

**REPORT OF PROCEEDINGS BEFORE**

**GENERAL PURPOSE STANDING COMMITTEE No. 5**

**INQUIRY INTO RURAL WIND FARMS**

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**At Tamworth on Friday 16 October 2009**

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**The Committee met at 9.55 a.m.**

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**PRESENT**

Mr I. Cohen (Chair)

The Hon. R. L. Brown  
The Hon. R. H. Colless  
The Hon. A. Catanzariti  
The Hon. C. J. S. Lynn  
The Hon. L. J. Voltz  
The Hon. H. M. Westwood

**CHAIR:** I welcome everyone to the third public hearing of General Purpose Standing Committee No.5's inquiry into rural wind farms. The inquiry's terms of reference require the Committee to examine the costs and benefits of rural wind farms. As such, this inquiry is an opportunity for all stakeholders and communities to provide input into how New South Wales can ensure wind farm development equitably balances social and environmental objectives. In addition to today's hearing, public hearings have been held in Sydney and in Goulburn, where the Committee visited a number of existing and proposed wind farm sites in the upper Lachlan area.

Today we will be hearing evidence from representatives from the Upper Hunter Shire Council and the Glen Innes Severn Council, the Hunter Thoroughbred Breeding Association, various landscape guardian associations and local residents. Before we commence I want to make some comments about certain aspects of the hearing. We are aware that people hold strong and diverging views regarding wind farms. The role of the parliamentary Committee is to provide citizens with an opportunity to participate in the parliamentary process. I emphasise that although this is a public hearing it is not an open forum for comment from the floor. While the Committee welcomes members of the public here today, the primary purpose of the hearing is to give individual witnesses an opportunity to give their evidence on oath before the Committee. Only questions from the Committee and the evidence of witnesses are recorded on the transcript. Uninvited interruptions are not recorded and would make it difficult for witnesses to fully express their views.

Committee hearings are not intended to provide a forum for people to make adverse reflections about others. The protection afforded to Committee witnesses under parliamentary privilege should not be abused during these hearings. Therefore, I request that witnesses avoid the mention of other individuals unless it is absolutely essential to address the terms of reference. In this regard, the Committee does not propose to make public references or case studies in submissions that might identify individuals or families. If a witness makes serious allegations that the Committee believes reflects adversely upon a specific person or entity, as a matter of procedural fairness the Committee would be obliged to provide that person or entity with an opportunity to respond to the criticisms either in writing or in person. This process may divert the Committee from its deliberations.

The Committee has previously resolved to authorise the media to broadcast sound and video excerpts of its public proceedings. Copies of guidelines governing the broadcast of the proceedings are available from the Committee staff. In accordance with these guidelines, only Committee members and witnesses may be filmed or recorded. People in the public gallery should not be the primary focus of any filming or photographs. In reporting the proceedings of this Committee the media must take responsibility for what they publish or what interpretation is placed on anything that is said before the Committee. Any messages from members of the audience should be delivered through the Committee staff. Under the standing orders of the Legislative Council any documents presented to the Committee that have not been tabled in Parliament may not, except with the permission of the Committee, be disclosed or published by any member of such Committee or by any other person.

Concern has been expressed to Committee staff that the witnesses appearing before the Committee today do not necessarily represent the diverse views held by local residents. Please be assured that verbal evidence is only one of the methods the Committee uses to obtain information from the inquiry. A list of witnesses and submission authors is available on the web, which includes transcripts and public hearings and submissions received, where confidentiality has not been requested. As the Committee is still in the evidence-gathering stage, if you are interested in contributing to the inquiry you are welcome to provide a written submission.

**JULIE BIERLING**, engineer and resident, affirmed and examined:

**CHAIR:** What is your job title, your employer or whether you are appearing in a representative capacity

**Mr BIERLING:** I was an engineer most of my life. I am now semi-retired, running a guesthouse outside of Scone.

**CHAIR:** Before the Committee commences asking questions, would you like to make a short opening statement?

**Mr BIERLING:** Yes. I have prepared a statement and some other documentation.

**Statement tabled.**

As an engineer I have learned I am not very good at speaking politically correct but I have learned to speak as an engineer. So, if I say things which may be a little bit controversial, please excuse me. There are some issues I would like to touch on before talking specifically on the terms of reference. There are two items.

The first one is that we have heard that the current submissions for wind farms before the Department of Planning, the Minister for Planning has indicated that the findings of this Committee will have no bearing on the current processes for approval, which is a concern to me. That is a procedural one. The second one is where I think I am more qualified to speak more than most because of my work experience, and this is regarding the noise and health effects which have been canvassed before your Committee. I was working for a major corporation on the noise assessment panel for workers compensation, going back some 20 years now. There we studied in some detail the noise scales that were relevant, the so-called dBA scale which you have seen mentioned in all of the submissions, and the dBC scale, which has traditionally been ignored because the lower level is said to not be relevant to the noise levels, low frequencies.

Anyone who has ever been in a disco will tell you that you can feel the music—and looking around I think most people might have at least once been in a disco—you can actually feel the sound waves. The point is, those are not covered by the regulations. I would like to draw a parallel here. In the 1940s, the 1950s, the 1960s and the 1970s the major Australian company called James Hardie complied with all the regulations regarding asbestos exposure, fibrous counts and all that stuff. That is now very little comfort to those people who have died because of asbestosis, because the regulations were manifestly inadequate. I suggest that before we have a similar debacle on our hands again that the regulations regarding noise exposure, especially at the dBC levels, are very seriously reviewed.

To the specifics of your inquiry: first, the role of utility in wind generation. This Government has recently approved 13 new coalmines. Each one of those coalmines will have a greenhouse gas contribution greater than a thousand wind turbines will ever save. I do not see that this conflict has been attended to in the public eye. The media have not exposed this. The Government is wanting to be seen to be doing something. To me this is tokenism. It is not effective. Either we cut out coal, if we are serious about greenhouse gas reductions, or we do not go this highly controversial method of generating a bit of power to make people feel good when there are better alternative green energies.

Clean coal technology would be great if such a thing exists but, despite the noises made by the coal industry, sequestration is unproven and it will not be a viable technology for a long time to come. I hope it will work, because that will make a huge benefit to this State but at the moment it is not something we can rely on, whereas nuclear power has been well and truly proven and the Australian public is slowly getting around to that position.

Those are my comments on the first two bits. The second one is the location of the rural wind farms. Why have them at all? Mainly because the public believes that they are green energy and efficient and that is the popular conception which has been broadcast through the media, through many channels and therefore will gain the Government many votes. If the people knew how little they really contribute and that there are better alternatives, then they may not be so popular. It has certainly been made viable for financial operations. People are being paid large sums of money for building these things and for selling the power.

In other words, we, as consumers, will be paying quite a bit more for this power. It is not necessarily a good thing. It is not economical. The contradiction is that the Government has approved more coalmines and at the same time is trying to foster wind energy and this contradiction has not really been highlighted in the public eye. However, if we are to have wind farms, let us not have them where they are impinging on the nearest residences, certainly not on high ridgelines and certainly not where they are highly visible. There are better locations; near power stations would be good solution. If you are going to have them, let us have them where they are near a power centre.

The next point is on property values and I would like to leave that until last if I may and talk about the next point, which is mechanisms for local ownership. This is an irrelevancy; it will not ever happen. The locals have never been invited to take part in wind farms except those whose land these things are built on. I have no further comment on that.

The renewable energy targets of wind farms in relation to the Australian Government are insignificant. The contribution that wind farms can make to the renewable energy target—unless we are prepared to plaster the countryside with thousands and thousands of wind farms everywhere, it is not a better way of reducing the energy targets. It would be better if we all turned off the lights but that is not going to happen. There are better ways of saving. Solar alternative energy and nuclear would, in the longer term, reduce our greenhouse contributions much more than anything else. What we are doing at the moment compared with the increase in the gas released from all the coal that we are selling; the impact on the global economy would be minimal. I believe that greenhouse gas is a global issue not a local vote-getting issue.

However, let us get specific about one other item, which is the so-called greenhouse gas savings, which I have referred to. We have received from this particular proposal for Scone, which is the Pamada, 1,400 pages of documentation covering all the non-negative environmental aspects. There will not be too many eagles killed or too many bushes. They will do this. One thing they do not mention is how much greenhouse gas any of this is going to save, but in my opinion the only reason we are even looking at wind farms at all is to reduce greenhouse gases and yet these proposals do not refer to greenhouse gases nor how much they are going to save; nor do they publish the fact that the actual construction of these enormous wind farms—200 tonnes of steel, concrete and roads—will cost an enormous amount of greenhouse gas and so-called carbon footprint; all this episode is not mentioned at all. To me that should be essential, much more essential than counting how many white box trees will have to be moved. This is the only reason we are doing it and it is not referred to at all.

At least the legislation should reflect that that should be an essential part of any application for wind farms. I have mentioned already solar thermal and an Australian company called Leighton's, which we all know, has helped to build in the north of Spain three enormous solar thermal plants, which overcome solar electric and they overcome all these objections. I have in my attachment some very detailed analysis, which one can pull from the Web—it is amazing what you can find on the Web if you have the time and the resources. Those would provide clean, non-controversial alternative energy.

If the New South Wales Government could promote and get all these guys together that are now pushing for wind farms and put one of these out there, we would be really doing something useful. It is not the Government's role at this time, I think. I could be wrong; I hope I am wrong.

On property devaluation, at the back of my papers I have a picture of our guesthouse as it is at the moment with the ridgeline behind it and as it will be with the wind farm.

If I were to buy this property I would rather buy it without than with the wind farms: to say that property devaluation does not exist is a blatant distortion of the truth. I want to be careful in what I say. I have also included in my letter to the department of—Sam Haddad; it has a long name—quotes from our guests over the last 10 years who have all been excited by the specific location of this whole valley of the Upper Hunter, which is beautiful country that we live in. We live in a beautiful part of the world. They have commented how nice the hills are. Once those things are up there and noise at night, which is another thing—people come up there for the peace and quiet—once they are up there, we will lose our business as well as the property value. I have written to him that if we are going to have these things—and I am dead against it—we should be compensated for that. That is the end of my story so far. I am sorry if I got a little bit emotional at times, but I feel very strongly about these issues.

**CHAIR:** It was very helpful. In terms of this inquiry, it is not the Government; it has Government members. It is a separate part of the parliamentary process. The Government is elected on a majority, in this

case in the lower House and it can proceed as it sees fit. The inquiry is an established parliamentary inquiry and it will undertake to write a very comprehensive report. It is an opportunity for a greater degree of detail than any other debate in the course of the parliamentary process. It is tabled and on the parliamentary record for all to see and use, and for the Government, the Opposition and all parties, including my own, to take note of. Inquiries never go any further than that. It is not a special circumstance. The Government of the day does continue with its business, as it can; nevertheless, I suggest it is one of the most valuable exercises of the Parliament.

**Mr BIERLING:** I understand, but of course the public does not necessarily make these distinctions. To us you are the Government: there is this is part of the Government and that part of the Government and there is no distinction.

**CHAIR:** We are the Parliament.

**Mr BIERLING:** I understand.

**CHAIR:** All members of this Committee are working very constructively to develop an understanding and report on all the issues raised during this inquiry.

**Mr BIERLING:** I do not doubt that for a minute.

**CHAIR:** Your evidence, your submission and statement today suggested that nuclear power is the only other energy source that could replace coal-based power.

**Mr BIERLING:** I said the only proven.

**CHAIR:** I see that on page 2 of your submission. Are you suggesting that wind power should not be developed in any capacity because it cannot entirely replace coal-fired power generation or are you looking at other circumstances? I was interested in your reference to James Hardie and asbestos. Do you not have similar concerns about the nuclear industry if you take into account mining, transport and safety issues, particularly with disposal?

**Mr BIERLING:** Absolutely. I am not saying that this is trouble-free technology but the fact that in France they have been on nuclear power for the past 40 years with 60 stations. There is a huge article in last Wednesday's Herald, if you care to read the editorial on that, I have got it here with me. Yes, there are problems. More people have died in coalmining than have died in the nuclear industry. The problem with nuclear wastes is something that is often brought up as the real deterrent to what to do. It is a real issue, I do not doubt it, but my answer to this is—and I am very sincere in this—that our generation was clever enough to develop nuclear power, surely we have some reliance on future generations, that they can solve the remaining problems of nuclear waste when there are already indications on how to go about this. CSIRO has developed a Synroc program which goes some—not all—the way and surely our kids, your kids will have the brains to work this one out. I sincerely believe that.

**CHAIR:** In your submission you talk about significantly reducing emissions on a reliable and sustainable basis. Some may judge as a step in that direction powering approximately 90,000 homes by renewable energy created by Kyoto Energy Park. Could you comment on this given your opposition to the energy park and the suggestion that the Kyoto Energy Park may offset some 800,000 tonnes of carbon dioxide per annum?

**Mr BIERLING:** Wind farms arose for very good reasons. First of all the economy ones. I am from Europe myself and I saw them 20-30 years ago and everybody thought they were a good thing until the first time I drove by one and read, "This wind farm is currently generating zero kilowatt hours." I thought that is a bit of a wonder, but that is the truth—I took a photo of it outside Amsterdam on the way up north. Yes, wind farms have been around. I am an electrical engineer. I appreciate the technology and I even like the looks of the tower. To be honest I think they are a clever adaptation and they do all these things. However, I think there are better answers to what this is trying to do, and therefore, they are no longer relevant.

There are areas in remote locations where there is no mains power where a wind farm could provide that much cheaper than running these high-cost transmission lines there. But where we have power, and these things are going to be topping up when the wind blows, not when it is needed. On a hot summer afternoon everybody has got their air conditioning on because it is so hot and wind-still, the wind farms will not contribute

one kilowatt hour because they are sitting there with no wind. In the middle of the night when we do not need it they are churning away and producing a lot of power but we are going to be paying them an enormous amount of money. We have not been able to find out what sort of funds these wind farms get for their kilowatt hours.

I would like to bring to your attention the Canadian Government freedom of information where you just log onto the website you can find out every bit of information about the Canadian Government, how much wind they are generating, how much they are paying. We have no inkling of what commercial relationship exists between the State Government and the wind farm operators. But I do know that we are willing to pay people who put a solar system on their roof and pay back into the net, we are willing to talk about 60¢ per kilowatt hour which is amazing when you read that the nuclear power industry in America is currently generating power at 1.9¢ per kilowatt hour and we are willing to pay them 30 times as much for the same amount of power. Where is the balance? To me, it just does not add up. So, yes wind power has a place but not like this, not as a substantial saver.

**CHAIR:** You have mentioned an enthusiasm for solar thermal. Why is there such a push on wind farms as opposed to really driving through with the development or setting up effective solar-thermal power stations?

**Mr BIERLING:** There is something called inertia. We have taken over an existing technology from the existing manufacturers of wind farms throughout Europe and have adapted them here. Indeed, in parts of Australia where the wind is reliable wind farms would provide a lot more. The Great Australian Bight is a perfect example of this, as some academics have pointed out. If we are going to have wind farms that should be where the wind blows, not where the wind stops half the time.

The alternative of solar needed to be developed. Our CSIRO is working on exactly that same problem. Our Prime Minister has devoted, how much, \$1.4 billion to the promotion of solar energy. That is something which is big, big bickies in anybody's language so why persevere with something that is so controversial and provides so many negative responses from the community when there is a better alternative possible if we are going to go this way? If something could be done to alleviate the social negatives of all of this, obviously our objections would be far lower, but to have these things sitting on your back step making noise and not really being very effective is something that is very hard to swallow.

**The Hon. RICK COLLESS:** In your submission you talk about a parabolic trough solar power plant in Spain. I am aware of a research facility at Liddell Power Station. Is that of a similar design to what has been built in Spain?

**Mr BIERLING:** I would not say identical but, yes, it uses exactly the same principles. You have this big parabolic trough which catches all the heat. There is a black tube in the middle which has special salts in it, they get very, very hot, you store those and draw off as much heat as you need in the normal power section. It is another way of raising steam; that is what it comes down to. So you do not use the electrical energy directly but you use the heat from the power. This works well in the north of Spain. We have at least twice as much sunshine as the north of Spain so we should be prime candidates for that. The CSIRO is well on the way to developing all this, and this is where the Government is determined to spend more money.

**The Hon. RICK COLLESS:** Is that being sponsored by Macquarie Generation?

**The Hon. ROBERT BROWN:** It is.

**Mr BIERLING:** Yes, I am sorry I am running a guest house.

**The Hon. RICK COLLESS:** Have you looked at that facility? In your view as an electrical engineer how far from reality is that for a commercial basis in Australia?

**Mr BIERLING:** We come a little bit into a difficult situation here. Australians always like to do things their way. It is operating now in the north of Spain, exactly the same thing, actually built by an Australian company, but we have still got to have our little bit of input. The CSIRO is not going to step in and say, "Yes, we will buy"—maybe the technology is not for sale. These are getting into areas with which I am really not familiar but I do know that the technology works, is proving itself and is operating. The costs per kilowatt hour? I can tell you that too—all that information is down there.

**The Hon. RICK COLLESS:** On page 2 of your submission under "reduction of greenhouse gases" you talk about climate change, global warming, having been only part escalated by human energy usage. In your view what are the other causes of this phenomenon that we are experiencing?

**Mr BIERLING:** Do you know Professor Ian Plimer?

**The Hon. RICK COLLESS:** I do.

**Mr BIERLING:** He has written a book that he thinks it is all a lot of hogwash and it is a natural cycle in solar and all that sort of thing. We have not been around long enough to prove whether he is right or wrong but even if he is right it is not going to make any difference because if the other people are only half right, if we are contributing to this, we should do something about it. I am having an each way bet here. Technically I think, yes, we are probably, there are solar variations, we are in all kinds of global changes. If you look back at the Ice Age we had nothing to do with that but if we are contributing to this, and the balance of opinion seems to be thinking that yes, indeed we are, we are speeding up the process, if nothing else, we should do everything we can to stop it.

**The Hon. RICK COLLESS:** It is fair to say other influences are at work in this whole process.

**Mr BIERLING:** Oh yes. Everything in this world is interconnected. Is it not? There is nothing in isolation.

**The Hon. ROBERT BROWN:** The Committee has received a number of submissions from people who have experience or knowledge of the true efficiency and worthwhile investment or otherwise of wind farms and they have raised the issue that you probably need open-cycle gas turbine generation where there are wind farms. Do you have any experience of that? Do you agree with that contention?

**Mr BIERLING:** I certainly agree with that because we all know that even if they are running at full pelt the wind can drop down and if you have got all the lights switched on, you do not want them to brown out so you have got to have something standing by. Batteries at this stage are nowhere near sufficient to carry. They can carry half an hour but they cannot carry eight hours of power unless we spend so much money on batteries that the whole thing becomes uneconomical. If battery technology were to increase by a factor of 10 we will not need gas, that is for sure, but at the moment the fact is that if you are going to have a wind farm that is supplying a reliable power you must have gas generation on stand by to make up for those times when the wind does not blow.

We all know that currently the wind farm industry accepts that the efficiency is 30 per cent—that is, using current figures. If you look at the web from two years ago, a huge study done on all the German wind farms, 7,000 wind farms over 12 months, the average total efficiency was 19 per cent. Things have improved a bit since then. Indeed, if you are going to rely on this power for anything except than an occasional top-up you must have a standby. Gas is the obvious answer because you can build a gas plant much cheaper than you can build anything else.

**The Hon. ROBERT BROWN:** In your supplementary submission you provide a description of the plant in northern Spain. It seems to be that per megawatt produced the investment is very high at 300 million Euros for 50 megawatts. Have I read that correctly?

**The Hon. LYNDA VOLTZ:** Three hundred million pounds, was it not?

**The Hon. ROBERT BROWN:** Euros, not pounds.

**Mr BIERLING:** I pulled this off Wikipedia. How accurate it is, I do not know. I agree, I looked at that and I thought that is expensive but this is going to be available around the clock, not 30 per cent. That is a huge difference.

**The Hon. ROBERT BROWN:** Probably 15 hours a day, 16 hours a day.

**Mr BIERLING:** And if you built the tanks a bit bigger you can make it 24 x 7, so it just depends on your power requirements. I am not responsible for the figures here.

**The Hon. ROBERT BROWN:** In your montage you describe how close the towers will be to your guest house and residence. Is it correct that the closest tower will be 1.4 kilometres?

**Mr BIERLING:** No, I think that is a mistake I made in there. The actual figure, now that we have received more accurate positioning, is more like 1.9 kilometres away. It is 1.4 from the boundary, absolutely, but our residence is set well back from that.

