry, I will finish this. So basically are you saying to move from a cost-plus operation to a fixed cost with a small margin of adjustment? Is that what you are talking about?

Mr GEIGER — Correct, yes. It is never going to be fixed because of different circumstances, like a large electricity user has a different tariff in how the electricity, the network charges, are charged than a residential customer, understandably. We do not want to punish industry unduly. But yes, we should have: 'Look, this is how much the electricity transportation should cost every year, and that can go up by a certain percentage, but don't go beyond that'. That then gives also the network service provider an incentive to keep within their cost range.

Mrs FYFFE — One of the ways you propose to support metropolitan projects is a partnership where a rural community hosts a project for a metropolitan community. Could you tell me how that would work? And has that happened elsewhere?

Mr GEIGER — I am not aware of a specific example, but that is a discussion I had with many of my peers over the years. How that could work is that we do have quite a number of rural communities that approach us with the idea of a community project, or we have a small project in size that we as a developer think, 'Well, it would be really good to bring in communities'. But we are also talking a lot with urban communities or urban renewable energy interest groups, such as Yes 2 Renewables and the like. Now, obviously they cannot put up a

wind tower in the middle of Albert Park, so what can happen is that you form partnerships where you identify a rural community that wants a renewable energy project and say, 'Hey, how about you work together with this urban group?', who most likely have got the stronger financial means and typically would have way more members because there are just more people living in the cities, and they partner up with the rural community that otherwise would struggle financially to get a project up. Thereby you really help both of those groups.

Mrs FYFFE — So it would be more of a business investment than actually sourcing renewable energy.

Mr GEIGER — No, you still source the renewable energy; you just bring community groups together. Say you have got an urban renewable energy group of some description that does not have the opportunity to build a wind tower somewhere in an urban area and they are looking for where they could do that. They could partner with a rural community that can host the project but probably do not have enough people who are able to fund that, so both groups fund the project.

Mrs FYFFE — Okay, and the energy is fed into the grid.

Mr GEIGER — Exactly.

Mrs FYFFE — Totally?

Mr GEIGER — Yes, and you go the same as for other community projects. You look at how you sell the energy and the certificates, and as I made clear in my submission, that is the major stumbling block, because it is a very complex transaction if you work in the realms of the free electricity market. Even for a large commercial project it is very, very difficult to fund that kind of arrangement, unless there is a clear offtake arrangement there for many years.

The CHAIR — In your submission you mention that a successful community energy model overseas is a commercially developed project in which community members can invest. How could such a model be encouraged in Victoria?

Mr GEIGER — I can demonstrate that probably best in how our company has developed a number of smaller wind projects in Germany that would typically consist of anywhere between 1 and 10 wind turbines. What we do is we talk a lot to rural landowners. Often they approach us, and sometimes we approach them; there is a mix of both. Once you have identified a site, what the developer can do is get all the planning approvals that are required, get all the network design done and do all the work so the project becomes finance ready. We would then typically approach the local bank branches, because they know of community members that are looking for an investment, either for their super or for their kids or for tax purposes. There are a whole raft of reasons why people want to invest money into a renewable energy project. Often these banks then help us identify those people that want to invest by issuing a prospectus, and then people can invest.

A lot of people actually believe renewable energy is the right thing to do. They actually want to invest in it as well, rather than in a super fund structure where they do not know where their money is going, so making that accessible to them is I think a suitable approach also for government — to support that so that people understand, 'Okay, it's a safe investment if I go for an investment like that'.

What we find with that model is, because the developer effectively takes on the cost and the risk of developing, many people in the community would like to make an investment, even like to make an impact investment, by saying, 'I'll put my money here because I think that is the right thing to do'. They typically do not have the time or the capability to do that, so I think coming to a partnership arrangement in some way with a developer who knows how to do that is quite beneficial for those investors as well.

Mrs FYFFE — Have any of those been going a long time, and are they making returns?

Mr GEIGER — Yes.

Mrs FYFFE — Consistent returns?

Mr GEIGER — Yes. If we did not achieve that overseas, our company would not exist anymore. We cannot afford not to be able to pay the private investors their investment.