**The Hon. ROBERT BROWN:** Have you visited any wind farms in the Southern Highlands?

**Mr BIERLING:** No, I have not had the opportunity to do that.

**The Hon. ROBERT BROWN:** The Committee has received varying levels of advice as to how much audible noise wind farms make and at what distances. We have visited wind farms and stood under them and visited nearby residences in the middle of the night to try to get an idea. It seems to me that the argument is that if you can build them somewhere between 2,000 and 3,000 metres from residences then the noise mitigation is largely mitigated. In your case are you more concerned about the visual pollution, the noise effect, or what?

**Mr BIERLING:** It certainly changes the nature of our pristine hills and all that sort of thing but on the noise aspect, indeed, an objective assessment like you made standing underneath it, is fine, but it is not as good as holding a meter underneath it. Standing underneath them, of course, does not give you the true picture. As you said, you have to be away from it but again the topography on which these things are mounted makes a huge difference. If you are standing on a flat or near flat open plain the sound is quite open, quite uniformly. If, however, you have valleys and hills the sounds will be channelled like through a trumpet at a particular location, and hills will mask it in others. So a general bland statement is not effective, it is not really good enough if that is the case. I do not think that is a very difficult concept to accept.

**The Hon. ROBERT BROWN:** I am trying to establish whether you had any direct experience yourself with these things?

**Mr BIERLING:** No, not with these, but something similar. Many years ago I worked at Unilever. There was a lady who complained in Balmain all the time about noise. The only way we could fix it was on Boxing Day morning at four o'clock to get up and switch our peak bit of the plant until we could figure out there was a noisy fan somewhere, because it used to get lost in all of the surrounding sound. Our problem really is when we have lovely quiet evenings and these things are sitting up high there will be sound, which will be different from what it is now. I think rural sound levels need to be quite a bit lower than in other settings.

**The Hon. ROBERT BROWN:** Apart from the fact that you disagree with using the A scale, do you think that 30 dBA in itself is an incorrect measure at the boundary, that it should be less than that?

**Mr BIERLING:** Thirty dBA?

**The Hon. ROBERT BROWN:** Or five dBA above ambient?

**Mr BIERLING:** That would be 31 dBA in our case because we are down to 26 dBA.

**The Hon. LYNDA VOLTZ:** In Germany you used the example of the 19 per cent and you mentioned feed-in tariffs. Am I right that in Germany they had a very high feed-in tariff ratio, where it was 3:1, which promoted a huge investment in renewable technologies over and above what you expect because of the high feed-in tariff rate?

**Mr BIERLING:** Absolutely. That is why when the wind does not blow in Denmark they can bring in power from Germany because the wind will be blowing further down south. So the Germans have excess wind farm power, absolutely.

**The Hon. LYNDA VOLTZ:** And it is about where you set your feed-in tariff rate?

**Mr BIERLING:** That I have not been able to discover. I have not delved into all that particular aspect, but I do believe you are right. I have heard other comments but I have not actually seen those things.



**The Hon. LYNDA VOLTZ:** In regard to using peaking plants like gas-fired peaking plants, obviously access to natural gas is an issue? We do not know where coal seam gas is going in New South Wales and what the supply is going to be.

**Mr BIERLING:** Ask Santos. They will tell you. It is right underneath us.

**The Hon. LYNDA VOLTZ:** They might not tell me.

**Mr BIERLING:** They had a big public inquiry.

**The Hon. LYNDA VOLTZ:** I understand there is certainly—

**Mr BIERLING:** There is coal gas everywhere. There is coal and there is gas.

**The Hon. LYNDA VOLTZ:** Liverpool Plains springs to mind.

**Mr BIERLING:** Yes.

**The Hon. LYNDA VOLTZ:** Obviously the intention with renewables when the Government was setting its target was not about solar and wind replacing baseload peaking plants, it was about getting a proportion of 10 per cent to 20 per cent where they could have renewables, and whether that is solar, wind or whatever. In that context you have numbers you would not expect?

**Mr BIERLING:** No, but we are prepared to sell the contents of 100 million tonnes of coal to other people, and the fact that their greenhouse gas is going up is not our concern? We are talking global here, not local.

**The Hon. LYNDA VOLTZ:** We can have that argument for a long time.

**Mr BIERLING:** Yes, but it should be in the public domain.

**The Hon. LYNDA VOLTZ:** Absolutely, and I am sure it is at the moment. Would you prefer to see, instead of this kind of investment into wind farms and renewables, investment into research with nuclear power with the new fission fusion techniques, and the plants currently being built that will be in line in 10 years that may create better outcomes in terms of nuclear waste? Would you prefer a better mix?

**Mr BIERLING:** Definitely a mix. Amongst the priorities I would ask can we develop alternative clean, green energy in a hurry and have it where it is non-controversial? Can we develop coal sequestration at a time speedy enough to really start making some difference, and can we develop nuclear energy in this country using existing technology? Those would be my priorities.

**The Hon. TONY CATANZARITI:** It has been estimated there may be an additional 5,000 to 10,000 visitors a year to Scone as a result of the Kyoto Energy Park and visitor centre, if approved. As you are a guesthouse owner the Committee may be interested to hear your view on the role wind farms may play in increasing tourism to an area?

**Mr BIERLING:** That is very easy. I know our guesthouse will not receive one extra guest. As a matter of fact, we will lose guests. People have said this to me already—if those things up there making noises, we will not be coming back, because we come here for the peace and quiet and the serenity and tranquillity, which we in the city do not get. They are not going to come to my place to look at these things whizzing around.

One thing I meant to mention earlier, we talked about what is called the common good, and this is where Scone has been led to believe by the proponents that this is for the common good. The common good is the landholders will benefit, the construction people will benefit, the contractors will benefit, the operators will benefit, the State may even benefit by getting more votes, but you and I, the common people—I am not calling you common, but you know what I mean—we will not benefit from this good. We will pay a lot extra. The whole concept of common good, even as mentioned in the law courts where people have been denied claims for compensation because the judge has said it is in the common good to have these things, it is a furphy, it is not true. Guests to Scone will not increase. Tourism will not increase. Tourism will not increase in our end of the market. I can see school tours coming to have a look at a wind farm—not 5,000, maybe 50.

**(The witness withdrew)**

**MICHAEL ROBERT THEW**, committee member, Hunter Thoroughbred Breeding Association and stud owner, sworn and examined:

**CHAIR:** We have a written submission by Mr Bedwood from your association. Before we ask questions would you like to make a short opening statement or add any further information?

**Mr THEW:** Yes, I would like to make an opening statement, if I could. As stated, I am currently a stud owner and committee member of the Hunter Thoroughbred Breeding Association. In July 2009 I retired from my position as head teacher of equine studies at Scone TAFE campus, a position I held for 14 years. I am appearing as a stud owner and representative of the Hunter Thoroughbred Breeding Association. My submission is very specific to the Scone proposal. I do not have the general knowledge that the previous witness had.

I refer Committee members to the 2006 report of the Hunter Valley Research Foundation on the upper Hunter thoroughbred industry, which quantifies the significance of the thoroughbred industry in the upper Hunter economy. Just choosing some of the points I highlighted in that report, it is one of the three main breeding areas in the world, second only to Kentucky in the United States of America in horse numbers. Scone is the home of the richest country race meeting in Australia. The industry in 2006 employed over 900 full-time and part-time staff. That figure has likely to grow to in excess of 1,200 in 2009. Initial business and employment opportunities in support of the industry, such as veterinarians—in fact, the largest veterinary practice in the southern hemisphere—horse transport companies, farriers, equine therapists, saddlery, veterinary supplies, accommodation, catering and feed manufacturers and suppliers. In 2006 there were 7,500 mares resident in the upper Hunter during breeding season. The value of those horses resident in the upper Hunter in 2006 was over \$900 million. That would have increased significantly since.

Sixty per cent of the studs in the upper Hunter had sold horses for export, so it is a significant export earner. Over 50 per cent of thoroughbred yearlings sold in Australia come from the upper Hunter. These yearlings are the racehorses of the next generation. They generate millions of dollars in taxation revenue through gambling. The thoroughbred industry in the Scone district is a significant contributor to the economy of New South Wales as evidenced in those research foundation figures. The thoroughbred industry in the upper Hunter is under threat from the advancing tide of the coalmining industry in the south and now also from the north by the proposed development. We can see the need to clean up the standard means of producing energy and have as much to gain as anyone in this respect, and perhaps more than most. We would do almost anything to stop the invasion from the coalmines. The problem is that a development such as Pamada's proposal at Scone will do nothing to stop that advance.

Our property, Crownstone, is located a little to the east of the base of Mount Moobi plateau, that is Mountain Station. Our house is located approximately four kilometres from the proposed turbine No. 27 and we will have an uninterrupted visual invasion of between five and 31 turbines and, with that, the subsequent devaluation of our land plus potential noise from turbines, visual pollution and EMT from power lines running along Nandarra Road. Our fellow horse breeders closely located include Midlands, Hunter Nursing Nannies and Rodney Northam Racing, and they are all closer than us to the Mountain Station development. Wakefield Stables, Redbank Stables, Chatsworth Farm, Dartbrook Downs, Attunga Stud and Yarraman Park are located within about six kilometres of Mountain Station. You can add to that Sledmere, Lincoln and Michael Parkinson's training facilities as well.

Yarrandi Farm, Tooloogan Vale Stud, Kanangra, Dunvegan, Middlebrook Valley Lodge, Ashleigh Thoroughbreds, Willow Park and Cressfield and Greg Bennett training stables are located in the Middlebrook Valley and subject to the visual invasion of the turbines on Middlebrook Station. Scone racecourse, currently one of the most picturesque racetracks in Australia, will have on its western vista the full array of up to 31 turbines on Mountain Station. Our industry supplies the raw material for the entertainment industry that is racing. Our clients want to feel good when they visit their horses. They do not want to visit them under the backdrop of an industrial wind farm and power lines.

In response to an earlier question with regard to tourism, the Scone Cup attracts 8,000 visitors on that day. A significant proportion of those would be lost throughout the year if our backdrop is polluted by these towers. I would like to refer you to the reprint of an article that I passed out called "The Innovators". The article was published in *Australian Turf Monthly*. Incidentally, the article is on my and my wife's operation, called Crownstone. The inset in the bottom left-hand corner of the second page explains the evolution of the name:

The Stone of Destiny

THE PROPERTY CROWNINGSTONE has a stunning natural rock formation in the ranges that frame a magnificent vista that lends itself to a name that is inextricably linked with the name and the Celtic heritage of Scone.

There is a kingmaking "Stone of Scone" or the "Stone of Destiny" upon which all monarchs were crowned at Scone in Scotland. The Coronation Stone or Laith Fail was returned from Westminster Abbey to Scotland in 1996.

The photographs show the backdrop of that range behind our property. If the Pamada development proceeds as currently planned, we would have to reword the opening paragraph:

The property Crowningstone has a stunning natural rock formation in the ranges that frame a magnificent vista that has been permanently disfigured and desecrated by the erection of numerous 100 metre tall concrete monstrosities. Monuments to the indomitable political will directed at commitment to "ET"—energy technologies that produce clean power and energy efficiency and OH!! carbon credits of course.

The proposed wind power generation and industrial site at Scone will destroy one of the Scone districts most valuable assets—that is, the natural beauty of the hills and sandstone cliffs that frame the upper Hunter Valley. I would like to finish by referring to a submission to the Upper Hunter council's review of the Pamada development application. Am I allowed to quote that person's name? It is on the public record.

**CHAIR:** Yes.

**Mr THEW:** It is from councillor Dr Bill Howey, a long-term veterinarian in the thoroughbred industry and known worldwide for his successful contribution to the thoroughbred industry. He said:

...in some circumstance we should evaluate very carefully what our "environment" and "far horizon" are worth? The pristine unspoiled vista of the Upper Hunter Valley should be sacrosanct and we must protect it. We have inherited the mantle so carefully and assiduously managed over the millennia by the previous indigenous custodians. Any "physical insult" to the natural order is by definition degradation and deleterious to the landscape. Any structures are artificial, superficial and perhaps even sacrilegious in some eye?

Whenever energy is converted from one to another there is a deficit—in this case the infrastructure for wind into "consumable" electricity. Ours is a special place and ultimately worth protecting. We have an absolute obligation to posterity to achieve this objective.

I point out also that I have not specifically addressed the unknown effects of EMT for powerlines on alarm systems, the low level noise on horse health and behaviour, light flicker and turbine movement on horse behaviour.

**CHAIR:** I appreciate the amount of concentrated work you have put into your submission and today. You mention the impacts on equipment and on horse, their hearing sensitivity and noises as opposed to human hearing. Do you have any evidence or information in that regard? From my limited experience, with looking at other animals around wind farms, is that they are not disturbed; there does not appear to be any disturbance from wind generators that spook the horse. Do thoroughbred have specific sensitivities? Do you have any further information on the impacts on horses?

**Mr THEW:** I have been unable to find any specific brief search on that potential problem. Of course, the horse has evolved as a flight animal as distinct from cattle, which are not. The thoroughbred's athleticism has been bred over several hundred years and that is, in part, due to the heightened flight response. It is an unknown area, for sure, but certainly the thoroughbred is likely to be more susceptible than any other animal.

**CHAIR:** I appreciate that. Apart from trying to assess it in terms of noise and sub-audible noise, do you have any knowledge of any studies of hearing capacity, particularly of thoroughbred horses? Is that something you have come across?

**Mr THEW:** I cannot quote a study. It is widely accepted that the hearing of horses is different and more acute than ours to different levels of sound, but it is not an area that has had a lot of research in terms of equine.

**The Hon. RICK COLLESS:** I will follow up on that aspect. Are you aware of the audible range that horses have access to compared to human hearing? Do they hear or are they subject to that low frequency sound? I know that dogs certainly are.

**Mr THEW:** I would have to take that on notice and do some research to find that information.

**The Hon. RICK COLLESS:** In your experience with working with horses have you noticed whether they react to very low frequency thunder? To use an analogy, I am sure we have all had the experience of dogs being aware of thunder long before we can hear it, when it is a long way away—it is a very low frequency roar. Do horses have that same reaction to an approaching thunderstorm?

**Mr THEW:** Yes, and not specifically an approaching thunderstorm. My experience of working with horses is we may be carrying out some husbandry operation and you may get a reaction from the horse that is totally unrelated to what you are doing and then some short time later a noise appears that you were not able to detect. That is quite correct.

**The Hon. RICK COLLESS:** When that happens? I refer in particular to the breeding cycle, when it is the breeding season. Does that impact on the horse's ability then to proceed with the breeding operation?

**Mr THEW:** Potentially, if it is ongoing where the unsettling behaviour upsets the relaxed nature of the horse. That is a potential problem. It is hard to quantify it.

**The Hon. RICK COLLESS:** This is where it has been said that a lot more research is needed. If it is there, it needs to be documented and quantified.

**Mr THEW:** Some of the information we have seen from the British Horse Society and similar associations related largely to horses and trails running through wind farm corridors. Of course, the horses they are riding are well-educated, quiet hacks as against a flighty 18 month-old thoroughbred that is yet to be broken in.

**The Hon. RICK COLLESS:** Have you had discussions with vets about these issues?

**Mr THEW:** Briefly. I must add that I was tossed into this role about a week ago and I have been working very hard, but there are a lot of stones that are still unturned, I can tell you.

**CHAIR:** There may be specific issues that come up from discussions at this hearing so feel free to make a further submission.

**Mr THEW:** Thank you.

**The Hon. ROBERT BROWN:** Would you be able to make a brief estimate of the value of livestock that may be affected by these wind farms in your association—just a rough guess? Are we talking \$100 million?

**Mr THEW:** I think we are talking \$500 million or \$600 million.

**The Hon. ROBERT BROWN:** Have you visited any of the existing wind farms in the Southern Highlands?

**Mr THEW:** No.

**The Hon. ROBERT BROWN:** Has anyone in your association?

**Mr THEW:** No.

**The Hon. ROBERT BROWN:** It is probably a stupid suggestion to take a \$1 million thoroughbred down there and walk him around some of these farms.

**The Hon. RICK COLLESS:** You are right.

**The Hon. ROBERT BROWN:** Has your association had any discussion with any advocacy groups from these areas that have wind farms? Have you had an opportunity to discuss some of the outcomes down there?

**Mr THEW:** No, we have not, but from my limited knowledge of where they are there is not the quality of horse there that we would be talking about in the Hunter Valley.

**The Hon. ROBERT BROWN:** Probably a handful of hacks. I am trying to ascertain whether your group has had much live experience around wind farms. The Committee has had the benefit of visiting these things in the last month and you have probably heard me talking to the other witnesses. We have stood underneath and been within a couple of kilometres of them. What is the closest one of your members has been to the actual wind farm? Is it your property?

**Mr THEW:** No, there would be several properties that would be within two or three kilometres. Could I make another comment? Visiting wind farms and living with them on your doorstep, as was pointed out, are quite different.

**CHAIR:** An interesting observation for the Committee to deal with is that for people who might gain some benefit from wind farms they would be music to their ears yet for those on the outer they would be quite a punishment. It depends on one's state of mind.

**The Hon. TONY CATANZARITI:** Has there been any consultation by the proponents with your group?

**Mr THEW:** None whatsoever.

**The Hon. TONY CATANZARITI:** No information?

**Mr THEW:** No.

**The Hon. ROBERT BROWN:** That sounds typical.

**CHAIR:** We may have further questions or you may have further information to provide to the Committee. Please feel free to do so. Thank you for your submission and your appearance here today. It has been most helpful.

**(The witness withdrew)**

**JUDITH ANNE WHEELER**, Secretary, Upper Hunter Landscape Guardians, affirmed and examined:

**GORDON ALEXANDER HALLIDAY**, Upper Hunter Landscape Guardians, sworn and examined:

**CHAIR:** We have looked at your submissions. If either of you have anything to add by way of an opening statement please feel free to do so in the limited time available.

**Mr HALLIDAY:** I will make an opening statement. Thank you for the opportunity for us to talk to you about our submission. The Upper Hunter Landscape Guardians was formed in July 2007. Its prime aim is to preserve the Upper Hunter's natural landscape. As you have heard from earlier submissions, the Upper Hunter prides itself on two things: it is the centre of the thoroughbred horse breeding industry and—it is in the Scone tourist brochure—it prides itself on having some of the most beautiful scenery in New South Wales.

A catalyst for the formation of the Landscape Guardians was the proposal by Pamada for its Kyoto Energy Park, which is to be established on the ranges to the west and north-west of Scone. It is primarily a wind farm: 92 per cent of energy to come from it will be wind generated. There is a small solar and hydro component that goes with it. In principle, it is fair to say that the Guardians do not, per se, object to wind energy and certainly support forms of renewable energy but it is really getting the right form and the right location.

As the Guardians have dug into the impacts of wind farms it has found that in aggregate they have a very substantial social, environmental and economic impact. It seems to us that these impacts are really being discounted by both developers and planning authorities in their haste to allow wind farms to be approved. The people who are bearing the brunt of them are those who already have approved wind farms next to them or those who are about to have wind farms approved next to them.

We question the relative benefit of wind energy, in particular, when you look at the aggregate disbenefits that we have mentioned and the generating unreliability. We note interestingly that the Pamada proposal originally had 42 turbines and now eight of them have just been removed because of impacts on air navigation but there has been no suggestion by the proponent that they might replace that wind energy with solar energy. So it does seem to us that there must be some bias towards wind energy in terms of the relative cost/benefit in that they have not chosen to replace the energy capacity.

We also question what is happening in the Hunter, particularly with the Kyoto Energy Park. There was a notion in the environmental assessment that it was wind energy versus coal energy. But really in the Hunter Valley it is both. There is no displacement of coal by wind. Rather what is happening is these wind farms are now going to complete the industrialisation of Raleigh right up to the very head of the valley. In fact, if you look at the statistics, Newcastle is just about to put in an extra 30 million tonnes of export capacity, a 30 per cent increase. There is talk of it going to 200 million tonnes within the next few years. We also know that the Government is talking about another coal-fired power station or a coal- and gas-fired power station down at Bayswater Liddell, so it seems to us the coal industry is rapidly expanding, and wind energy is being added on; it is not a displacement of coal.

Of particular point, I guess, with regard to the location of wind farms, it seems that one of the crucial things for residents at least is buffering. I know this is a subject that authorities are reluctant to address but it seems that if you had adequate buffering from residents then that would solve a lot of the problems. It does seem that if you live about 3 kilometres distant on flat terrain and may be up to 5 kilometres in hilly terrain, you will then take away really the critical concerns of residents with regard to noise, health and visual impact. It does seem particularly in the Hunter there may have been better locations. One would have thought it would have been better to try to find locations closer to the existing power stations and lines because that is already an industrialised landscape and also closer to existing transmission systems. The proposal from Kyoto involves putting 40 kilometres of high-voltage transmission lines to connect that particular energy park down to the grid at Muswellbrook.

There is no doubt wind farms reduce property values. I think Mr Bierling talked about his particular situation. Partly what happens with submissions is that proponents use generalised assessments, not specific assessments. I think the assessments on property values are very particular to each location where you are going to conduct the development. Certainly around Scone the issue is very much that we have a number of rural residential properties rather than large farm properties or industrialised properties.

I think the biggest thing that concerns residents is the issue of noise and associated with that the issue of health impacts. There is a fair bit that has been written or is on the web on wind turbine syndrome. Certainly there is evidence from overseas that this does appear to be a real problem. The studies seems to have been driven by Dr Nina Pierpont who has produced a number of studies and has talked about impacts from different sizes of turbines, although not so much done on the very large turbines that are now proposed. The Scone energy park is looking at these 150 metre high turbines with a larger capacity than three-megawatt turbines.

Through Ms Wheeler we have some things that we could leave with you. We have a short synopsis and table from the work that was done by Dr Pierpont. Also, as recently as this week, the Victorian Legislative Council arranged for a work safe study by the Department of Human Services and also, I guess, the equivalent of WorkCover in Victoria to look into the issues of a wind turbine syndrome around a couple of the wind farms down in Victoria. Also we noted that in Ontario, Canada, in an area where there has been a wind farm for sometime a parliamentarian has called for a moratorium on further development to get to the bottom of whether this wind turbine syndrome is real or not. We would like to leave this with the Committee at the end of our submission.

One of the issues that we see around noise is that a relatively simplistic approach has been taken to noise assessment. It just simply seems to be the noise that is emitted and then look and see what is the tolerable noise that is accepted that a resident can bear, much as you might do with a coalmine and noise from a mine truck, whereas the wind farms it is very much this low-level low-frequency noise that is called dBC noise, and that really is not assessed or put into the guidelines. New guidelines are coming out, I understand, from South Australia, which seem to be the leading guidelines available in Australia. The two things that worry us there they are actually increasing, in those new guidelines, the level of noise that is considered tolerable. They are going up to 40 dBA and there is no mention of the dBC measurement.

Finally, in concluding my opening remarks, I am not the closest resident to this proposal but some other members of the Guardians are. I can start with the arguments at the very beginning but what I can see is that the phenomenal emotional stress that proposals like this brings to neighbouring residents is something they live with and it really does threaten the quality of their life, and it is very hard to take. It also does start to bring some division within the community. Already we are starting to see some divisions about a few people who might be supportive. In Scone only one landowner, in fact, will benefit very much economically from this, and that is a bad thing in a rural community because we do have to work together. We do not always have to be friends but there are many things where we do have to work together.

**CHAIR:** You mentioned the 40-kilometre grid. The Committee has heard evidence that extolled the virtue of being close to existing power lines. Are there any major pre-existing lines on this route or will this be a brand new series of power lines, solely for the purpose of the wind farms?

**Mr HALLIDAY:** The problem is the existing power lines are inadequate to take the volume of power that will be generated from the energy park. So it will require new high-voltage transmission lines and also a new substation.

**CHAIR:** Will that be a separate project, a separate independent line or an upgrade of existing lines?

**Ms WHEELER:** I believe it is a replacement of the existing lines to the point where easements would, more than likely, have to be taken along all of Nandarra Road, back Muswellbrook Road, past Crowningsstone and many of the studs that are along there which potentially could have an impact on the paddocks that they use for their horses. I think some of the concerns relate also to the fact it is a little unknown as to whether or not you would be mandated by EnergyAustralia, let us say, if you did not want to participate in providing that easement, as to whether or not your land could be resumed if it were classified as critical infrastructure. There is also, I might add, part of the plan is to come across private land as well prior to getting to that particular point. And there is a second option should the amount of energy produced by the park be less than what they would prefer, to go into the Scone substation which is not going to be equipped to take it. There are concerns there. That would also require going across private land, an easement across private land, one of which is a major stud in the area. As to how they feel about that I do not know.

**CHAIR:** I understand that Ms Lynberry actually wrote the submission.

**Ms WHEELER:** She is the president of our organisation.



**CHAIR:** She discussed the building codes and low hanging fruit. Are you aware of what she was referring to?

**Ms WHEELER:** Was that her own submission or the submission by the Upper Hunter Landscape Guardian?

**CHAIR:** I understand it is the guardian organisation. It is not a problem if you do not know.

**Ms WHEELER:** Would you provide me with a page reference?

**CHAIR:** I do not have the reference. If you are not aware of it, that is okay. Perhaps I will refer it to you at a later stage and you can take that on notice. The lack of New South Wales guidelines for wind farm developments is referred to in the submission a number of times. Would you enlarge on that?

**Ms WHEELER:** I could. I have personally been in contact with the Department of Planning policy section in relation to the renewable energy precincts that has been announced by the Premier looking for guidelines. The Premier has made several announcements about things that are going to happen but there are no guidelines about how it is going to happen. The information I have as late as yesterday from talking to somebody from the department is that whilst those guidelines have been drafted they are currently under review and there are also currently some areas that they need to seek further information on. It is also a case that the Department of Planning will not be managing those guidelines; they will be producing them but they will more likely be managed by the Department of the Environment. So we still do not have anything there.

That will also explain how the community is to be involved with the renewable energy precincts, all of which is very unclear from the Premier's announcement. The other things is the national code for wind farms which was started under the Liberal Government under Malcolm Turnbull when he was in the Climate Change position has been picked up by the current Government. They had a workshop last year. They have committed to having some guidelines out for public display by November this year. I have made a personal approach to them in relation to setbacks. There seems to be a reluctance in relation to setbacks to actually set some guidelines. Comments that have been made to me from a member of the Department of Planning indicates that it may disadvantage developers. My response to that is this is a really big country and if we have to live with these things on our doorsteps then certainly surely to make some appropriate setbacks so that we can live in some sort of harmony with these things, if we must, would be more than appropriate. The three to five kilometres, certainly in hilly terrain, that Nina Pierpont talks about, would certainly alleviate, I believe, the noise, the visual amenity and property devaluation issues, and certainly health issues.

**The Hon. RICK COLLESS:** Ms Wheeler, I know you are aware of the draft development control plan [DCP] before Upper Hunter Shire Council but I am not sure whether it has been adopted. The Committee will talk to council later today. How do you think the development control plan process should work? What sort of level of community input should occur in that? If part 3A projects are to be approved by the Department of Planning do you believe that the Department of Planning must comply with the local development control plans?

**Ms WHEELER:** First of all the proposed DCP for wind power for the Upper Hunter Shire Council was kicked off as a result of a community request because it had been noted that there were several other shire councils that had put together wind farm guidelines so they had something to go on. A draft has been prepared and is currently under review internally within the Upper Hunter Shire Council before it gets presented to the council to be requested to be put on public exhibition so they have made progress in that respect.

The other part of your question is that I think that local councils, as with the local communities, have a great feel and understanding for their local area. I think it would behove the department to take into account the guidelines that are set by the local areas. We have LEPS, DCPs for this, that and the other and it would appear to me that the Department of Planning just ignores absolutely everything at the local level. This is why the community itself feels totally disenfranchised about the whole process.

**The Hon. RICK COLLESS:** At the hearing in Goulburn we heard evidence about the Crookwell 2 wind farm, which had been approved by the Department of Planning, and the Upper Lachlan Shire Council down there also had a development control plan and the approval does not comply with the local government control plan. Do you foresee that happening here? Do you think the company will change its plans to be compliant with the local development control plan?

**Ms WHEELER:** Unfortunately, in our case the commitment to do a development control plan should have been done, in my opinion, when our council changed the zoning regulations to allow for eco-generating devices on the particular parcels of land. That did not happen. It was commenced back in 2004 and gazetted in 2006. At no time did the council think to put in place a development control plan. A development control plan has only been mooted since May this year which was just prior to the exhibition period for the Kyoto Energy Park, and is unlikely to get gazetted by council prior to any approval from the department. I would suggest that based on past experience by the department, it will probably ignore it as well and I would hope that, as a result of your inquiry, the department may think to change some of its guidelines to take into account community concerns and things like environmental setbacks.

**The Hon. RICK COLLESS:** Certainly the issue has been raised with us by a lot of people.

**The Hon. ROBERT BROWN:** The submission your group made has some Canadian wind farm performance statistics attached to the back. Was that put in to demonstrate the low efficiency of wind farms or did you have a point about generally assessing?

**Ms WHEELER:** The point about that was twofold—one to demonstrate what appears to be a standard situation of the 30 per cent efficiency. The other point that was trying to be made there—and I believe Paul Miskelly produced some statistics—was taken from raw data provided by the Australian site, the point being that the Canadian site has all this at your fingertips. None of that had to be manipulated. Currently in Australia they are pushing more and more for wind farm development but no statistics are available as they are for the coal industry. We seem to be very behind in reporting and compliance. It would appear to me that if you are going down this track, like with any new industry, you should have regulations to ensure that reporting is above board and freely available. That was the point of that.

**The Hon. ROBERT BROWN:** We have had submissions from other landscape guardian groups. Have you had any discussion with any of the people from down at the Southern Highlands or have you visited the wind farms down there to look at their impacts?

**Ms WHEELER:** Yes, we have had communication with the other landscape guardian groups. You may or may not be aware that there is a master body called the Australian Landscape Guardians. It is based in Victoria, and many other areas have started up their own landscape guardian groups. Therefore there is a rapport amongst various people. So, yes, we are aware of their issues. I have extensively read the Taralga court cases. We do not communicate a lot, but we are certainly aware of what they are doing.

**The Hon. ROBERT BROWN:** If you get the opportunity it may be a good opportunity for your group to try to get yourselves a bus and get down there to have a look at it, because it is quite edifying. A lot of the proponents have put forward the argument—and have done so with the Committee—that a lot of the studies that have been done in Europe and a lot of the health and noise studies, were based on older technology and that their technology is a lot better. I have to say, that visiting one of the properties about seven o'clock or eight o'clock at night—mind you it was pretty cold and we were in a hurry to get out of there—they were located 1.2 kilometres directly from the closest turbine and you could hear it. However, there was quite a bit of wind that night and their statement is that on still nights if the turbines are moving you hear them. I notice in this particular development it appears people are talking more of the tune of two kilometres to four kilometres from residences and operating studs. So, it probably would be a good idea, even if you end up in court down the track, that you visit those southern wind farms.

**Ms WHEELER:** May I make a comment on that? I have no doubt there are noise issues. What causes them, whether it be low-frequency sound—clearly in the case of Waubra they have meters out there that can measure that—I think topography plays a huge part in this. In the case of our one, we have these things proposed on the ridges around, like an amphitheatre sort of thing. The way sound travels, I am not an engineer, Mr Bierling can probably explain it to you a lot better, I think you have great potential under certain atmospheric conditions for the noise to appear, particularly in a very quiet rural area.

The proponent talks about trees masking the sound, et cetera, but at the particular height of these, which are going to be the highest in Australia if they are built—in fact, there was a recent application in New Zealand that has been refused for a similar sized turbine for various reasons—and we are not aware of any of this height in Europe either. I think it is a little bit of an unknown as to what might happen and, as far as the distances are concerned, I think Mr Thew mentions the distances to some of the studs.

There are some other properties that run horses—I think the Hunter Nursing Nannies was mentioned and Pine Lodge—and they are much closer, three kilometres away in that case. There are houses and there is one particular residence that is about 1.2 kilometres away from a bank of about five turbines. I am just under two kilometres away from the beginning of a bank of three turbines and there are other people around the Mountain Station site, some of whom are 1.5, 1.9, 1.4 kilometres away from some of those turbines.

**The Hon. ROBERT BROWN:** As the Hon. Rick Colless mentioned, we looked at Crookwell 1 with one resident, a lady who was within 600 metres of one of these things, and, like the township, Crookwell 2 development will surround her totally, four sides.

**Ms WHEELER:** I do not think they should be allowed. I think the Department of Planning on some other determinations has said that turbines cannot be built where they surround. The development control plans for various councils also quote those sorts of things, and it should not be allowed to happen. I do not know why developers continue to put in plans for these types of things. Again, it gets back to planning regulations and guidelines.

**The Hon. HELEN WESTWOOD:** If the Department of Planning gave you the opportunity to be involved in developing the guidelines and having input into development control plans, would your group be willing to do that?

**Mr HALLIDAY:** Yes.

**Ms WHEELER:** I have nothing more to do with the rest of my life except it to do development control plans for wind farms.

**Mr HALLIDAY:** One of the things that is lacking is the opportunity to get independent guidelines backed by independent expert advice on how wind farms might be set up and operated, because the expert advice is coming from the consultants employed by the proponents. It seems that groups like the guardians and other residents are the ones who are doing what they can in their own way with very limited resources to try to work their way through this to really get to the bottom of what are the impacts and what should be happening.

**The Hon. ROBERT BROWN:** I know what you are talking about, brother. I have been there.

**Mr HALLIDAY:** Yes.

**Ms WHEELER:** I think most definitely it would be very beneficial. Even if we had one development control plan that was used by everybody. The onus should be on the proponent to put forward a case as to why they may want to build something outside of those guidelines instead of the other way around, which is what it is now. The community is trying to get some guidelines and the Department of Planning is making decisions willy-nilly about what is allowed for one development and what is allowed for another development.

**The Hon. RICK COLLESS:** Have submissions been called for on the Pamada statement of environmental effects?

**Ms WHEELER:** Yes. The submissions have all been put in in relation to the overall environmental assessment, and the proponent has responded to those submissions and that was the modification of removing those eight turbines, which was always a known flight issue, so I cannot understand why they put it in.

**The Hon. RICK COLLESS:** Flight regulation issues, rather than—

**Ms WHEELER:** Air Services Australia, I believe, but I also understand that to the community, and in particular the Thoroughbred Association, the race club, et cetera, who rely very heavily on jockeys being flown in on larger aircraft, visitors from overseas coming in for the sales and things like that, the Scone airport is very important. I believe also that the Upper Hunter Shire Council stated in its submission that there should be no impact on Scone airport in particular.

**Mr HALLIDAY:** If you go into the Department of Planning website you can get through to the response to the submissions.

**The Hon. RICK COLLESS:** I have to say I have not looked at that particular one but I have looked at a similar report on a submission on one of the Glen Innes wind farms. In that I did pick up that there were concerns about the spacing of turbines in certain areas, and one submission suggests they should remove a couple of those turbines. The company's response was that it would not be viable if it were to remove those turbines therefore it had no intention of doing it, yet the removal of those turbines was consistent with the requirement of the development control plan of the Glen Innes council. They are the sorts of issues we are hoping to try to resolve and maybe have some input with the Department of Planning from the recommendations that come out of this Committee.

**Ms WHEELER:** I would like to go back to the question about tourism that you raised before. The proponent in its response to submissions clearly has outlined that the landholder, who currently runs a bed and breakfast establishment and tours both by flight and by bus around the area, will be the only person who will be taking tourists up to the site. So, I cannot see that we are talking about busloads of Country Women's Associations, the Lions Club or Probus being able to go up there, or freelance operators.

**The Hon. LYNDA VOLTZ:** The Hon. Robert Brown raised the point of the noise of the wind farms in the Southern Highlands. Obviously the idea of the amphitheatre and the terrain was an important point. Some of those sites were specifically based on that argument about the amphitheatre and the different terrain. So, just reiterating what he was saying, it does give you that idea of the type of terrain they have there.

**Ms WHEELER:** Yes, and I do not believe you will find any turbines of the height of what is being proposed. Again, that is a bit of an unknown.

**Mr HALLIDAY:** What is difficult is the background noise. In the area where these turbines are going near Scone it is so low to be almost immeasurable, particularly at night.

**The Hon. LYNDA VOLTZ:** I will guarantee you they are exactly the same points we have heard before in those areas as well.

**CHAIR:** You made some very clear points about the consistency of the development control plans and buffer zones, so you might want to take on notice if you have any further concepts you might want to see as recommendations, please feel free to give them to the Committee at a later stage, unless you have anything in particular at this point?

**Ms WHEELER:** I think Mr Halliday would like to make a few closing points but I would like to table for your later reading the comments regarding the Nina Pierpont thing. I wrote to her to ask for her data to make sure that we were talking apples and apples and not apples and pears. I am happy to provide it for you and it talks about the construction type of the house, the terrain, the total heights, et cetera. I know previous people were speaking of her.

**Documents tabled.**

**CHAIR:** That is very valuable, thank you. Also, do you know of any peer assessment of her work?

**Ms WHEELER:** There is peer assessment on her website. She has published peer assessment. I cannot give you the names off the top of my head. There are also these articles we referred to that are recent as of this week, one from Canada, where they are asking for a moratorium, and information from Victoria that they are now going to investigate those noise levels at Waubra.

There was another one last night from Mount Gambier about the opposition to the Allendale east wind farm. They are talking again about setbacks and quote setbacks in Germany, things that are not available here in Australia. I will table the correspondence we have had with the Minister's department in relation to asking her to hold off any decision until after the inquiry. The answer is no, in short. We have invited the Minister, both directly in a letter and via our local member, George Souris, to visit to take her around. That letter has not been responded to in any shape or form, either to us or to Mr Souris.

**Document tabled.**

Finally, I leave with you a montage of a property directly across and 3½ kilometres away from the proposed wind farm. The magnitude of these particular wind turbines is horrific. The shot is further away than

what Mr Bierling has given you. Whilst they are across the top of three ridges and those three ridges are parallel, it still creates a wall of turbines and is absolutely horrific. I know they look like sheds but there are properties stuck there.

**CHAIR:** Rest assured that we will look at the material. Thank you for the obvious work you have put into that. Mr Halliday, we have run out of time. You can table your statement and rest assured that we will look closely at it.

**Mr HALLIDAY:** I will be one minute. It is a matter of delaying further approvals until the findings of this inquiry and other investigations are completed. We believe we need to bring dBC assessment into the noise assessment. We suggest a level of 50 dBC for residences and suggest that for the wind turbine syndrome for the Hunter that proponents should be asked to fund a study through the medical faculty at the Newcastle University to work out if wind turbine syndrome is real, and do day-before and day-after testing to get to the bottom of that. The last one is on a precautionary basis, that if wind farms are to go ahead without getting to the bottom of that, there should be a setback of three kilometres to residences.

**CHAIR:** Thank you for your attendance and obvious preparation today. It is much appreciated. If there are further questions on notice and, vice versa, if any issues arise, please inform the Committee secretariat.

**Ms WHEELER:** Thank you for the opportunity to speak.

**(The witnesses withdrew)**

**NOREEN FRANCES MARSHALL**, affirmed and examined:

**CHAIR:** Do you wish to make a brief opening statement?

**Mrs MARSHALL:** I am representing the Marshall family from Thompsons Creek Road, Scone, and also our property on the New England Highway, Scone. You have received submissions regarding both properties. Our Thompsons Creek property is under threat from 34 turbines of 150 metres high, which is proposed by Kyoto Energy Park, Pamada being the company. Our other property will be impacted visually by these turbines and potentially, because there is a wind monitor on Scone mountain, we will probably have a view that way and the noise that way.

I will give a little bit about my background. I am a registered nurse but currently I am not working. I was 20 years as director of care of a 101-bed facility and I am currently studying a diploma of professional counselling, which has come in real handy over the last 2½ years. I appreciate the opportunity to address the panel in relation to wind farms and have kept in mind the terms of reference as much as possible, bearing in mind my skill level in regard to certain areas. We are being told that governments of the day are attempting to address the climate change issues by introducing various renewable technologies. We understand this and we are not against it but it should not come at any cost, which does appear to be happening currently.

I noticed in the Goulburn transcript that a person mentioned that they had spent \$130,000 of their own moneys. Are we not flying under the flag of democracy? There are times I really wonder about this. Apart from the obvious issues with the wind industry such as visual, noise, flicker, my personal concern—and this would come from my background in nursing—are the health issues. They have been documented fairly well and I have read a lot of the references that have been made today. Nina Pierpont is the one that comes up the most. We have Van der Berg, Frey Hadden, Robyn Phipps from New Zealand and information from the United Kingdom Noise Association research arm. Noise is an issue.

Even if only a fraction of the documentation is true, it is very clear that in allowing this industry to proliferate, it needs to be governed very strictly in regards to its location. At some stage in the past, as it has been mentioned about asbestos in the community, smoking was thought to be harmless. We now know these two things are insidious killers of people. We have been alerted to the health issues. What confounds me is why do we not heed it. Depression—one in five people suffer from depression. In rural communities we know we have a huge problem with this. Why are governments putting another arrow in the bow? I cannot understand it.