Mr NARDELLA — You say in your submission that the Government can support community energy projects by clearly defining community energy projects. Why should governments define this? Aren't they defined anyway? I mean, in terms of — —

Mr GEIGER — They are not. There is another inquiry out into how to define a community energy project, because they come in many different ways, shapes or forms. There is the one extreme, which looks like the Hepburn project, where the community has driven the whole process and raised the finance and the like, and then there are others where a developer has developed a large project and then makes, say, one turbine available for community investment. So they come in all shapes or forms, and that is why there is another inquiry on its way, to define what a community project is.

Personally, I do not think there is a great need to do that, but there is also talk that in some areas in Victoria wind projects are banned unless they are a community project, and the State Government wants to make an allowance, such as in the Macedon Ranges, that wind energy projects are no longer banned if it is a community that is driving it. But they come across the problem of work, 'Well, how do you define a community?', and they also realise that the planning law actually does not allow you to distinguish who is the proponent, because that would be unfair for us. We are a small company that is based in the Macedon Ranges. Now, if we developed a project on a commercial basis, because we have costs to cover and the like, we could not do that, but the community down the road who has not got the means could apply for a permit and have a chance of success. So there is a debate on why you would want to define it at all. I think a lot of people in the general community would like to have a definition so they can point to what it is.

Mr NARDELLA — So where would we get a definition?

Mr GEIGER — It is a good question.

Mr NARDELLA — And you are in the industry.

Mrs FYFFE — So how is it defined in Germany?

Mr GEIGER — In Germany they do have some state-based definitions, and those definitions have changed over the years. I know that in the northernmost part, in Schleswig Holstein, they said if a certain percentage of the equity in a project is coming from, say, within 20 kilometres of the site, then they would call that a citizen wind project. What they have then typically done is in their planning law they have said, 'This project site must only be developed by a citizens wind park', basically. They do not call it 'community'; they call it a citizens project, but it is the same thing. Thereby you can only exercise the permit when you can prove that a certain amount of your investment on the equity side is coming out of the local community.

They started off with a fairly high number — more than 50 per cent I believe initially — and then as the project got bigger, they dropped that number because they still wanted to also meet their renewable energy targets and they just could not get the investment from within 10 or 20 kilometres of the site, so they widened the circle. That was really more a geographic basis, because how do you define 'community'? A lot of people think 'community' can be, say, a village, and others say, 'Well, it could be another form of community. It could be the animal welfare rights community'. It is not a term that you can easily define.

Mr NARDELLA — You talk in your submission about simplifying planning and committee processes and providing case managers to support community energy groups through the process. Who would employ these case managers, who would pay for them and who should pay for them?

Mr GEIGER — We currently have the renewable energy jobs fund of up to $20 million here in Victoria. I think it would be a very sensible part of that jobs fund to fund some of those case managers, because these would be jobs where a community group can talk to that case manager who tells them all the ins and outs on the planning side, the ins and outs on the network connection and the like, because that is where the community groups struggle. They do not understand the planning process, they do not understand the connection process and they do not understand the electricity market either. So I think the renewable energy jobs fund could fund those case managers in my view.

Mrs FYFFE — In your submission you mentioned biogas as a commercially viable option overseas. What circumstances are required to make it viable, and do they exist in Victoria? Could we do it here?

Mr GEIGER — That is a very interesting question. I understand that a couple of landfills are basically covering some of the landfill area to also retain gas and then use that. I certainly see opportunities in Victoria where you have a high concentration of, let us call it, the fuel or the base biomass such as some of the intense animal husbandry areas. They could probably do something, but there are also other areas where you have a high concentration of produce that is grown. So in Germany typically the biomass generators are more or less all run by farmers who own the feedstock. It is not worth it for an independent developer and then buying or trucking in feedstock. It needs to be somewhere where you have a lot of that feedstock that can either be digested or burnt, and to do it there. In Victoria what would come to my mind is: where do we have a lot of biomass that is surplus? Maybe in our stone fruit areas. We know there is a lot of rotten fruit as well that they just cannot get to market quickly enough, or that is not sellable because it has got blemishes or whatever, so we need to — —

Mr NARDELLA — Or Coles will not take it.