Location is the one thing that could stop all the issues we are talking about. It cannot be that hard to get it right. The visual impact—my husband and I have discussed this and when the turbines were going along Glen Range, which is what we look at, we said, okay, if we have to, we will probably be able to live with it, visually. We moved from the highway because of noise. Now that was my biggest concern. My husband's biggest concern is the flicker issue. He gets very nauseous if you are driving through heavily forested areas. That flicker issue really concerns him. I do not think that has been dealt with enough with any of the information I have read in relation to this.

As far as health issues go, anxiety over the last 2½ years with all the people who mix in our area—some people are really depressed; I mean, they are really depressed just even thinking about it. It has been very stressful as far as relationships go. Husbands get sick of us saying, "Will we be able to live with it?" "Just get over it; there is nothing we can do about it." Those 2½ years within our little community have probably been the toughest 2½ years I have spent in the Scone area and I have been there 30-odd years.

I think with the noise—you did mention the Upper Lachlan Shire Council—back in 2005, they had a teleconference with the South Gippsland Council and one of the issues that came up was noise. It affects our sleep patterns. Children in particular apparently are affected by this. A doctor did a study in a very small group of people and everyone had sleep disturbance issues. On that website where the peer review is about Nina Pierpont, which is "wind turbines health issues", you will find there is another paper that refers to sleep problems with children. An interesting thing that came out of the United Kingdom Noise Association, which really concerns me, is that the larger turbines were much noisier than first thought. We have been told that these modern turbines are noisier than first thought.

I have a copy of a diary from a woman in Italy, who kept it for 12 months, and she and her husband ended up leaving their property. She got to the stage where she could not get work. She cried, she became

undone and they walked away. I have that diary if anyone is interested in looking at it. In New Zealand they have the same problems as we are having. A lady believed the company's assurances that the noise would have minimal impact and is upset with the noise. She went on to say that it is an invasion of people's rights. I personally think it is a gross violation of people's personal space and rights.

As for property devaluation, if I could buy a place away from 34, 150-metre high turbines I am quite sure I would. My husband and I bought that place and there were not 150-metre high turbines on the range. I personally think we should have been notified the minute it was even considered to change the zoning. That was a gross oversight. People should be able to make informed decisions. People would not have bought properties if they had known the zoning had been changed. I realise that the Government has decided to have the Valuer-General taken on board in relation to property devaluation. But something that is so individual, I do not see how you can have a blanket assessment. That is ludicrous. Every area is different; every property is different and as you know, my submission asks that our property be valued prior to this development going ahead and if we are unable to live with it, we have asked that we be purchased by the developer.

It is interesting that Inferon Energy states in the *Sydney Morning Herald* that some property ads use wind farming as a selling point but they also say in the same article that there is little doubt that in an ideal world wind farms in areas with lower densities of populations are desirable. I ask you! John Jess from Victoria says that local agents have observed that any mention of wind farms and 50 per cent of people will not even look. Compensation: in the Taralga situation it was stated that compensation could not be thought of because you could not set a precedent. Hello! We have set a precedent. "Mining: Upper Hunter Valley strategic assessment plan 2005 DOP states: Dust, noise, affected zone secondary affected zone." What is the difference with the wind industry? I ask the question.

When I first got involved with this wind industry 2½ years ago there were many letters in the *Land* newspaper and it was all about wind farms going ahead in the Crookwell-Goulburn area. I rang a woman and she burst into tears on the phone and said, "I'll pass you on to someone else. All I can tell you is that we're \$100,000 in debt and I don't see why any individual who has this industry impact on them should be looking at that sort of situation." As I said, the 2½ years that we have been lobbying and the emotional trauma when you only get back the standard "Dear John" letters from any government department and it is always not their issue. They pass you on to Mr so and so.

The other thing is false hope. Probably people in this audience firmly believe that wind industry will overcome all the greenhouse gas emission problems. That is a furphy. How can you refer to this industry as "critical infrastructure"? Critical means necessary. Infrastructure? We cannot even get our systems right in Sydney with our trains and our buses. Our hospitals are rife with MRSA, the superbugs. I consider that critical infrastructure. Liddell, I believe is nineteenth century technology. Why can we not bring that up to date? Would that not be critical infrastructure? Why could we not improve the way that works instead of wasting taxpayers' money on this type of thing? I find it very hard.

We know coal is not going away any time soon so why are we not focussing on improving this technology. Recently twice on ABC Radio Joe Tripodi said the highlight of his political career is ensuring the future of mining in the valley. Fourteen new coal-fired power stations coming on line—radio ABC, love it, 14 October 2009. The other day they said, "Come and see one of the biggest coal loaders in the world at Newcastle". Therein lies the story, and wind energy is not going to make any difference to that whatsoever. Why will governments not look to the future? Now the first gentleman mentioned nuclear. When we had a little shopfront display in the Scone shopping complex it was really interesting to find the number of people who suggested to us that nuclear might be the way to go, realising that we do not know how to totally manage their waste products, we realise that, but it was the younger age group that really surprised me. They were the ones that mentioned nuclear. When I say this, it was interesting that I think it was probably about 18 months ago a certain gentleman, I will not mention his name but he was an Australian of the Year a little while back, and he had just come back from Canada. He said, when I listened to his talk, that nuclear is certainly above coal and he never once mentioned the word "wind".

**CHAIR:** Your submission refers to the Aboriginal heritage land near the Kyoto Energy Park. Can you provide any further information about Aboriginal heritage in the area or about the impact of the energy park on those particular sites?

**Mrs MARSHALL:** The particular area that we were talking about there, its future has been ensured now because there have been eight turbines removed from that particular site which was where the main part of

the Indigenous persons' issue was. We are extremely grateful for that because I had written here that we pride ourselves in being accepting of all cultures, and yet there was our own local culture that would have impacted on that site particularly. Pamada does say that it does significantly reduce any impact on the indigenous people's heritage there at that site because those eight turbines have been removed.

**CHAIR:** You mention setbacks of 10 kilometres.

**Mrs MARSHALL:** Dr Robin Phipps from New Zealand said that in a survey she did 25 per cent of people could still hear the turbine noise over 10 kilometres away.

**CHAIR:** What distance are we talking about in relation to the impact on your property?

**Mrs MARSHALL:** The ones that are going in now, the closest one to us is probably about 4.8 kilometres I think.

**CHAIR:** You have also raised some quite serious concerns about the dismantling process?

**Mrs MARSHALL:** That really does concern me. If the ridges around Scone are not managed correctly that will just be a disaster. I mean, they said decommissioning. I think dismantling, and I think landholders and developers should have to put monies in an ongoing fund so that we are assured that those things will be removed off the ridge line.

**CHAIR:** Do you refer there to the impact of decommissioning or do you refer to decommissioned turbines left standing?

**Mrs MARSHALL:** It has been known, I have a thing here about turbines, they say their lifetime is 25 to 30 years. There is overseas information that says that is a furphy. Fifteen years? Within five years they can throw a rotor, they can do—parts for turbines are very difficult to obtain because they are so popular and it is such an expanding industry. Sometimes you have to wait up to 18 months for a part so that turbine is just standing there out of action. I think Toora wind farm was a fine example of that. I think there were 12 there and at one stage only two were working. We have to be realistic here. We have got to manage all of those issues. If these things are out of action—I think I actually said that if they are out of action for 12 months I think they should be removed. Why should we have to look at 150 metre high turbines just standing there?

**CHAIR:** I understand what you are saying in terms of breakdown and I do not know about the propensity for breakdowns of moving parts, but I am talking about end of life. Is there not agreement at the end of life that they are to be removed?

**Mrs MARSHALL:** They refer to it as decommissioning. All I am trying to make really clear is dismantling and removal. It worries me that decommissioning is, it is just not going to be used. There are stories from Hawaii and I think one of the members of our group has a photograph of the rusting ones left behind that do not work and new ones have been built in front. We do not want that in the Scone area. That is what I am passionate about. If they are out of action, off that landscape.

**The Hon. RICK COLLESS:** Are you aware that the mining industry requires a security deposit to be paid by the mining proponent in order to ensure that the site is rehabilitated post-mining.

**Mrs MARSHALL:** That is right.

**The Hon. RICK COLLESS:** Do you believe that same sort of security deposit should be applied to wind farm proponents?

**Mrs MARSHALL:** Most definitely. If that is what it takes, definitely. Personally, I do not want to drive through Scone and see these things at all but, if we have to have them, surely we can ensure that they are not just going to stand on that ridgeline and rust away. That would really be my biggest concern.

**CHAIR:** You can provide more material to the Committee if you want to take issues on notice.

**Mrs MARSHALL:** I had a piece I wanted to finish off with.



**The Hon. CHARLIE LYNN:** You mentioned the health depression concerns in relation to wind farms. Is that restricted to adjacent farms or to the wider community in Scone?

**Mrs MARSHALL:** I personally think that is the problem with this particular development because yesterday a gentleman parked at a beautiful creek area in Scone. When my husband and I went to go home, this gentleman was parked there. Not long after that he showed up at our place. I thought he was a little bit vague. I think where he had been sitting, he looked straight across at his property. He knew I was coming up here. I think all of a sudden it impacted. He kind of said, "What can I do about it?" I said, "Mate, it is too late. If you haven't put your submissions in, if you haven't let people know how you feel". So this is what is happening. Scone community, I have got to say, and I will give council its due, in the latter stages of this council has really listened to the concerns of the community because I do not think they realised just how people felt about it. Scone council members, they came and actually looked at a couple of sites, and do you know, I think it is only when they did that they realised what was going on.

**The Hon. CHARLIE LYNN:** Have you been down to South?

**Mrs MARSHALL:** I have not been to South but I have been to Millicent in South Australia. I am not real sure how tall the turbines are there. They look to me, from memory, I would have thought maybe about 90 metres. The situation where they are located in Millicent is quite different to our situation in Scone. I was interested to know in your first panel of inquiry there was a gentleman who said the noise was negligible and you could have a conversation under the turbine; that he did not really think it was an issue but the very next gentleman said he quite liked noise because it was something he could deal with. You know, you could grow trees and you can soundproof people's homes. We do not want trees where I live because they are fire hazard. We live on top of a mountain. Fire races uphill, so why would you want trees, for crying out loud? Really, not only that, my husband and I are not ever going to live long enough to see these things grow as tall as they need to.

Diane Gasbolt who was actually on the Upper Hunter Lachlan Council at the time went to New Zealand where they had grown a row of trees. Do you know what it did? It increased the noise level by two decibels. Certain things are a joke. I am not against renewable technologies but we have to deal with how they are going to impact on people's lifestyles. As far as I am concerned, it is the population density in the Scone area that is the issue. I spoke to the guy from Hunter Weather Station because Pamada would never give us the information on wind. We asked the gentleman at the very first meeting can we have this. "No, it is great commercial value, you can't have it." I got in touch with Hunter Weather. I thought Scone was supposed to be one of the third windiest places in New South Wales. He said, "No way". He has emailed me the information. There is a very little window of opportunity for these turbines to work apparently if you know the scales, somewhere between 4.00 and 7.00. Four, they do not work. Seven, they have got to cut out. Hey? How effective will they be? How much energy will they produce?

**The Hon. LYNDA VOLTZ:** The idea of decommissioning was of great concern to residents in the Crookwell and Goulburn areas. One farmer whose property was going to have a wind farm said that he had done a costing on the decommissioning and because of the issue of whether you actually got a profit, or whatever it costs to pull them down, and because of copper and other components they contained, he would be paid to take them away. Do you have a view on that? One view is to have the bond. He also raised the issue that he would be paid whereas other residents were of a different view.

**Mrs MARSHALL:** I would pretty like to see the money in the bank. Realistically, as much and all as that might be a really good theory.

**The Hon. LYNDA VOLTZ:** I was wondering whether you had looked at the costings of removing them?

**Mrs MARSHALL:** I am fairly conservative when it comes to the dollars and cents.

**The Hon. LYNDA VOLTZ:** I would question leaving it in some of the banks then.

**CHAIR:** I understand there are different types or levels of compensation offered to those affected living near coalmines as opposed to wind farms. Do you have any comment on that?

**Mrs MARSHALL:** Outside of Scone we are virtually surrounded by those coalmines. When you talk about compensation, we asked Pamada when the gentleman came and, for example, there is a property there where a young couple spent a considerable amount of money in preparing to build and they were devastated when they heard about this industry coming. The wife asked the Pamada guy about compensation. She explained how much money they had already spent, and the guy said, "It is really hard to pay emotional compensation." Hello, mate—I thought that was really, really bad. I found the way they have managed their public relations stuff has been absolutely appalling.

**CHAIR:** Do you have any comparisons between the amounts at all?

**Mrs MARSHALL:** Not in relation to what somebody might have got for a property alongside a coalmine, no. That is why I am saying, what we would like to come out of this if it goes ahead, that our property be valued at what it is worth currently and, if we cannot live with this industry, that we can nominate to have it purchased by the developer or the operator of the wind farm.

**CHAIR:** Do you have anything else to add?

**Mrs MARSHALL:** All I would like to say, if anything comes out of this inquiry I would dearly love to see exactly what Mr Halliday said, that through Newcastle University there is some sort of comprehensive study done in relation to these health issues. We have all said that we would love it if the Department of Planning made no further decision on this industry until this inquiry is complete and people's concerns are recognised and compensated accordingly. If we cannot have that, I think there should be a fairer payment system. I read in one of the hearings about Europe, and that gentleman is right, that is one way. And Mr McLauchlan, who walked away from his farm down the road there, what a lucky man, he can afford to walk away from his farm. I do not think people should have to walk away. The other thing that concerns me is whether this industry is a whole new scam. Wind companies stand to make a fortune, green chip stocks, a new way of life, a new generation of wealth—one wonders.

**The Hon. ROBERT BROWN:** Just like the carbon tax scam: everybody stands to make a lot of money out of that.

**Mrs MARSHALL:** Yes.

**(The witness withdrew)**

**(Luncheon adjournment)**

**MARY ANNE EVANS**, teacher, Glen Innes High School, and Secretary, Glen Innes Landscape Guardians, and

**GEOFFREY WILLIAM PUTLAND**, member, Glen Innes Landscape Guardians, sworn and examined:

**ASHLEY WILLIAM PEAKE**, general practitioner and office bearer of Glen Innes Landscape Guardians, affirmed and examined:

**CHAIR:** If either or all of you would like to make a brief opening statement before we commence questioning, please feel free to do so.

**Dr PEAKE:** We will all make just a brief statement. We thought we would give you a little bit of an idea about just how engaging this whole process has been. We brought along this material, not to be tabled but this is just some of the material that has engulfed our lives since this development project has been in the offing. We have something we would like to table, and that is our sign. It might be difficult you getting it back.

**CHAIR:** I was just wondering about taking it on the plane, but we appreciate the sentiment.

**Dr PEAKE:** The Glen Innes Landscape Guardians are united in our support for a minimum two-kilometre setback of wind turbines from neighbouring non-related homes. The setback has been supported by residents of the Furracabad Valley, the greater Glen Innes community, the Glen Innes Severn Council and our local member, the Speaker of the Legislative Assembly, Mr Richard Torbay, who I think you all know well. Many of our members would have preferred greater setbacks but we have compromised in the spirit of not obstructing a project which could deliver sustainable energy solutions of which we are supportive. The proponent of the Glen Innes wind farm was warned by a council officer at the very beginning of this process of the likely problems anticipated at the southern end of this proposal because of the proximity of turbines to neighbouring residences. This is exactly what has happened.

We have encouraged the proponent to move the turbines away from homes and offered our assistance in reconfiguring the wind farm proposal, but to no avail. The proponent, Glen Innes Wind Power Proprietary Limited, a joint venture between NP Power and Infigen Energy—Infigen arising out of the ashes of Babcock and Brown Wind—has persisted with plans to locate turbines within two kilometres of non-related homes and even within one kilometre of some houses. Glen Innes Wind Power has claimed repeatedly in its submissions report that any setbacks will affect the viability of the project. Miles George, who is the managing director of Infigen Energy, was recently interviewed on the ABC Sunday *Insiders* program. He boasted of the high margin business and quoted a figure of 80 per cent margin with low costs, free fuel, being wind, low fees and maintenance costs, as well as an energy sector that is mandated to buy his product. So much for his claims of unviability.

The proponent seems hell-bent on gaining approval for this proposal to ensure maximum profit, no matter how adverse its effects are on the community, and on the community's perception of wind farm developers. Even when the Glen Innes wind farm's own noise data demonstrate exceedances at nearby residences, it still refuses to modify the proposal, and the Department of Planning appears ready to accept this. We need setback guidelines.

**Mrs EVANS:** As stated previously, my name is Mary Anne Evans. I am a wife, a mother of three children, a committed member of the Glen Innes community and I have lived in Glen Innes for 20 years and my husband has lived here his entire life. We have been in the Furracabad Valley for the past 19 years. My family home is closest in proximity of any home to the proposed Glen Innes wind farm in the Furracabad Valley. My family home will have 14 wind turbines of 140 metres in height for 180 degrees, the closest of which will be 900 metres from my home. I believe in sustainable energy and a future for my children. I believe in a minimum two-kilometre setback of wind turbines from people's homes. My terms of reference today are social and economic costs of the Glen Innes wind farm to my immediate community, the Furracabad Valley, and the wider community that is Glen Innes.

The social costs are listed in point form: The underhanded and secretive nature of signing up neighbours to have a wind farm development which effectively pits neighbour against neighbour; the lack of protection afforded to my family for our way of life by our council and the Department of Planning; the expedient nature of council to change our rate notice from rural to residential when it suits them, placing an industrial wind farm 900 metres from my home. What zone do I live in? Is it industrial, is it rural, is it

residential? Can anyone tell me? The acknowledgement from Infigen, the 80 per cent profit margin company, that our home noise levels from the wind turbines will exceed the noise regulations using South Australian guidelines, yet they are not required to do anything to change the turbines or to reconfigure the amount of turbines and their proximity to my home. Infigen simply will not compromise or budge from its position, and it would seem it is not required to by the Department of Planning. Is the department effectively supporting such exceedences?

The lack of consultation by Infigen that merely pays lip service to basic requirements: The proponents have not once met me or my children. They have not even spoken to me by phone. They have not taken any feedback given to them by the Glen Innes Landscape Guardians into consideration, contrary to what Mr Upson said to this inquiry on Friday 11 September about such a process. The lack of flexibility on the part of the proponents; the condescending nature of the report written by them and the lack of adequate time given to lay people like me to respond to documents that are culturally biased and lexically dense as to intimidate and bully people and make people like me think why bother.

The tearing of the fabric that binds our community together—which makes it such a great place—where untruths are told so that the landholders getting the wind turbines do not look so bad. For example, saying in the community that we moved our present location and building our house knowing what wind turbines would be built—hardly. We were kept very much in the dark, even when our neighbour, getting a wind turbine, was bulldozing our house site. He seemed to think it prudent not to say anything at all to us. Our title searches showed nothing in 2001 when we purchased our farm. We were living on our farm and the council told us nothing about any proposed wind farms even after we wrote and asked it directly about it. In fact, it sought not to reply to us at all.

The other wind farm owner and his wife publicly say they support the two kilometres setback, yet in their submission to the Department of Planning they reneged on this, even accusing Glen Innes Landscape Guardians of contributing very little to the community. This is very disappointing but indicative of the disregard the entire project has for the people in the valley who will be affected and have to live with these decisions.

Economic costs: An established business owner in Glen Innes who has invested considerably in the town in both business and real estate approached me only Tuesday of this week to ask me about the wind farms. She has been advised by a real estate agent in Glen Innes to sell her house, of which she has several, on the western side of town and to do it now because it will see the wind turbines and, "In five years you won't be able to give it away."

Our property is a 100-acre lifestyle block 13 kilometres from town. We enjoy peace and tranquillity, and that is our farm's strength. It is stunning. Even when our local member, Speaker of the House, Mr Richard Torbay, visited our home he stated that we had one of the best views he had ever seen. If these turbines are erected our property's value will be severely depreciated. Why would anyone want to live near 14, 140-metre wind turbines that exceed noise limits on a good day?

Please do not say to me where are the studies to backup this claim? You do not have to be Einstein to know the answer to that question. No-one will want to live at our place except if they can buy it in a fire sale, and who could blame them? This signifies the end of our dream and our children's future. I am sorry, I stand before you to represent my family and other families in the Furracabad Valley. It is a real cost you are going to impose on people. Our local mayor stated last week on ABC local radio that some people will have to pay the price of such development, but I disagree with this concept. With the bare setback of two kilometres wind farm developments will still go ahead and families like the ones in the Furracabad Valley have compromised and still have some quality of life.

This inquiry stands to achieve so much through vision, understanding and humanity. My family and the 27 families in the Furracabad Valley, whom I am indicative of, look to you for some hope in our seemingly very bleak future. I will leave you with the prophetic words of Barack Obama:

I always believe that ultimately, if people are paying attention, then we get good government and good leadership. And when we get lazy, as a democracy and civically start taking shortcuts, then it results in bad government and politics.

**Mr PUTLAND:** I would like to thank the Chair and the Committee for your invitation to address the Committee today. In summary, I do not want to go over what a lot of the other people have said, but I think what Mary Anne has said points to the matter I want to raise. The process that is being applied at the moment is just all wrong. If the process to approve things, to develop things and move things forward was correct, we

would not be having this inquiry and the emotion of people that is going on. I agree with most of the comments of the other people to the Inquiry but the whole process is wrong.

What is the process that has happened to date? The process is that developers have found an area that they want to put wind turbines on. They find farmers to agree to that process, sign those farmers with contracts that contain secrecy clauses and all that, but no consultation or advice to the community about what they plan to do. Eventually we have an environmental assessment prepared with no consultation, with very little limited time to respond and then we are given an approval. To me that process is all wrong. It is not the way we should operate in the world today.

What is a better process? A better process, to me, would be for the Government to identify where they want wind developments to occur. There is no denying a wind farm is an industrial development. It is not me putting up a new set of cattle yards or buying a new motorbike; we are talking about hundreds of millions of dollars worth of development. The Government has an obligation to identify these areas and say to the public, "Hey, this is our plan. This is the area we are going to put 2,000 turbines, 1,000 turbines here, 1,500 there, 50 there or 20 there"—and then seek feedback on the proposal and get recommendations from the community before they go any further.

The community must be led by the local councils because they represent the local community, and then get feedback from the local community. Once we have feedback and agreement we then, as a government, can say, yes, these are the terms or guidelines of the developments. I find it unconscionable that we can have projects being approved and developed without formal guidelines being in place to provide guidance for these things. I have worked in other business with guidelines, principles and approvals that I must abide by. I find it incredible that local councils come up with development control plans and the State Government and the Federal Government do not have similar guidelines.

**CHAIR:** Obviously, you have many significant complaints about the process of consultation and communication. Mr Putland, you indicated a very substandard form of communication. Has there been any instance where the proponents on any level, be it government or industrial representatives, have sat down with your representatives to talk, even if there may not have been agreement or they have not come to the party, or have they totally ignored the concerns of the community?

**Mr PUTLAND:** I will let Ashley tell you. I will make one point: I am a largest landowner in both the Matheson and Furracabad Valley and I have not been approached.

**Dr PEAKE:** In the early days once we were given the impression, once we learned about the true nature of the project, that the proponent and its consultants had widely consulted but we did a door-knock, Phil Evans and I door-knocked the whole valley and found that simply was not true and it took a lot of work to get any response really from the proponent. The consultants, Connell Wagner, now Aurecon, put noise weather stations on a couple of the properties on the proviso that they would provide us with data and that was like drawing blood from a stone and basically that agreement was not fulfilled. Ultimately we got data from them but it was in a pretty useless form. In the end we had a meeting with the proponent during the exhibition period, which was rather a late time once the environmental assessment had been drawn up and it is at the finishing line really at that time.

**The Hon. TONY CATANZARITI:** Was the approach to that particular meeting from the proponents to you or you to the proponents?

**Dr PEAKE:** It was more from our side of things, basically saying that we really needed to have some consultation. This was really after a number of our complaints. We just continued to let people have a say. We let the Department of Planning know that we were unhappy with the consultation process; that it had not met any of Auswind's supposed best practice guidelines and we kept on at the consultant and the proponent; we wanted them to hear what we had to say. It was interesting that Colin Patterson from NP Power attended the meeting, which was good.

**The Hon. TONY CATANZARITI:** It was your group that asked the proponents?

**Dr PEAKE:** Yes, we had to keep on the pressure until it happened. We had that meeting and it was interesting that the Guardians and supporters from the valley and other places came. It was a candid meeting and they claimed to have done all this consultation and they virtually only knew a handful of people in the room and

there were people like Frank McAlary, my father-in-law, who is a major landholder in the district and they never had any contact with him at all.

**The Hon. LYNDA VOLTZ:** When they said they did all this consultation, how did they specify in their application they had done consultation?

**Dr PEAKE:** They said they had visited residences in the valley and if there was no-one home, they did not seem to pursue that. When we did our consultation and talked around, the majority of the people had not had any contact at all. The ones who had had contact and visited, it was not real consultation anyway. There were a few people who had visits but it was more like, "That is where the wind farm is going to go". Consultation is about interaction.

**The Hon. LYNDA VOLTZ:** They say they door-knocked some residences?

**Dr PEAKE:** Yes.

**The Hon. LYNDA VOLTZ:** Did they send any correspondence?

**Dr PEAKE:** I think earlier on they did?

**Mr PUTLAND:** After they spoke to that person.

**The Hon. LYNDA VOLTZ:** When they had spoken to that person or generally? Often with development applications there is a newsletter?

**Dr PEAKE:** They did not do that at all early. When they came to our place to put it in our weather station it was the first time we saw any proper document. We asked for a copy—this is the consultants Connell Wagner—of the document they had and they said, "No, you cannot have that one " and we had to wait for weeks until they actually sent it.

**The Hon. LYNDA VOLTZ:** I am trying to get to the crux of people knowing the development application was being considered or in. There was no community newsletter; they may have door-knocked some residences. Were there any advertisements in the local newspaper?

**Dr PEAKE:** No.

**Mr PUTLAND:** As I said, the approach appeared to be deliberate non-communication to keep it confidential. As I say, I own properties in both valleys. There are six houses—

**The Hon. LYNDA VOLTZ:** You did not receive anything in writing?

**Mr PUTLAND:** No, you would think one of my houses or one of my workers would have received something.

**The Hon. LYNDA VOLTZ:** What is the closest proximity to the development?

**Mr PUTLAND:** The closest is a fraction over two kilometres.

**The Hon. LYNDA VOLTZ:** Was that prior to the development application or post-development application or the environmental assessment?

**Dr PEAKE:** It was after it. They sent a letter out of an open day they had just before Christmas and it was at a time when a lot of people were out of town and it was sent in a manner that a lot of people did not receive notification until after the actual meeting.

**CHAIR:** What year was that?

**Dr PEAKE:** December 2007.

**The Hon. LYNDA VOLTZ:** Do you know the distribution of that letter? I assume the region is fairly sparsely populated?

**Dr PEAKE:** That is right, but I know a lot of people did not receive the letter or received it after the event. It would have been may be sent out to two dozen.

**The Hon. LYNDA VOLTZ:** So obviously anyone outside the two kilometres did not receive it, because you, Mr Putland, did not receive it?

**Mr PUTLAND:** Not the original one.

**The Hon. LYNDA VOLTZ:** The one Dr Peake is talking about?

**Mr PUTLAND:** I did not, no. Could I make one other statement? After a meeting in late 2008 they did say at the meeting that they did want to engage with us to seek a compromise. That was all that happened; they made the statement that they would want to seek a compromise. We wrote to them and suggested times and never heard back.

**CHAIR:** Can you indicate the date of that meeting to give us an idea?

**Mr PUTLAND:** I can find out.

**CHAIR:** If you cannot answer the questions take them on notice and ask your representatives. It is all on the record, so you can take the questions on notice, furnish us with the information and we will take note of that. We are trying to reach the basic facts.

**The Hon. ROBERT BROWN:** Mrs Evans, do you have a rough idea how many of these towers would have to be knocked off to get to the two-kilometre limit from your house?

**Mrs EVANS:** I think it is in the vicinity of 10.

**CHAIR:** Out of how many?

**Mrs EVANS:** Out of 27. The original proposal was for 22 wind turbines and the proponents went back and put in an additional five.

**The Hon. ROBERT BROWN:** Do you think that the offer that the company made to negotiate with you was on the basis of talking about ameliorating the plan; in other words, moving wind farms? Do you think they wanted to talk about that or you never got to that point?

**Mr PUTLAND:** At the time we were hopeful that it was to talk and find a compromise solution as to how this project should go ahead but with the benefit of hindsight, one would presume it was to just buy us off at the time because communication between us was nothing because there was nothing set. We were optimistic at one stage saying "communication prior may have been non-existent but hopefully now there was positive thought that maybe now they were trying to engage us and they would sit down and discuss the project", but it did not happen.

**CHAIR:** At what point did the part 3A and the Department of Planning process step in with negotiations? Was it before or after this period of meetings and possible meetings?

**Dr PEAKE:** I think it was always under part 3A.

**CHAIR:** It was not at any time up to the local council to do an assessment?

**Dr PEAKE:** No.

**The Hon. ROBERT BROWN:** How many of the other 26 residences would be within the two-kilometre limit?

**Dr PEAKE:** Probably six to eight.

**The Hon. ROBERT BROWN:** And similarly for Mrs Evans?

**Dr PEAKE:** Well, there are probably three or four and then there are maybe another 20 within the two to three kilometres.

**The Hon. ROBERT BROWN:** Can you advise how you came to the two kilometre suggestion? What processes did you use?

**Dr PEAKE:** As I mentioned before, a lot of us would prefer greater distances but we are kind of realists in that we realise we need to do something about sustainable energy solutions, but at two kilometres a lot of the problems go away—not all of them. Where we are in the Furracabad Valley it is a no-through valley, it is very quiet, low background noise, we will hear these things. The proponents say, "Yes, you will hear them" but we just really want to be in a position where our amenity is not totally destroyed because rural people have got enough other reasons why we might want to leave the bush—education, health and a whole lot of other factors where we are disadvantaged. This idea of having the nation's turbines right on your doorstep as well is just another reason to say, "Well, if you can't respect us here, we are off."

**The Hon. CHARLIE LYNN:** The Committee has received submissions about a landowner with a long heritage link to the land, so it is very emotional and no amount of money will compensate them for any loss. However, you spoke about your dream in this plot of land. Have you thought about a matter of being sufficiently compensated for your farm or guesthouse, whatever it is, so that you can leave and purchase another dream?

**Dr PEAKE:** I think Mary Anne has probably got an answer to that as well. In my situation, my wife's family has been in this district for decades, since the turn of last century they have had land in that area, so it is a hard thing to just up and move. Also, we have actually moved there, we have settled there, our kids go to school locally and we have made those kinds of commitments so it is hard to imagine what kind of compensation would make up the dislocation associated with moving away from there.

**Mrs EVANS:** At the risk of sounding stubborn not everyone is in the position to be bought off. I feel I am in that boat. I would also consider that they could reconfigure those turbines to be out of that two-kilometre zone where they would not affect anyone. Surely that is the compromise.

**The Hon. LYNDA VOLTZ:** When the development application was lodged did you receive a letter from your council?

**Mr PUTLAND:** No.

**Mrs EVANS:** My husband when we were living on our farm in the old home received a letter from the council stating a development application for wind monitoring towers. That is the letter to which we responded and received no response from the council. We did ask did that lead to the development of wind farms and we received no answer to that. Obviously we then had our development application for our new home that we built.

**The Hon. LYNDA VOLTZ:** I note within council's submission there is a requirement for residents within a five kilometre area to be notified. Given Mr Putland has a house within the two-kilometre area that is why I asked that question.

**Dr PEAKE:** We might provide you with some background on the consultation process. I am not really great with dates. My wife is the expert and she has documented a lot of this and you will get a very good idea. I would also like to table, as part of our effort to try to be clear about the EA, and the proponent's noise figures, we have actually had an acoustic engineering company, Renzo Tonin and Associates, one of Australia's leading acoustic engineers, have a look at their noise data. They have lots of contentions about their noise data so we thought we would provide you with that. I do not know whether the Department of Planning is asking the same kind of questions.

**CHAIR:** I appreciate that and the Committee is very happy to receive that information. That is the sort of information we need. I understand, Dr Peake, that you are a practising physician in the area?

**Dr PEAKE:** Yes, that is right.



**CHAIR:** Feel free to take this question on notice if it is too lengthy to deal with right now. A lot of evidence has been given, including evidence from your organisation, about Dr Nina Pierpont's claims in relation to wind turbine syndrome. The Committee is not aware of any peer-reviewed articles on her material. As a physician in the area can you throw any light both on the reality of wind turbine syndrome, physical impacts on people and also psychologic impacts, real or perceived, but real in their manifestation on a psychological or psychiatric level. You might want to go and think about it and provide the Committee with a little more information.

**Dr PEAKE:** I would love that as well. Briefly, with regard to Nina Pierpont's work, my understanding is that there has been peer review of that data. The great difficulty with wind turbines and wind turbine syndrome is that you cannot really do a double blind crossover trial like you can with drugs and say "This causes that" or whatever, with a virus, for example. The difficulty is that you have got these big things up there and you really to a large extent have to rely on what happened after that time. The veracity of your information really is determined by how good a researcher you are. In Dr Pierpont's case I think to say that is effectively peer reviewed but it is always going to be a problem because there will be the element of the fact that wind turbines that are big things that come into people's lives and take away their personal power. As we have already heard, people in the country have incidences of depression. Often depression is related to powerlessness, whether it is the effects of the drought or all those other effects.

Again here we have a situation where people are ridden over, to some extent, roughshod. It is always hard to work out exactly what is happening here in terms of the effects of these enormous structures on people's lives, how much of it is noise and how much is intrusion. However, there are some very interesting things known about the effects of infrasound on people's lives. We know that some very strange things happen during incidences of high infrasound associated with storms—this is well documented in America—the incidence of suicide and other occurrences, up to a significant distance away, is increased. With a lot of these things, we are hearing all these anecdotes, and I really believe that with time this will be more accurately characterised. I am convinced there are significant effects from, particularly, low-frequency noise associated with, even modern, wind turbines.

**Mrs EVANS:** Could I just say too, you have seen a glimpse of my emotional state today which is just reflective of the pressure of these things, and they are not even up yet. That is the pressure we are under.

**CHAIR:** I appreciate that, as do all members of the Committee appreciate the individual and community pressures. I will have to close now as we are out of time. Given the discussion we have had, please feel free to provide the Committee with further information and rest assured the Committee will do its best to assess all your material.

**Mr PUTLAND:** Can we table a summary of what we would like from the Committee?

**CHAIR:** Certainly.

**(The witnesses withdrew)**

**DAVID KENNETH CASSON**, Director, Environmental Services, Upper Hunter Shire Council, sworn and examined:

**CHAIR:** Do you want to make a brief opening statement?

**Mr CASSON:** I have a written statement that I will go through, a copy of which I can provide.

**CHAIR:** If it is not material that we have already received.

**Mr CASSON:** What I tried to do is the response we put through to the Committee, this is a little more structured in terms of the terms of the terms of reference so it is a slightly different format.

**CHAIR:** Please go ahead.

**Mr CASSON:** On behalf of the Upper Hunter Shire Council thank you for the opportunity to appear before the Inquiry into Rural Wind Farms today. As the Director, Environmental Services, Upper Hunter Shire Council, I have been requested to represent council at the inquiry and will be happy to answer any questions put forward by Committee members or take such questions on notice to provide follow up at a later date. The Upper Hunter Shire Council made a written submission to the Inquiry into Rural Wind Farms following its recent experiences with the approval process of the Department of Planning for the Kyoto Energy Park, which includes the proposed erection of what was originally 42 wind turbines, now reduced to 34, which will be up to 105 metres high to the hub with 45-50 metre blades, that is, with a total height of up to 155 metres. The turbines would be erected on prominent ridge lines located some 10 kilometres from, but in clear sight of, the town of Scone with some 5,000 people.

Council lodged a detailed submission to the Department of Planning for consideration in its assessment of the application. I have a copy of that submission for the inquiry. The submission covered a wide range of areas and was completed following site visits by the majority of councillors and senior staff to the Waubra wind farm near Ballarat in Victoria, and a further inspection at the Capital wind farm near Bungendore in New South Wales. On a personal note, I have also seen and/or visited a number of wind farms in Northern Ireland, off shore on the eastern Norfolk coastline in England and also a number of locations in Europe, during a six-month working holiday last year.

The terms of reference include six primary areas. I advise the Committee that I do not propose to provide comment on all of those areas. The terms of reference include areas which have not been the subject of discussion or debate at council, and I do not believe that it is my role to make any comments on those. In the terms of reference the first point of reference, "the role of utility-scale wind generation" I do not wish to provide detailed comments on this item. I would mention, however, that the Upper Hunter Shire Council has demonstrated support for the concept of renewable energy generation by an amendment to its Scone local environment plan document to make such proposals permissible within a number of zones within the former Scone local government area.

For your information, Upper Hunter Shire Council is an amalgamation of formerly Scone, Merriwa and Murrurundi councils in 2004. The amendment was achieved by inserting a new definition into the local environment plan document for eco generating works which allowed these types of developments to be considered within the 1D, 1E 1S, so essentially rural zones in the 7A environment protection zone. Such developments are also permissible within the former Merriwa and Murrurundi areas, under their existing local environment plan documents.

The second point of reference relates to locating rural wind farms to optimise wind resource use and minimising residential and environmental impacts. The Upper Hunter Shire Council would support such intentions. However, council would suggest that this will be a difficult objective to achieve until State or national guidelines are produced which confirm, if not require, such fundamental objectives to be demonstrated as being achieved in the development application process. The New South Wales Government is introducing six renewable energy precincts, which include the upper Hunter.

The Government has indicated its intent to establish a precinct advisory committee, and the Upper Hunter Shire Council will look forward to being represented on such committee. Council would reinforce the need to prepare and finalise appropriate guidelines in conjunction with the establishment and operation of such

committees. Guidelines will provide a consistent approach to the assessment of the application proposals and, perhaps more importantly, allow a greater level of certainty from proponents who can use such guidelines when considering and designing proposals at the earliest conceptual stage.

The basis for establishing appropriate buffer areas between turbines and adjoining properties and/or residential use of property, including houses on rural lots, needs to be addressed. Council's submission to the Department of Planning suggested that the buffer should be established not necessarily based on a minimum distance but rather so that accepted noise level criteria will not be exceeded at any non-landowner resident. Identified exceedence should not result in mitigation measures; rather it should result in redesign of the proposal. Council also urged the department to ensure that potential impacts on low-frequency noise levels, such as wind turbine syndrome, and the like, be fully assessed. If there is inadequate data to correctly predict or fully assess such potential effects, a conservative empirical distance should be adopted as a safety measure.

Remote locations will quite likely reduce many of the concerns generally expressed in the community. However, the obvious difficulty with remote locations would be the connection to the power grid. In most circumstances, one would assume, that connection point will be in relatively close proximity to residential localities. Therefore, achievement of suitable locations, from an economic viability point of view, and minimising residential and environmental impacts may be difficult, to say the least. Therefore, an option may be to provide greater assistance to such proposals by the relevant State or Federal government with additional financial or other assistance with such costs. Location of wind farms in more remote locations will undoubtedly create less concern within the community. The feasibility for such locations, unless for very large proposals such as the recently approved stage one of the Silverton wind farm, which has some 282 turbines and a further 316 proposed for stage two, would be a significant issue.

The impact of rural wind farms on property values was an important issue included in the Upper Hunter Shire Council's submission in respect of the Kyoto Energy Park. The local community had raised such issues, and council considered that it was an issue that needed to be satisfactorily assessed by the Department of Planning. The environmental assessment for the Kyoto project indicated that a review of sales of residential properties in Victoria within two kilometres of a wind farm indicated that a temporary reduction in values surrounding non-agricultural development could occur over one to two years. This effect would most likely be as a result of perception of negative effect rather than actual outcome.

Council considers that all proposals should be considered on their individual merit and circumstances. The environmental assessment for the Kyoto project referred to a Land and Environment Court case, *Taralga Landscape Guardians v The Minister for Planning*, where Chief Justice Preston ruled against the principle of creating a right for compensation for an otherwise compliant proposal based on lowering the amenity of another property, although not so great as to warrant refusal on planning grounds. The environmental assessment claimed this set a precedent as to how the court may rule in such matters. However, the Upper Hunter Shire Council would suggest that this remains a grey area and will remain so until further research and valuations of before and after wind farm developments are done in a range of locations and circumstances. There are genuine concerns within the community and further information is required in this area to help allay such concerns.