Mr GEIGER — Yes, something like that. So that is what I had in mind for Victoria. I am not an expert in the biomass area, but I know it is providing a lot of the backup energy, because the gas you can store, the feedstock you can store until you digest it, and then produce electricity, and that is a major benefit over wind and solar, which you cannot store.

Mrs FYFFE — But with animal husbandry, because we have less cows per acre — as you do in Germany because of the soil, the grass et cetera — would it be viable? I mean harvesting the waste.

Mr GEIGER — Yes. Not with the cows on the paddock —

Mrs FYFFE — No, that would have to be — —

Mr GEIGER — but certainly with the piggeries, the chook sheds and the feedlots.

Mr NARDELLA — And mushrooms.

Mr GEIGER — Yes. Because if you look at the piggeries, there are massive amounts of effluent there and the same with chook sheds, so for the normal farmer who has the cows in the paddock, probably not.

Mr NARDELLA — I reckon you could put them on some of those broiler farms, just where they cool them down. You would be able to run 50 generators off them.

Mr GEIGER — Yes, that is true.

Mr NARDELLA — Is there somewhere where we could actually have a look at these small biomass generators? It is all right talking about it, but until you actually see them in action, it is a bit difficult. I can understand the concept — the stuff decomposes, it creates methane and then you draw the methane or bottle it or whatever and then you run it. Because one of the things that we are struggling with is that, yes, you can have all these wind farms and solar generators — solar panels — but if the wind is not blowing and the sun is not shining, then it is not working. The storage and batteries are not a mature, I think, and certainly not a cheap, cost-effective way of storing electricity, but with biomass I reckon there could be quite a bit of development.

Mr GEIGER — Yes, I tend to agree with you. The biomass does have a good future. I am also talking to a couple of agribusinesses which are looking at biomass. They want to increase their productivity by putting things in greenhouses, because in a greenhouse you can per acre grow a lot more fruit and veg, and those greenhouses need heating and cooling. For that it would be perfect, yes.

Mr NARDELLA — Strathbogie shire has a special use zone, and that is where pigs, chooks and mushrooms grow. For example, if you are looking at critical mass, after eight weeks they then clear out all the chooks; they clear out all the manure because they have stayed in there for eight weeks and wee'd and pooed for eight weeks, so they clear that out and then they dump it and get rid of it. So in actual fact you have got a huge area, a huge amount of these chook factories doing it. I reckon there are probably some opportunities in those types of areas to do it.

Mr GEIGER — Agreed.

Mr NARDELLA — Rather than one at Mornington and one elsewhere, you need to be a bit more concentrated.

Mr GEIGER — That is right, and that is — —

Mr NARDELLA — If you could get us somewhere where these things actually operate, that would be — —

Mr GEIGER — I do not know where they operate in Australia.

Mr NARDELLA — No, overseas.

Mr GEIGER — I know there are thousands of megawatts distributed over Germany. They are typically in that 200-kilowatt to 2000-kilowatt range.

Mr NARDELLA — That is good. We could do 2000 kilowatts.

Mr GEIGER — They are either operated and owned by an individual farmer or cooperatives of farmers where there is just more feedstock if a couple of farmers work together.

Mr NARDELLA — I am sure Kerryn will investigate that for us, won't you, Kerryn?

Ms RISELEY — Yes, got it under control.

Mr NARDELLA — 'Yes, got it under control', she says.

Mr GEIGER — I can probably send you some internet addresses also of the suppliers of the machinery.

Ms RISELEY — Yes, that would be helpful, and some articles on that as well.

Mr NARDELLA — That would be great, thank you.

Mr MELHEM — Could you take me through which business model could work for us in Victoria — solar versus wind, I suppose. In our current environment which model would work? What do you recommend is the best model to make sure that the return on investment is actually good in the long run —

Mr GEIGER — Yes, that is the crux.