I do not propose to comment on the fourth point of reference. The fifth one is the role of energy generated by rural wind farms. The Australian Government's renewable energy target scheme sets a significant target for sourcing 20 per cent of our energy supply from renewable sources. Rural wind farms must have the potential to play a major role in achieving such targets. The proposal within the current Kyoto Energy Park is to provide not only wind turbines but also a significant solar photovoltaic facility and a smaller mini hydro plant, therefore providing a collection of renewable energy alternative supplies. It is understood this is the first such energy park proposed in Australia and in terms of it providing a significant source of alternative renewable energy represents a good concept, provided it can be demonstrated that it is in an appropriate location. Large wind farms such as on the scale of the Silverton project, located in relatively remote locations, would appear to have significant merit if the scale of the proposal is able to offset any economic disadvantages attributable to the location.

Finally, the council would also like to raise two other concerns. We will provide the Committee with a copy of its submission in respect of the Kyoto Energy Park for your information. Council is concerned with the ongoing costs it will incur due to the monitoring of conditions that will or may be applied should an approval be issued to the Kyoto Energy Park. I am sure this would be echoed by any local government authority. The development application will be determined by the Department of Planning. All fees associated with such determination have been lodged with the Department of Planning. Should an approval be issued, all costs

associated with the monitoring of conditions of consent will be met by the particular local government area. Therefore, in addition to any costs associated with, in effect, undertaking an assessment of the application to enable an appropriate submission to the department, noting that the development application fees were paid to the department, the local government authority will also be required to meet the ongoing cost of monitoring and reporting on a particular term of the approval. Council would suggest that consideration should be given to some sort of annual fee payment to the relevant local government area which would cover the costs of such monitoring and reporting.

Secondly, is the position that developers or proponents should accept at an early stage that local government areas will have a development control plan or a section 94A contribution plan in place which will require an appropriate contribution to the local community for infrastructure that will benefit the broader community. At present there appear to be a couple of methods of applying appropriate contributions—via a specific development control plan, which may indicate a contribution per wind turbine proposed, as in the recent Gullen Range approval, or a section 94A contribution plan which may indicate a 1 per cent contribution of development costs. Recent approvals appear to be somewhat varied in their application of such conditions. Again, this emphasises the need for standardised guidelines which clarify and enforce the obligations for appropriate contributions within the relevant local government area.

**CHAIR:** We have had some expression of frustration about the 30-day exhibition period in terms of the response to the environmental assessment. Your submission raises similar concerns. What was your advice or reaction from the Department of Planning to those concerns?

**Mr CASSON:** The advice we had back from the department was it was not prepared to extend that period. It indicated that a similar length of exhibition period had applied to the Gullen Range, which had been most recently approved, and it thought that 30 days was appropriate—end of story.

**CHAIR:** Was any other reason given?

**Mr CASSON:** No.

**CHAIR:** Or any other discussion on that matter?

**Mr CASSON:** No, not to my recollection.

**CHAIR:** What do you see, particularly in impacts to the changes to the Protection of the Environment (Operations) Act, which now place responsibility on local government to investigate noise complaints of wind turbines? What sort of impact will they have on your council, and how is that working with your council not having a role in the original process? Is there concern about that?

**Mr CASSON:** There certainly would be. For one thing, council officers—certainly currently—would not have the expertise for such monitoring, or the equipment to undertake that.

**CHAIR:** The Department of Planning does?

**Mr CASSON:** I do not know whether the Department of Planning will have. The Department of Environment and Climate Change would be the one that we would be calling on or alternatively looking at consultants to undertake the work.

**CHAIR:** Has there been any communication at all with Department of Environment and Climate Change officers to look at how to deal with these potential situations?

**Mr CASSON:** No, not at this point.

**The Hon. RICK COLLESS:** I think you said in your opening statement that you made an amendment to your local environmental plan to allow eco-generation.

**Mr CASSON:** That is correct.

**The Hon. RICK COLLESS:** That was an amendment to the rural zone?

**Mr CASSON:** Yes. It introduced a new definition, effectively, because the prohibition in the rural zones referred to waste generating works, I believe it was, or generating works. So we brought in the new definition which then allowed eco-generating works.

**The Hon. RICK COLLESS:** When you do that what process do you go through so that an amendment reflected the community's expectations in your council area?

**Mr CASSON:** We went through the normal process for a local environment plan amendment in consulting with the department and giving its consent in the first place. The amendment was advertised, as is required. I suppose that was the extent of it.

**The Hon. RICK COLLESS:** You would call for submissions? That is the normal procedure, is it?

**Mr CASSON:** Yes.

**The Hon. RICK COLLESS:** Did you get many submissions on that amendment?

**Mr CASSON:** From recollection, no.

**The Hon. RICK COLLESS:** So when you started the process of preparing your development control plan, what process did you go through in that regard?

**Mr CASSON:** The development control plan for the wind?

**The Hon. RICK COLLESS:** For the wind generation.

**Mr CASSON:** We have not finalised that.

**The Hon. RICK COLLESS:** No, but it is in process, is it not?

**Mr CASSON:** Yes.

**The Hon. RICK COLLESS:** So what process are you going through?

**Mr CASSON:** We have had a look at a number of other existing development control plans at this stage. We have put together a very draft preliminary document as a starting point for discussion, which has gone through to one of our development environmental services committees for initial review and feedback.

**The Hon. RICK COLLESS:** Has that been out in the community?

**Mr CASSON:** It has not been out on public exhibition at this stage, no.

**The Hon. RICK COLLESS:** You might have heard when I raised this issue before, one of the other proposals that we looked at in the Crookwell area was the Crookwell No. 2 proposal, which was for 82 turbines, and the Upper Lachlan Shire Council had a development control plan in place prior to that application going forward, and the Department of Planning elected to approve that application even though it did not comply with the development control plan. Would you see that as a fundamental fault in this whole part 3A process?

**Mr CASSON:** Clearly, and that would not be the only example. I have heard of that happening at Oberon as well. Oberon had a development control plan and had an approval for turbines being placed at a distance less than that specified. I think that reinforces the need for a common State accepted guideline. What is the point of us going through and getting something that the community has an expectation will be applied and then the department simply takes no notice of it? It is sending out the wrong message in my view.

**The Hon. RICK COLLESS:** What is the timeframe for your development control plan on wind farms to come to fruition?

**Mr CASSON:** We have taken not quite a sidestep but we are looking to get a consultant into the council, just to talk about some renewable energy issues generally. However, we have three-quarters of the

development control plan document. We are not wanting to delay the preparation of that. So, I would think in the next couple of months at the most we would hope to get something.

**The Hon. RICK COLLESS:** Are you hoping to have that in place before the approval of the Kyoto Energy Park is started?

**Mr CASSON:** Difficult. I do not know how long that will be.

**The Hon. RICK COLLESS:** Would your council have a commitment to that development control plan being in place prior to the approval being granted?

**Mr CASSON:** To be honest, I do not think it will have any effect anyway. I am not quite sure.

**The Hon. RICK COLLESS:** That is the point I am getting at.

**Mr CASSON:** Yes. I do not think the department will take any notice of the document.

**The Hon. RICK COLLESS:** The thing that worries me greatly is that these development control plans can be in place, and the Minister can approve these projects not complying with the local community's expectations.

**Mr CASSON:** Yes.

**The Hon. HELEN WESTWOOD:** Can I just ask about the issue of consultation with the Department of Planning as it is establishing the precincts? Has it spoken to the council directly at all about that? Has there been any consultation with you about those precincts?

**Mr CASSON:** There was one workshop in Goulburn which I attended three or four months ago and I have heard little since that. We talked about the concept of establishing precincts and where they would be.

**The Hon. HELEN WESTWOOD:** When the announcement was made how did your council receive that information? Is it directly from the department or just by way of a press release or did you read it in the media?

**Mr CASSON:** I am sorry, I would have to go back and check on that. I will have to take that on notice.

**The Hon. HELEN WESTWOOD:** The issue of monitoring, have you been advised formally that you will have a role in monitoring compliance with the consent once the wind farms are established?

**Mr CASSON:** No. We certainly have not received that from the Department of Planning at this stage in respect of this proposal.

**The Hon. LYNDA VOLTZ:** You said you were invited to a precinct meeting three or four months ago by the State Government on the announcement of precincts.

**Mr CASSON:** Yes. I was advised that it was on, so I went down there.

**The Hon. LYNDA VOLTZ:** At that point had your local environmental plan been amended?

**Mr CASSON:** Yes.

**The Hon. LYNDA VOLTZ:** That is probably what prompted the State Government to look to councils where local environmental plans had been amended?

**Mr CASSON:** I am sure that would have been a factor. Well, the fact that there had been a lot of discussion. This Kyoto Energy Park had been on the drawing books for a number of years.

**The Hon. LYNDA VOLTZ:** But your local environmental plan would have been gazetted well before that three or four months?

**Mr CASSON:** Yes.

**The Hon. LYNDA VOLTZ:** Why do you think the State Government, as in the Department of Planning, is calling these in rather than washing its hands of the matter and letting local council deal with what seems to be a controversial issue?

**Mr CASSON:** The department appears to be trying to take over control of any applications of any substance to make sure that they are taken out of local hands, it would appear, not just wind farms.

**The Hon. LYNDA VOLTZ:** Which applications have you had called in by the Department of Planning?

**Mr CASSON:** We have had no others previously but under the new proposals, basically designated developments. It will be joint regional planning panels that will be looking at those and approving those.

**The Hon. LYNDA VOLTZ:** But you do not have any at the moment?

**Mr CASSON:** No.

**The Hon. LYNDA VOLTZ:** You were talking about noise and ability to monitor that. I do not know if there are any in the upper Hunter area but things such as frost fans run during the night and create considerable noise. How do they compare with this type of noise and how would you monitor them?

**Mr CASSON:** We do not have frost fans. I have had some practical experience of listening to the wind turbines and the sort of noise generated from those. I think one of the major concerns would be low-frequency noise, the stuff that you cannot hear.

**The Hon. LYNDA VOLTZ:** But you would not have an idea of how they compare with things such as frost fans?

**Mr CASSON:** No, I am sorry.

**The Hon. LYNDA VOLTZ:** When you put the local environmental plan on exhibition did you write to local residents and notify them of the amendment to the local environmental plan?

**Mr CASSON:** No, we did not.

**CHAIR:** When your council was first informed or heard of the potential project for wind farms, how did council or council staff view it, negatively or positively? What was the initial reaction?

**Mr CASSON:** More positively than negatively, I would have thought.

**The Hon. ROBERT BROWN:** In relation to the comment in your submission about the shortage of time, the 30 days, the point has been made by several witnesses that environmental assessments are typically 1,200 or 1,400 pages and that few communities, if any, would have the capacity to be able to do any sort of technical assessment. The suggestion was made that perhaps what was needed in the current circumstances, that is, where councils are like any other objector and only have the 30 days, that there be created some sort of technical panel, perhaps under precinct committees, that could be made available to communities so that at least when an environmental assessment was put forward, there may be someone who could explain to residents what various parts of the environmental assessment mean and how they can frame objections. What do you think of that concept, along with extending it by another 30 days?

**Mr CASSON:** I make the point in the submission that at least 60 days would be a small extension, given the project preparation time. I would have thought that two to three months would be reasonable time and the more information or access the community has to people with appropriate levels of expertise so they can make more informed decisions about the potential impacts.

**The Hon. ROBERT BROWN:** I think you said your council does not have any in-house expertise in sound monitoring?

**Mr CASSON:** No.

**The Hon. ROBERT BROWN:** So you would need to engage a consultant in order to make some assessment?

**Mr CASSON:** That would be a likely scenario. We could look at training.

**The Hon. ROBERT BROWN:** Every council could not do that, could they?

**Mr CASSON:** No, I do not think so.

**CHAIR:** In your submission council says that it does not suggest any setback limits or buffer zones between the wind turbines and residences, stating on page 4 of your submission that they carry little weight with DOP assessment. Could you elaborate on council's view that turbine location should rather be based on performance criteria and understanding in relation to Mr Brown's question that you do not have sound equipment? Could you elaborate on that situation?

**Mr CASSON:** Sure. In the environmental assessment it talks about obviously that they do some detailed noise monitoring and the like, taking in relevant locations, topography, wind conditions and those conditions that may generate noises which are above the acceptable standard. Council's position is that if they have that sort of information they should be able to redesign so that there are not periods of exceedence under any conditions; just push them back and in that way, rather than having necessarily a standard setback, it can be a case-by-case look at the merits of the particular location and proximity of houses, et cetera. It is a performance-based criteria and it seems that with the detail that goes into these environmental assessments and the modelling that is undertaken, one would think that they should be come up with appropriate distances and let the distances set themselves.

**CHAIR:** I think that is all we have. Thank you very much for your submission.

**Mr CASSON:** Good luck with your inquiry.

**(The witness withdrew)**



**KEITH FREDERICK THOMPSON**, affirmed and examined:

**CHAIR:** We are aware of your submissions with the many amendments. They are certainly of value. Would you like to make a brief opening statement?

**Mr THOMPSON:** I have provided the opening statement in my presentation to the Committee. Do you want me to reread it?

**CHAIR:** No, I do not think there is any need. We have it. I am aware of the fact that you have given submissions in stages. We have them and we will continue to refer to them. If you have anything further to add or any further information we welcome that?

**Mr THOMPSON:** I would prefer if you ask questions.

**The Hon. LYNDA VOLTZ:** Your property "Peak Hill" is owned by?

**Mr THOMPSON:** My wife and me.

**The Hon. LYNDA VOLTZ:** That is just to clarify an error that has been made by someone.

**Mr THOMPSON:** We are waiting for a letter of apology from Pamada.

**The Hon. LYNDA VOLTZ:** They can look it up on the *Hansard* now.

**CHAIR:** Living so close to the proposed energy park, I understand you would need to have close interaction with the developer. Could you describe your experience and identify any areas that you feel could be improved, for example, the regularity and methods of communication and responsiveness on the part of the developer to questions that you have been proposing?

**Mr THOMPSON:** Our first meeting with Pamada was in May 2006. Not long before that we stumbled over information that there was going to be a proposed wind farm above our property. An electrician happened to be at our place one day, and said, "Look, that tower up there that is 45 metres high. I had something to do with installing that. That is where the wind farm is going." Up until that stage we had no idea anything was going to go ahead. We had bought the property a year before that and there was nothing through the legal system of our solicitors that gave us any information about it at all. If there had been, we would not have bought the property.

Since May 2006 a pretty picture has been painted by the proponent and since then we have found that just about everything they have told us it is incorrect, untrue, false or a lot of hot air. Most of the things I have written down. One of the particular things they said right from the first meeting is, "We do not have to build a manager's residence up there even though we will put it in because there are only going to be two casual staff working on the mountain station." Now I read in the environmental assessment they are proposing that 15-plus will be working there as casual people. That is what I mean by misinformation, incorrect information or whatever.

From there we have had another five meetings at our home, plus several in their offices when they have had an office at Scone. We have had approximately 200 emails from my side going to Pamada; a lot of heated discussions, a lot of heated telephone calls and our absolute refusal to let them use our property for bringing the 66-kilovolt power down our property.

**CHAIR:** Do they have alternative access?

**Mr THOMPSON:** About 300 metres away from us there is a government paper road and they proposed to bring the power down that road. Actually in my submission it says from where all the wind turbines are they are going to run the power north to the substation, then bring it all the way back down south to just above our place at turbine 31, run it down the hill a few hundred metres away from our property where the paper road is, down to the bottom and then they would hit a blank because they reckon there is a road there, but the senior project manager for Pamada has been told for two years by the owner of that property that it is a private property and he will not get to use it. But in everything that they reprint, even the last answers to the questions

of the environmental assessment—I think it is page 64, number 93—they say that Winter Road is still going to be used for the power to come down off mountain station.

**CHAIR:** Do powerlines already exist along that route?

**Mr THOMPSON:** No.

**CHAIR:** So there is nothing currently there?

**Mr THOMPSON:** No, it just happens to be a track, which is called Winter Road. It goes straight across private property.

**CHAIR:** What distance are they and would they be visible from your residence?

**Mr THOMPSON:** Five above our house.

**CHAIR:** No, the powerlines itself?

**Mr THOMPSON:** It is about 300 metres.

**CHAIR:** From your residence?

**Mr THOMPSON:** Yes.

**The Hon. ROBERT BROWN:** Just a point of clarification: You did say a 6-kilovolt line?

**Mr THOMPSON:** A 66-kilovolt line.

**CHAIR:** The developer has given information to the Committee that they have removed some five of the wind turbines to keep the noise levels down to acceptable limits and reduce the visual impact. Also we have heard that the developers agreed to reduce the speed of the turbines during specific weather conditions to keep them within acceptable limits. This was at a public hearing on 11 September. Could you explain your point of view to the Committee in terms of those suggestions, which, on the surface, would appear reasonable?

**Mr THOMPSON:** The first layout I got of the mountain station turbines showed nine turbines just above our house. The four that they removed from above our house were within the one-kilometre zone—in other words right on the ridgeline. The original consultant of Pamada had said, "Scrap those because you will not get those approved by the DOP". So instead of nine they actually made five above our house and brought the five forward a little bit so that the closest one to us now is 1,110 metres.

**CHAIR:** That is as close as the original number nine.

**Mr THOMPSON:** Ten metres further back than what it was originally, that is all. What we are finding with some of this information that we are getting—you all have a copy of this report from us—that Pamada have told us in this email that the closest one is 1,110 metres from us but in their environmental assessment and all their other information they are quoting 1.2 kilometres, so they are 90 metres incorrect with their information.

This trend goes through everything I have read. There seems to be misinformation or incorrect information all the way through their EA and they keep telling us, "No, we are 1.2 kilometres from the closes wind turbine" which is number 31 but when they print it out and tell us they are 1,110 metres. There may not be much distinction but with the size of these things being 150 metres tall and noise it certainly makes a hell of a lot of difference especially when there are five of them just about our house.

You asked about communication. Yes, we have had six meetings at our home, and several other things and all these other phone calls and emails, but it does take a lot of what you call badgering, pushing, arguing to get the information. The testing that they did at our place over two lots of two weeks for noise monitoring took us over 12 months of badgering to get that detail. The detail came to us but I had no idea how to read it or understand it. I have no acoustic background. In asking for information from the Department of Planning to explain it, nothing—you do not get an answer. Apparently the Department of Planning does not have to reply.

**CHAIR:** How about the issue that the department has stated that it will be reducing the speed of turbines?

**Mr THOMPSON:** They keep telling us that they will ramp them down.

**CHAIR:** In specific environmental circumstances.

**Mr THOMPSON:** They keep telling us they will ramp them down but the senior project manager drew us a diagram one day. He drew five circles and a little diagram down here that meant it was our house. He said, "If that is 100 dBAs from each one of those" and he drew lines down "how am I going to get 25 dBAs from your house?" I said, "I don't think you can. Can you, just over a kilometre from our house?" The reading at our house according to Pamada and their words, which we believe is 25 dBAs at our house. That is at our house, not in our house.

**The Hon. ROBERT BROWN:** That is the ambient noise they measure?

**Mr THOMPSON:** Yes. Pamada told me after that that they are allowed to disregard that 25 dBAs and the Department of Environment and Climate Change tell them that they are allowed now to have it at 30 plus 5 or 35 plus 5 so my question to the Department of Planning is, "Why should we put up with a 40 per cent increase in noise?"

**CHAIR:** Where does that decision come from?

**Mr THOMPSON:** That information?

**CHAIR:** Yes.

**Mr THOMPSON:** The Department of Environment and Climate change tell me it is 35 plus 5; Pamada tell me it is 30 plus 5, dBAs. I do know who is correct, but I do not want it 30 or 35 dBAs. I want it at 25 dBAs if we are getting that noise, that is, 100 x 5 turbines hitting our house and our house is within an amphitheatre.

**The Hon. TONY CATANZARITI:** Are you getting those replies from the department and the proponent in writing?

**Mr THOMPSON:** You can't get anything in writing. That is the first thing I have had in 3½ years from the proponent Pamada—anything in writing.

**The Hon. TONY CATANZARITI:** You have got two differing dBA readings and none of them are in writing?

**Mr THOMPSON:** No.

**CHAIR:** I think perhaps the Committee can ask those questions and elicit a response in writing for its purposes.

**Mr THOMPSON:** Please do, I would be interested in a copy of that. It is interesting when they talk about ramping down the noise, they talk about directions of wind, which way the upwind movement of the blades and the wind and those sorts of things, and one is supposed to cancel out the other, et cetera. It is very technical as far as I am concerned, and I am not technical enough to know exactly what that is. What I concern myself really with this is: Why do we have to have more noise than what we have got now? We are not asking for these five turbines to be above our home so why do we want that noise?