Mr MELHEM — apart from zero emissions, which we all want to achieve? But in the meantime, on the other hand, I think a return on investment is another key.

Mr GEIGER — Yes. Return on investment is critical. It does not need to be exorbitant. If it is a similar kind of return that you would get, say, if you invest in property or in super or the like, that is the return that we are targeting.

I think the model that I would recommend, and which we are now fostering, is that we are trying to partner up with community groups that want to have their own renewable energy project. We specialise in the wind space because that is our strength. We are not doing much in the solar space, because it is too easy. In the solar space you do not need the relationship with the developer, because really there are so many solar installers there that can just do it for you off the shelf. The planning is very simple, because often they do not need a permit at all. You can just screw it onto a big factory roof or something — you do not need a permit for that. So solar is very easy, and the community groups need a lot less specialist support than they do in the wind space.

In the wind space what we are doing is we are partnering up at the moment with a number of community groups, such as groups in the Macedon Ranges, but also down in Geelong for Point Henry. We really want the community group to take ownership of the project in the public arena, in the public space, so that they help with the communication inside their communities about the project, because I think as a learning exercise and from an acceptance perspective, that is very important. As a developer, we really support the technical aspects in the planning, because that is our forte, that is our bread and butter; we do the energy yield analysis and the measurements — we can do all of that — but we would really like the local communities to take the ownership in the public arena so that the people feel empowered because they are part of something bigger but also the community at large sees the benefits there for the community.

By doing it with a commercial developer in the background, we are making sure that there is going to be a return on investment, because otherwise we would not get involved either, because I could not say that out of the goodness of my heart I would spend $2 million of my shareholders' money and they would not see anything for it — I do not think I would be in this job for much longer. But we see that there is a return on investment potential there, and that is for the community to take.

Mr MELHEM — So the return on investment is for the investors, which is fair enough, but what about the community, because they are the consumers or the investors, really?

Mr GEIGER — Yes.

Mr MELHEM — Are you able to balance the two?

Mr GEIGER — In terms of the cost of energy, it has got to be in a similar league as commercially produced electricity. It cannot be more expensive, because otherwise you cannot compete in the market. You can achieve that by having the community involved, doing a lot of the engagement work on the project, effectively on a pro bono basis, but we do not do pro bono with the community. What we do is we give them sweat equity in the project. They can earn their equity stake. So we value certain activities in the project development cycle. Like, community engagement, I have to say, is okay for a project. You need a community engagement manager, and it is going to cost you X dollars a year. But if the community takes that on, they have that value. Okay, that is worth this much to the project, and we attribute that to the community. So the group that is driving it does have an equity stake that they earn, and then of course they can also make their personal investment on top of that and so can the rest of the community. I think it is important to bring more people in.

Mr MELHEM — So I will finish off and follow up on that. So the price per kilowatt from a current generator, we have got Yallourn versus that project — are you able to sort of give a comparison today of what it is likely to be in five years' time?

Mr GEIGER — Yes. Right now the cost of commercially generated wind power in Victoria is in the order of $80 per megawatt hour — that is what the market pays in a power purchase agreement. Now the $80 per megawatt hour consists of what we call the black component, which is the electricity, and the green component, which is the renewable energy certificate. For Yallourn at the moment the spot price is sort of at the $40 to $50 per megawatt hour mark — that is, 4 to 5 cents. So we are not quite there with renewables at that same level. If you were to build a new Yallourn today, though, it would be more than 8 cents per kilowatt hour. The only reason it is so cheap is that all those assets have been fully written down and paid off. But if you were to build a new gas or coal-fired generator today, you would pay more than that. Otherwise you would not get an investor for those assets either. What we see in the long term is that right now the renewables need the certificates to be competitive with the very cheap old coal-fired generators, but by the time they are due for replacement with either coal, gas, hydro or whatever other resource we use, that price will be in a similar league. And in a community project you can achieve the 8 cents per kilowatt hour as well.

The CHAIR — If there are no further questions, on behalf of the Committee, I would like to thank you for your time.

Mr GEIGER — Thank you for your interest.

Witness withdrew.