Now that my wife has a hearing problem, which is written in the submission, it is going to affect her terribly because even driving with the window down, that much, in the car, that vibration and that noise, I have to wind it up because it annoys her hearing. If we are going to have these things belting down all this noise to us, she is going to have a terrible time. And even because our house is full timber the noise is not going to stop on the outside of our home. What we are going to have to do is, I think, approach the director general of the Department of Planning and ask him to instruct Pamada to purchase our property because we are not going to be able to put up with that noise, that vibration, whatever it is, that is really going to affect my wife.

**CHAIR:** Would that be an acceptable solution at a fair price for you in your circumstance?

**Mr THOMPSON:** I have already written to the Department of Planning telling them under what circumstances I will accept a buyout. I have not stated a price, but I have already put in stress and time, et cetera as an amount that needs to be compensated Pamada buying us out. I believe Pamada should buy us out, not the people they sell it onto, as the builder because Pamada has caused the problem.

**CHAIR:** If, for arguments sake, you are able to come to a just term situation with the proponents to be bought out, are there any other neighbours or people in close proximity who would be similarly affected?

**Mr THOMPSON:** I believe so. Nobody is closer than what we are, but there are some that are fairly close to it. Now I think those readings of those machines would have to be done at those properties now, and then, after the actual turbines start.

**The Hon. RICK COLLESS:** We have probably got your wife's hearing health documented but I cannot locate it.

**Mr THOMPSON:** She has lost hearing in one of her ears and has about 50 per cent in the other ear.

**The Hon. RICK COLLESS:** Is there a particular range of frequency that affects her hearing?

**Mr THOMPSON:** The specialist has not told us anything like that but the hearing aid that she has, which was quite expensive, is supposed to cut out a lot of noise but even when we get to a restaurant et cetera it does not cut out that background noise. The public address systems and music and whatever create terrible troubles for her so much so that now, since she has had this problem, we do not go to dinner very often. We do not even go to coffee shops or restaurants very often now because of the noise problem she has.

If these things are just above our home she is not even going to go into the garden because that noise will worry her all the time. The wind and the trees et cetera do not worry her but it is that whoosh, whoosh, and the vroom noise that will actually worry her terribly. I have been going to write to the specialist and ask him for, what would you call it, more detailed information but I have been so involved in these things I really have not had the time at this stage to write to him. If you would like me to put it on notice, I am happy to.

**The Hon. RICK COLLESS:** I would like to get some understanding of the range of frequency—I have asked this question quite a few times during this inquiry—that are emitted by these things. We know the audible range of frequency and there has been a lot of talk about infrasound and low frequency noise that they emit not necessarily audible but you can feel the vibration. That is the sort of information I would be keen to learn about. I want to know from your wife's hearing specialist what is the impact of those different frequencies on hearing aids and also on individuals.

**Mr THOMPSON:** I will take that on notice.

**The Hon. ROBERT BROWN:** Have you visited any wind farms?

**Mr THOMPSON:** No.

**The Hon. ROBERT BROWN:** You indicated that you understood the noise was a whoosh and vroom. How did you know that?

**Mr THOMPSON:** How much do you want me to show you? I have thousands of pages. The ladies over here have also told me you have my submissions.

**The Hon. ROBERT BROWN:** It is not up to me to suggest things to you but in your case it would be a good idea that everyone get on the Guardian bus to the Goulburn area and visit a wind farm. It might give you, your wife and anybody else an indication not only of the base load sound at your property which may or may not be 25 dBA but what effect these things might have. If you are being told now that you have to put up with 40 dBA, that is not a 40 per cent increase in noise. The dBA scale is a logarithmic scale so it is a lot worse than 40 per cent.

**Mr THOMPSON:** Thank you, I only worked it out on numbers. Yes, I will take her down with her hearing aid and see.

**The Hon. ROBERT BROWN:** I think it is a good idea for all the concerned community to get some first-hand information and not just accept what other people say.

**The Hon. CHARLIE LYNN:** It might cause more depression.

**The Hon. ROBERT BROWN:** It might, but at least they will know what they are in for.

**Mr THOMPSON:** Yes.

**CHAIR:** I have to say it was certainly a huge advantage for the Committee to visit the wind farms. We appreciate all the different wind conditions and environmental circumstances at different times. It is valuable to stand near them, and then one kilometre away and at night.

**Mr THOMPSON:** After the Upper Hunter Shire Council went to Victoria and I think it was Lake George near Canberra I invited them to our house, and they went to several other houses as well, and once they had been to our place they realised just how close we are to where they are going to be. Then I believe they did a visit up to the top of the hill where the mountain station is going to be and they were surprised just how close we actually are. Within Pamada's EA we got a mention about 20 times. Pamada and its consultants must be really concerned that our property is going to be affected. I would assume that from that we could make a lot of noise for them, and disturbance for them, as reciprocal—coming here, talking about these things, mentioning their name so many times, that I think it is actually up to it now to turn around and say, "Well, look, yes, those five turbines above your place can be scrapped."

We already know from the owner of the property where these are going to be that the solar area is stage 1, that they are talking about up there. The owner of the property took us up one day and we had a look. It is the first time we have been above our place on this property. As we were driving away he actually said, "Oh, by the way, over there is going to be stage 2 of the solar." A little bit on from there he said, "Oh, a bit over there is going to be stage 3 of the solar". One of my submissions to the Department of Planning suggests scrapping the five turbines above us—save all the problems—and putting in 1, 2 and 3 of the solar. If stage 1 is 54,000 panels, and produces up to 10 megawatts, why not increase in stage 2 and 3, and do it that way, and that will solve our problem for them, rather than having to buy us out—or all the problems we could cause or all that sort of thing. I come back also to this setback that everybody was talking about before as well.

**CHAIR:** Was there any response to that proposition?

**Mr THOMPSON:** Once again, you do not get any answers from the Department of Planning. All they send you is an email saying that they have got this submission or that submission or some other submission, and that is all. You do not get any answers or related answers to questions at all. I do not even know whether you can actually write them a letter, ring them up and ask for an appointment to go through all these sort of things. As far as I can see it is just a blank wall without communication. I hope that is not what it is.

**The Hon. TONY CATANZARITI:** You said earlier that you had various consultations with the proponents, either heated or not-so-heated. Were you satisfied with the amount of consultation that took place?

**Mr THOMPSON:** I was satisfied with the amount of consultation.

**The Hon. TONY CATANZARITI:** Did you have any problems trying to talk to them at all?

**Mr THOMPSON:** No, I think we were the first actually to have a meeting with them, in 2006. I think from that stage, because we had started the communication, I think that each time I wanted a meeting we got a meeting. The only problem was, as I said before, that there were no minutes taken, nobody would confirm what we talked about or discussed because I do not think they wanted to commit themselves to paper.

**The Hon. TONY CATANZARITI:** What about any other residents close by? Do you know whether they have had any?

**Mr THOMPSON:** I do not know whether they have had meetings with them.

**CHAIR:** I appreciate you have raised a number of significant issues, personally, property-wise and communication-wise. Can you perhaps let me know what you see as your primary issue with this matter? What is the most confronting situation?

**Mr THOMPSON:** I would like the problem of noise, visual, et cetera, solved. My way of looking at that is that if there is a boundary setback, or whatever you want to call it, of somewhere between three kilometres and five kilometres from every turbine to every boundary fence—not residence or house, but boundary—we would not have a lot of this problem we have today.

**CHAIR:** Do you not think two kilometres is enough, as mentioned by earlier witnesses today?

**Mr THOMPSON:** Not enough. Nowhere near enough. I think three is the minimum from the boundary—not the house, the boundary—and I think five would be more acceptable to everybody. Suddenly the noise has disappeared, because that is what they seem to say, most of the noise has disappeared, a fair bit of the actual visual has disappeared, and that sort of thing.

**(The witness withdrew)**

**(Short adjournment)**

**STEPHEN JOHN TOMS**, Mayor, Glen Innes Severn Council, and

**GRAHAM WADDELL PRICE**, Director, Development and Environmental Services, Glen Innes Severn Council, sworn and examined:

**CHAIR:** Prior to any questions the Committee may ask of either of you if both or either of you would like to make a statement please feel free.

**Mr TOMS:** I would like to make a statement and then allow Graham to make any comments backing that up. I should point out that in my real job I am a land manager with the parks and wildlife group, now part of the Department of Environment, Climate Change and Water. In that role I have no contact or dealings with these sorts of matters.

Firstly, I thank you for the opportunity of appearing here today. Wind towers are obviously a significant development and represent a change of land use or an additional land use to what we are used to seeing. It is significant in that respect and I believe it needs a public hearing in various formats. It is great that this opportunity is here today. It is pretty obvious that sustainable power, both solar and wind, are obvious solutions to a whole range of environmental issues, one of which is that fossil fuels are finite—and I think that is something that gets lost in the climate change debate. If for no other reason than that fossil fuels are finite we should be looking at alternatives. Some positive things are coming out. If sustainable power can be produced locally, there are some positives in all of that. Obviously there are also some impacts.

Currently around the Glen Innes area there are three wind farm proposals. There is the Glen Innes wind farm, which is before the Department of Planning for about 28 towers and which has attracted at this point the most local public interest. There is the Ben Lomond wind power development, which is to the south. It starts from Glencoe and goes down into Guyra shire. That proposal was the first one, I think, to hit the decks. It was a proposal for about 90-odd towers, but at this stage seems to have gone fairly quiet, and the new one is known as the Sapphire wind power development, which extends from north of the Gwydir Highway and in towards the Kingsland area within both Glen Innes and Severn local government area and Inverell. That is in the order of 180-odd towers so it is quite significant and a fairly recent development.

I will try to go through some points of each of the terms of reference. First, the role of the utility scale of wind generation, I think, is primarily a somewhat technical matter, which is not for me to comment on with any expertise. Item 2, the location of wind towers, I note that under the New South Wales Wind Atlas, the Northern Tablelands shows up as an area of significant wind resource and generally we have low population densities, which, I can see, collectively makes it somewhat attractive for developers. On the other hand, there are local issues, particularly where residences are located close by to towers. To try to address that issue the council has developed a development control plan. It went through the public process to do it. It tried to look at what information was around and what other development control plans had been approved by other councils in relation to the matter. Council was concerned that guidelines for determining wind farms were performance based in terms of the location of the towers and there needed to be more security for residents and, I suggest, for the proponents, in relation to the expectations of our community and safe and reasonable distances from towers to houses.

The development control plan also deals with a number of other things as well. The bottom line is it proposed a two-kilometre setback from residences to towers as a minimum setback distance. It is still not suggesting that performance monitoring and assessment should not take place as well. It was argued that should have happened in addition to the two-kilometre setback. While people can argue is it two kilometres, one kilometre, three kilometres, whatever, there must be some point at which the impacts are unacceptable. Based on the information at hand and looking at local examples, et cetera, council determined two kilometres was an appropriate compromise in terms of distance. The topography of the locality will also make a difference. In our case, a lot of towers are located high on ridge tops and some of the houses in question that are the sources of major concern are lower down. There will be other areas where it is relatively flatter terrain and houses may be at ground level to the wind farms. Obviously that will make a difference as well on the impact.

In terms of the broader landscape, there will be obviously an aesthetic impact. That is in the eye of the beholder, I believe, whether you see it as an industrial development or something of majestic appearance. Everybody will have a different view on that and no doubt it will bring about a lot of emotion in unravelling those views. Item 3, the impact on property values, it is no doubt early days in our area. I suspect there could be

in the short-term a negative impact to landholders of some holdings located beside properties with wind farms, For properties that have the towers on them and that are able to negotiate some form of income from those towers, it depends on the level of that income whether the property values go up, down or stay the same. The fact there may be some income to the property holders would certainly be a significant offset. There will also be benefits to the local community in the construction stage and ongoing maintenance. There will be some positive economic activity which no doubt in the local sense I think overall will be positive.

Item 4, mechanism for local ownership and control, is a really difficult one because, to start off with, the approval of wind farms over a certain size are considered a State significant development which the council does not control. However, the council has developed a development control plan which I mentioned earlier which plans to give some leadership to the Department of Planning and hopes to represent the community views as far as anyone can as far as what are reasonable conditions in the process. One of the significant changes that has only happened recently is that now council is responsible for policing noise effects from wind farms. Currently, council does not have the expertise to do so. Quite clearly those noise effects need to be anticipated before the things are developed because it is too late after that to turn them off, or whatever, especially if it is anticipated that there could be some issues.

**CHAIR:** On that matter, are you suggesting it is the State Government's role in pre-assessment or are you suggesting some other sort of body, given we are going to have this debate across certain areas of the State?

**Mr TOMS:** I suggest there needs to be, when all the objective data is put together, there will be some minimum distance at which it can be clearly said there will be impacts and then there will be another distance which will be some sort of buffer in certain circumstances. In the first instance the towers need to be located in the least conflicting positions as possible so far as neighbouring landowners and residents are concerned and, secondly, council is not equipped to be monitoring noise because there are other issues like what is known as the van den Berg effect, which will be difficult to measure and certainly council does not have that expertise. It certainly does not have the financial backup to defend major controversies over the implementation of some of these noise impacts, whether it be in regulating the developer or being able to defend noise effects or whatever, should that end up in the Land and Environment Court. It is unreasonable for a body that has not had any say in the approval process to then be asked to do the regulation of the noise effects.

The other area in terms of local ownership is the need for developer contributions, which has been touched on by some previous speakers. In the same way that other developers provide contributions to the community, either through 94A development plans or whatever but as a means of supporting community infrastructure, is some form of compensation for having some developments in the community. In terms of item 5, wind farm potential, quite clearly for wind farms to be able to offset the generation of coal power would take enormous area of wind farms to actually do that. We are talking about potentially a significant scale to generate enough power. Quite clearly that would have fairly significant visual impacts as well as more local impacts. The whole push towards solar needs to be part of it in terms of broad-scale solar schemes.

Item 6, "Any other relevant matters", I think there are a number of different issues here. One is that the size of the towers now being proposed are certainly larger than what most people would historically see in existing wind farms. The size of the towers appears to be growing. I am assuming that the density of towers would be somewhat less because of that but the height and scale of the towers are getting bigger and becoming more significant.

**CHAIR:** We need some time to ask questions.

**Mr TOMS:** I have a couple more points then I will finish.

**CHAIR:** Time is limited.

**Mr TOMS:** Both inquiries like this and the Department of Planning should be able to source objective information to answer some of the questions raised. The decommissioning issue: one would hope, being a sustainable form of energy, we are not talking about this as a short-term exercise. If we are I suggest we should look at something else. Thank you.

**Mr PRICE:** Just one quick point, bearing in mind the time, which is clarification on the noise control issue. It has been discussed here. Some time through 2008 there was a change to the Protection of the Environment Operations Act in regard to scheduled premises. In the stealth of the night that was changed



without any consultation with local government and a little clause was put into the list of scheduled premises that previously were administered by the Environment Protection Authority, "General Electricity Works: meaning the generation of electricity by means of electricity plant that, wherever situated, is based on, or uses, any energy source other than wind power or solar power." That clause effectively referred those issues back to council and that will be a significant issue for councils, particularly our size, and councils throughout the State because we will be the authorised regulatory authority and will be responsible for noise complaints and administering them and we have limited expertise. Our expertise is in barking dogs and those sorts of complaints.

**CHAIR:** The role of local government is that you have the community on one side and part 3A and the State Government on the other, really squeezing council's role. What you have described is a classic example. Are there any other serious obstacles in being able to express the concerns of the community and how you regulate the situation? Are there any other aspects that we need to know about?

**Mr PRICE:** There has been much discussion about development control plans. The development control plan applies to a development application that is received by council. Here we are on the prompting of our community, sometimes a little bit slowly, which is probably a valid criticism, preparing development standards, which is what a development control plan is, for development applications that we are not receiving and we have no control or say over at the end of the day. That is as a result of the lack of clear guidelines from the State. They are the ones that are approving them; they are the ones that are doing the negotiations with the developers. Council is just another stakeholder, as community groups are.

**CHAIR:** I understand that you have gone through the development of your development control plan for wind power generation. How was that developed and what was the extent of local community input in that process? Have you had any response at all from the State Government or the Department of Planning on what you have come up with?

**Mr PRICE:** A development control plan is a prescribed process where we have to put it on public exhibition and call for community comment. I guess that applies to the Department of Planning. They were well aware that it was in the process. We did not receive a submission from them but we did receive quite a few submissions from the community. Council took on board those comments and changed the development control plan where they thought appropriate.

**CHAIR:** Are you aware of whether the State or the department has reflected many aspects of that plan or are you left in the dark on that?

**Mr PRICE:** We do not really know because we have put our submissions in, as have many other people, and we are unsure of the answer to that question.

**The Hon. RICK COLLESS:** When you prepare a development control plan for your development application, as you have described, council is obliged to approve that development application only if it complies with the developing control plan, is that right?

**Mr PRICE:** It is good practice to do that but at the end of the day it is council policy—they can vary that, from a staff perspective—we do not advocate that and we do not like to see that happen because it becomes a watering down of the standard. It is a local standard that can be varied by the council but is preferred not to.

**The Hon. RICK COLLESS:** So at the end of the day would you be concerned if a wind farm is approved that does not comply in any way, shape or form with your own development control plan?

**Mr PRICE:** With all due respect, I do not think it matters what I think because we do not have any say in it, really.

**The Hon. RICK COLLESS:** It probably matters what the council thinks. When I refer to you, I am referring to you both generically as the council. It would appear to me that it would be of great concern to the council if a development application were approved under part 3A that did not comply with your development control plan.

**Mr TOMS:** Council would expect that the development control plan would be taken very seriously by the Department of Planning and seen as a significant document and a significant reflection of what the community view is.

**The Hon. RICK COLLESS:** Councillor Toms, I have read through your development control plan and I congratulate your council on preparing that, as I do with the ones of Inverell, Scone and the Upper Lachlan councils and all the other councils, because I can see that that is going to be a very important document in the future as these things progress. You are aware, I guess, that the Upper Lachlan Shire Council had a development control plan approved, as did Crookwell and Gunning councils, which did not comply with their development control plans?

**Mr TOMS:** I understand so, yes.

**The Hon. RICK COLLESS:** Do you believe then it should be binding and compulsory for the Department of Planning to only approve those applications if they do comply?

**Mr TOMS:** It is very easy for me to say yes. I guess the reality is that the State Government does have a broader agenda and perspective, but I would expect that in approving something that was less than what our development control plan was saying there was very good evidence to the satisfaction of all stakeholders, that it was based on well-informed advice and would not have impacts that the development control plan was trying to mitigate against. I suspect that that, particularly in relation to the setback distance—we have heard some people today talk about three and five kilometres. I think the two kilometres is not an unreasonable distance to provide some sort of surety to residents and also to the planners of wind farms.

**The Hon. RICK COLLESS:** Correct me if I am wrong, but I gather from what you are saying that it would be reasonable for the department to approve an application that does not apply as long as there was some communication back to the local council to make sure that the overall objectives of the development control plan, that is the impact on the community, were being met?

**Mr TOMS:** Yes, but in the first instance I would be strongly saying that we would expect the development control plan to be honoured and to be implemented, but if it was not going to be to the full degree, yes, it would have to be subject to some reasonable safeguards.

**The Hon. ROBERT BROWN:** First, Mr Price, would it be possible to table the clause reference for that change to the noise requirement so that Hansard do not get it wrong.

**Mr PRICE:** Certainly.

**The Hon. ROBERT BROWN:** On the issue of council having to take care of compliance under that change, what would be council's preference? That it did not do it; in other words, that the Environment Protection Authority did it, or that the council was properly resourced by extra funding, extra capital, extra staff to be able to undertake those compliance issues? What would be council's position?

**Mr TOMS:** I would suggest it would be for council not to have to do it.

**The Hon. HELEN WESTWOOD:** My question follows on from that. In the development control plan that you have adopted for wind farms, how is it envisaged that you will monitor the conditions of noise emissions?

**Mr PRICE:** The development control plan technically, from a legal point of view, does not apply to the development because it is not being approved under that development control plan. Any conditions that the Department of Planning put on, it is up to them to monitor the conditions. They have indicated that they would be responsible for monitoring compliance with any conditions that were put on a wind farm with regard to noise. The trouble that I see with that issue is that what is going to happen is going to create even more uncertainty for the community because they are going to investigate complaints. They may get the Environment Protection Authority to investigate that on their behalf. They are going to take some standard noise level readings, which are going to show that the development is complying, but really issues such as the Vanderberg syndrome, et cetera, are unknown and are not able to be measured easily. They will go along, inspect it and say, "Yes, it is complying with the consent". The residents will be unhappy so they will be coming back to council again because council is the authority or, alternatively, the Department of Planning will say, "We have investigated

the matter. It is not an issue as far as we are concerned. You will have to take it up with council." It is just going to go round and round and be buck-passed, basically.

**The Hon. HELEN WESTWOOD:** Does your development control plans set a standard for noise emissions?

**Mr PRICE:** It only refers to the South Australian guidelines.

**The Hon. HELEN WESTWOOD:** Was there complete support from the community when you eventually adopted your wind farm development control plan? Was there unanimous support? You had it on public exhibition and amended it?

**Mr TOMS:** Yes. "Unanimous" is an interesting word.

**The Hon. HELEN WESTWOOD:** Even significant.

**Mr TOMS:** There was definitely significant support. Just in terms of council monitoring its own development control plan, the fact that the two-kilometre setback distance is in there, we believe, would give a fair degree of safety margin as well.

**The Hon. HELEN WESTWOOD:** Did your development control plan address the issue of decommissioning?

**Mr PRICE:** I would have to take that on notice.

**Mr TOMS:** I think it is touched on.

**CHAIR:** If you can get back to us on that.

**The Hon. HELEN WESTWOOD:** That would be good. What about the issue of community compensation? In the process of developing it, did you look at how that issue could be addressed? Some of the evidence we have received to date talks about the European model where there are lease fees paid not only to the landowner but also to those affected on neighbouring properties. Did you look at that in the development of your development control plans and did you make any recommendations?

**Mr TOMS:** The development control plan talks about development contributions but does not actually talk about neighbouring landholder contributions. I think that is an area that does need to be considered because quite clearly for people—and this has created conflict between those people with wind farms on their properties who may be receiving some monetary return and have a different focus to those who are not. I believe that could well be one of the things that need to be considered.

**The Hon. LYNDA VOLTZ:** In regard to approval of wind farms and noise monitoring, obviously not all wind farms in New South Wales have been approved by the Department of Planning; some have been approved by local council. Do you think it is more appropriate that local councils are approving and monitoring or do you think it is more appropriate that the Department of Planning is approving and monitoring because obviously there is conflict between the two?

**Mr TOMS:** There is, and I think that is an interesting question to reflect on considering the scale, particularly in our area, of what has been proposed. There is the model that has been pushed now for regional planning forums, panels, which involve, I guess, something of a partnership. I guess that is the third variation to all of that. I believe that it would make sense, rather than the Government having a very strong equity in terms of the approval process but I do not think it is unreasonable for the State to have a stake in there as well.

**The Hon. LYNDA VOLTZ:** According to your DCP with the development application process—and this often happens when the Department of Planning issues approval—often the council has input to assist the Department of Planning. The Committee has heard, for example, from the previous witness of difficulties in terms of gaining access to the noise data and his ability to interpret that. Is there a role for local governments to assist local residents, local government actually having some expertise in reading this data and being able to have access to it through the Department of Planning with whom it has a relationship, rather than residents trying to chase down that information?

**Mr PRICE:** The trouble with the noise data is that it is a highly specialised field that even professional people who may deal with noise on a day-to-day basis in a normal council would do, that these noise issues are immensely complicated. We have seen a peer review of some of the reports that are being done, and there is conflict even within professional people. I think there is a role for councils, as a bit of a go between, to allow information to be more accessible but the logistics of how that works, I am not too sure.

**The Hon. LYNDA VOLTZ:** Obviously the environmental assessment is taken well before the DA is actually lodged so a lot of information is available, particularly between council and the Department of Planning, that may assist local residents in a way that where you get to the 30-day exhibition period they could be better informed. I notice in your DCP that you also have a requirement that upon lodgement of a DA that property owners within 5 kilometres are notified of that development. Yet, Mr Putland's property is within 2 kilometres but was not notified. Would you check what was the area on that development application and the notification?

**Mr PRICE:** That applies to development applications that are received by council. In this instance that is a development application that was received by the department.

**The Hon. LYNDA VOLTZ:** The DCP follows on from the paragraph about the Department of Planning having the approval, and council assisting in the process, and then upon lodgement of the development application the council generally notify within five kilometres.

**Mr PRICE:** Okay, I will take that on notice.

**Mr TOMS:** I also make the comment that this DCP was approved after the Glen Innes wind farm development was announced.

**The Hon. LYNDA VOLTZ:** I guess my point is that council has a lot more experience in planning than local residents, and represents local residents. It has a much better rapport with planning, and in some ways it is not that councils need to be asked to do something; it is their responsibility to provide rather than the residents having to come looking.

**Mr TOMS:** Yes.

**CHAIR:** We are out of time. Thank you very much for your preparation and attendance. The Committee may have some further question and vice versa if you have any information that comes to hand, the Committee would be happy to accept it.

**(The witnesses withdrew)**

**RICHARD JOHN TANNER**, self-employed primary producer and Chairman, Coolah District Development Group Inc., sworn and examined:

**CHAIR:** In what capacity do you appear before the Committee?

**Mr TANNER:** I am a self-employed rural primary producer. I am also Chairman of Coolah District Development Group. Whilst I appear as chairman, I am not representing that group, or my views may not necessarily coincide with their views.

**CHAIR:** Do you want to make an opening statement?

**Mr TANNER:** Yes, I would. There is some quite extensive material that I have placed before the Committee.

**CHAIR:** It will probably put us over the weight limit on the way back.

**Mr TANNER:** That might be a good thing: we might have tomorrow to talk about all this. The volume of the material that I have given you, I think, all jokes aside, is very important. I believe, without being egotistical, that your Committee perhaps has not been privy to some of the legal agreements that landowners have been asked to sign. There are some very dangerous aspects in those, and they have been included in my submission. Some of them fell off the back of a truck at midnight and I did not get the number plate. It might be advisable that they not be published in *Hansard* or any web page, or anything like that.

**CHAIR:** The Committee will consider that.

**Mr TANNER:** I think it is essential that the Committee realises that they are very important documents and they are perhaps documents that your Committee has not come across before. Just briefly, I come from Coolah. Coolah, as many would say, is a wind hot-spot. The number of wind farms or turbines that have been mooted for the Coolah area is very large—perhaps a minimum of 500 turbines, perhaps at least 1,000 and there have been certain estimates of up to 2,000—and by any standard that is a very large wind farm developing perhaps 2,000 megawatts of energy or more. So it is very important that the collective group of landowners get the basic agreements right because there are very important and dangerous aspects to my way of thinking in some of these agreements.

Coolah is a hot-spot, as I said. It is perhaps due to an alignment of the planets that this has happened. We are characterised by a number of ridges which are relatively high, which have relatively little timber on them, are accessible and we are reasonably close to the power grid. That probably sets us apart probably from 95 per cent of other wind farms. There have been approaches from two wind developers at least, at the moment, and, of course, some landowners are very keen to sign up. I have adopted an approach which says that there are major items of concern in a legal sense. I have not got into the planning side—I think that has probably been dealt with more fully than I could—but certainly I think the legal side needs to be looked at.

I have in my submission given you some case studies of what happens with these so-called wind developers. In my mind they are no more than wind prospectors. What they do is attempt to sign everyone up. They will set out, and as I have mooted, the agreements are very dangerous to the landowner having signed up with the wind developers. The assets of that lease or agreement generally gets split two ways. The cash flow component goes to a superannuation fund and the right to take the power will either end up in the hands of AGL or Origin Energy. They could end up in the hands of Country Energy or Integral Energy or Energy Australia, however, the New South Wales Government, because it is short of money, wants to sell those energy retailers and you are going to have a greater concentration of power in the hands of energy retailers. I think if you are not already aware of that you should be.

There are some questions in my mind over what is called the renewable energy contract which itself is valuable. At the moment it would appear that the energy retailers are the only ones who are allowed to own those renewable energy contracts as outlined by the Federal Government. There is a question in my mind as to whether the farmers, or the landowners, should own those renewable energy contracts. I think if they were, it would put a stop to a lot of nonsense. There is in my submission a flow diagram of the complexity of the wind farm development. You are looking at major investments. For instance, each turbine, it is generally acknowledged, costs between \$3 million and \$5 million, that is, installed. About 60 per cent of that would go to

the manufacturers, either your Suzlon, your Vertas, General Electric Wind, and the other 40 per cent will be spent in the district. If the district generally decides that it would like to embrace wind farm—in the Coolah area it is a relatively small country town, 40 per cent of 1,000 turbines times \$3 million to \$5 million each, you are looking at a massive project, and some 40 per cent of that would be spent locally and the other 60 per cent would go to the manufacturers of the turbines.

I made the point that the wind prospectors or wind developers, call them what you will, will sell out quickly. There are the contracts which in my submission are important because they offer, in my opinion, very little help or very little legal protection to the actual landowner.

**CHAIR:** On what are you basing your assumption that they may sell out? Are you saying that landowners could enter into a 30 year agreement in good faith but these companies are somewhat less than transparent?

**Mr TANNER:** Oh yes.

**CHAIR:** Will you explain on what you base that assumption?

**Mr TANNER:** Yes, it is based on the experience in South Australia with Australian Gas Light. They have made a profit just selling the cash flow rights, and they retain the energy utilisation rights. In the case of Hallett 2, which only involved 34 turbines, they made a profit of \$59 million, without the project even being finished. Only last week they made an announcement they have sold Hallett 4 wind farm, involving 67 turbines, and they made a profit of \$88 million.

**The Hon. LYNDIA VOLTZ:** Have you included those press releases in your papers?

**Mr TANNER:** I have included the press releases as appendix 1, and that is the standard operating procedure for these wind developers. They will sell out. They cannot afford to hold on because the capital investment, and they will borrow these funds, is massive. I indicated that it is \$3 million to \$5 million per turbine so in the Coolah area you are looking at 1,000 turbines and the expenditure all up is between \$3 billion and \$5 billion. You have got to have a balance of a capital base with the debt financing.

At the moment the superannuation funds are keen to invest but their mandates preclude them at the early stages from investing because it is not guaranteed. However, once the wind is tested the superannuation funds are lapping up the cash flow because it is a stable, probably, 12 per cent or 13 percent return. The developers who themselves are hard-pressed financially because of the low capital base will sell out. The agreements with individual landowners in my opinion are very loose and dangerous. In my opinion they are not capable of being performed or the landowner would have no redress against third parties. They say they will do their best, they say there will be governance, but the agreements with the landowners are very loose and offer them very little protection.

**CHAIR:** Perhaps you can take on notice in general some of the evidence on which you base those assumptions.

**Mr TANNER:** I think you will find that 10-page submission of mine will cross-reference to the various appendices. There are just a couple of more points and I will finish up. I have touched on the question of the renewable energy certificates. That is a Federal Government matter and it has been set at about 10,000 megawatts. The hot water industry on the roof of houses is generally acknowledged as taking up about 4,000 megawatts and they are deemed to be electricity savers. Whether they are or not, I am not sure, because those panels on the roof are made of aluminium and, as you know, aluminium uses a lot of electricity. But as far as the Federal Government is concerned the renewable energy target source, about 40 per cent of it already has gone and it has been taken up by the roof hot water manufacturers. About 3,000 megawatts is estimated to have already been committed by the existing Origins and AGLs. They have taken up approximately 3,000 megawatts or will take up approximately 3,000 megawatts to fulfil their obligations under the Federal Government's energy program and the renewable energy target of 20 per cent of energy coming from renewables by the year 2020.

That leaves about 2,000 megawatts. Any delay—and I believe there will be some delay, and this is where I do want to make an appeal for a change in operation of the New South Wales Climate Change Fund because I think it is going to be necessary if you are going to get community involvement and the signing up of a contiguous number of farmers to allow for large-scale development of wind. There is a very real chance that

the renewable energy targets, unless these matters are sorted out very quickly, that you may not have many wind farms at all. I leave you with that thought.

The shortcomings of the New South Wales Climate Change Fund should be mentioned. I personally have been trying to get the farmers in the Coolah district to adopt a cooperative approach. At this stage I have not been particularly successful but I will keep on trying because I think that is the only way our interests will be protected. One of the stumbling blocks of trying to get farmers to agree on anything is like herding cats—they go off in different directions. If the wind is going to be the one medium that replaces coal—and I think it is the leading medium, I do not think there can be any doubt about that—there has to be some help from the New South Wales Climate Change Fund to collectives of individual farmers so that they can do the testing. We will then be in a position to sort out the renewable energy contract, whether we own it or whether the energy companies own it or whether the developers own it. I think that is perhaps all I wish to say. There is a lot more in my report but I realise time is short and I would not want the volume of my submission to cause you to miss the plane.

**CHAIR:** I appreciate your concern. What is the motivation of the wind companies to set up? You have briefly but succinctly explained some of the downfalls and that is the short-term nature of their role before it is taken over by big energy authorities and suchlike.

**Mr TANNER:** Yes, that is right.

**CHAIR:** What is the rationale?

**Mr TANNER:** I think the rationale is profit. They will say, of course, that they are saving the planet.

**CHAIR:** I do not think anyone is going to dispute that, but what I am asking here is whether there is something quite apart from the issues we have at the moment? Are you asserting there is some sort of hole in this whole mechanism that could leave people with agreements that are not going to be properly fulfilled or they could be liable in a short period of time—the carpetbag effect, if you like?

**Mr TANNER:** I do not know that they will be liable. I do not think even the individual landowner will be liable under these agreements but, in my opinion, they will have no rights against third parties. Once the landowner has signed up, the prospectors or developers—call them what you will—will sell out. You have to understand the nature of the industry. I have mentioned the key role of AGL and Origin Energy. They are becoming vertically integrated. They do not want to be on the receiving end of wild fluctuations in the price of renewable energy contracts. Renewable energy contracts are mysterious things but there is a default payment of \$90 per megawatt if they do not source 20 per cent from renewables. If they do not want to pay the \$90 they have to own them and then surrender them to the Government. So the end user retailers will be the recipients and their balance sheets will reflect the assets and liabilities of every wind farm in Australia.

**CHAIR:** Can you suggest an alternative or, at least, a more balanced agreement arrangement that would work and could work for both the wind farm proponents and the landowners who may wish to proceed that way, apart from the other issues we have with the impact and community values? Just looking at these lease arrangements?

**Mr TANNER:** In appendix 5 of my submission you will see I have written a couple of letters to local landowners with suggestions of what I term a corporate model, which will start off as a fledging cooperative company. It will along the way have to issue quite substantial amounts of capital and if it was either to joint venture, having done the wind testing stage, or proceed to float on the stock exchange it would convert to a public company and have to borrow as well as raise some billions of dollars from the capital market.

**CHAIR:** Does this fit in with some suggestions we have had before the inquiry of groups of farmers getting together for both economically equitable and impact equitable community approaches?

**Mr TANNER:** Yes. That is very much a central theme. Apart from the dangerous nature of these agreements, the positive thing I would like to leave you with is that provided the community is empowered to get together and given some assistance at this stage I think all things are possible. I believe it will be in the best interests of everyone. Disputes between neighbours can be sorted out, about whether the turbine should be one side of the boundary fence or the other. Maybe even at the community level the whole community could feel

part of it if they were given some shares. The district development group, of which I am chairman, was to take an equity position and some trust would be set up for the townspeople so that everyone could feel involved.

**The Hon. ROBERT BROWN:** That is incredible stuff you have presented us with. We have had one other, not a similar proposal but the suggestion that cooperative was the way to go, and that was one of the farmers who made witness to the Goulburn inquiry. Of course, they were at the very early stages. They did not know what they wanted to do. All they knew was if they could get everybody in the community—in other words, all the landholders, the tower landholders and the adjacent landholders—involved, then you take away the problem of the inequity.

**Mr TANNER:** Yes. I can foresee that happening. I am vain enough to think that my model would accommodate that.

**The Hon. ROBERT BROWN:** And you think if it was rearranged from the financial model point of view to a cooperative sort of thing, there is enough money to go around?

**Mr TANNER:** Yes, very definitely. If AGL can sell out and make \$150 million in five seconds flat by developing only 100 wind farms, then if we get our act together the figures are telephone numbers. There is a lot to this, do not get me wrong. It has to be big in my way of thinking to justify the enormity of the capital cost.

**The Hon. ROBERT BROWN:** With the thousand wind turbines you are talking about in the particular district, roughly how many property owners would be part and would be affected by them?

**Mr TANNER:** Probably about 80 to 90, maybe more. We are not sure at this time. The developers have so divided the community.

**The Hon. ROBERT BROWN:** Already?

**Mr TANNER:** Already. There are those who have signed up, in my opinion rather foolishly. There are those who will not sign up until some of the things I have been mentioning are fixed up. There are those who will not have anything to do with it until the mess is sorted out anyhow and, believe it or not, the developers are getting cranky because they cannot sign up contiguous parcels of land. So at the moment the sledgehammer approach by the developers—sign this agreement or we go away—has given rise to a shemozzle.

**The Hon. RICK COLLESS:** In part two of appendix 1, the press release in which you talk about the AGL sale, I think it is your note on the back of that, where you say AGL purchased one, two, three wind projects from developer [Name deleted]?

**Mr TANNER:** Yes. They are a developer I do not know anything about.

**The Hon. RICK COLLESS:** It is interesting for this hearing because one of the ones we have considered today at Sapphire has been put forward by [Name deleted]. Can you run us through what [Name deleted] did with those? They actually built the site, the hardware?

**Mr TANNER:** No they were incapable of building the site. What happened with [Name deleted], I think, is that they got into some sort of trouble. They did their testing and they were probably operating on borrowed money. I do not know and I should not speculate. However, they wanted to sell out. AGL bought the rights, which they had developed—

**The Hon. RICK COLLESS:** Before construction?

**Mr TANNER:** Before construction. AGL then did certain high tower wind turbine testing.

**CHAIR:** I ask that comments on that specific company be deleted from *Hansard*. I do not think it is appropriate to be making those statements.

**Mr TANNER:** I think I prefaced my remarks by saying I do not know enough about [Name deleted].

**CHAIR:** Maybe so, but I ask that the name of that company be removed from *Hansard*.



**Mr TANNER:** The original owner of the Hallett 2 and a whole series of Hallett wind farms in South Australia, whoever they might be, sold out to AGL. AGL, from what I understand, have done the wind testing and the wind farm layout. It is a relatively small wind farm. Halfway through construction, or even before construction in the case of Hallett 4, they have sold the cash flow. In the case of the Hallett 2 it was a round robin. The developer in this case was AGL, having purchased it from this other vendor, then borrowed some money from the ANZ Bank.

Halfway through construction, hey presto, the ANZ Bank and their funds management division purchased the cash flow. That allowed AGL to repay the ANZ Bank when it was the funds management of the ANZ Bank on behalf of super funds, which actually purchased the cash flow. AGL walked away with a profit of \$88 million before the thing was even finished. They retained the renewable energy certificate rights. I have mentioned those very briefly in that all the assets and liabilities of these wind farms will end up on the balance sheet of AGL or Origin Energy.

**The Hon. RICK COLLESS:** This whole process, what you have just described, to the uninitiated like me in these big monetary affairs would appear to be a system of smoke and mirrors.

**Mr TANNER:** Yes, it appeared to me like that about three months ago. I had to sit down and so that I did not confuse myself, let alone everyone else, you will find that appendix 2 shows the complexity of just the financial arrangements, and I think the inquiry ought to be aware of the complexity of the financial arrangements.

**CHAIR:** I think so. We are out of time. We may ask further questions on notice at a later stage. Obviously, we have a lot of material from you to absorb.

**Mr TANNER:** Some of it perhaps is not relevant.

**CHAIR:** With that amount, I certainly hope so.

**Mr TANNER:** Just take one or two pages into consideration.

**CHAIR:** Be sure we will read it with great interest, given the theatrical introduction you have given today. We appreciate the amount of work you have put into your submission. After absorbing this material we could well have further questions for you. Thank you very much for your appearance here today.

**(The witness withdrew)**

**CHAIR:** That concludes today's hearing. I would like to thank everyone who has participated and those who have patiently spent the entire day listening. Any questions on notice will be sent to the various witnesses by the Committee staff, along with a copy of the transcript of today's proceedings. I will provide final information so that you are aware of the inquiry process from here. The Committee is still in the evidence-gathering phase. If you are interested in contributing further to the inquiry you are welcome to provide a further written submission. Preparation of the report will follow, which will take several months. I am hoping that the report will be published by the end of the year. That is our aim, but it is a significant task. That timing is an indication only.

Once the report is published it will be tabled in the Parliament and if the Parliament has recessed for the year we have a method for tabling it with the Clerk and it becomes a public document. All participants will be sent a copy and it will be placed on the Web. The Government is required to respond approximately six months from when the report is tabled. That is the process of the inquiry from here. I thank everybody who has obviously put a lot of effort into other aspects of this matter and for the effort you have put into the inquiry. You can rest assured that we will do our best to assess that evidence and act in good faith. Thank you for your participation.

**(The Committee adjourned at 3.50 p.m.)**