## REPORT OF PROCEEDINGS BEFORE

# GENERAL PURPOSE STANDING COMMITTEE No. 5

# INQUIRY INTO RURAL WIND FARMS

At Goulburn on Thursday 1 October 2009

The Committee met at 9.15 a.m.

### **PRESENT**

Mr I. Cohen (Chair)

The Hon. R. L. Brown

The Hon. A. Catanzariti

The Hon. R. H. Colless

The Hon. C. J. S. Lynn

The Hon. L. J. Voltz

The Hon. H. M. Westwood

**CHAIR:** I welcome everyone to the second public hearing of the General Purpose Standing Committee No. 5 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 the community to provide input into how New South Wales can ensure wind farm developments equitably balance social, environmental and economic objectives. In addition to today's hearing, a public hearing was held in Sydney in September and a third public hearing will be held in Tamworth in October. Today we will hear evidence from representatives from the Upper Lachlan Shire Council, various landscape guardian associations, the Friends of Crookwell and other local residents.

Before we commence, I will make some comments about certain aspects of the hearing. We are aware that people hold strong and divergent views in relation to wind farms. I wish to emphasise that although this is a public hearing, it is not an open forum for comment from the floor. The role of the parliamentary committee is to provide citizens with an opportunity to participate in the parliamentary process. While the Committee welcomes members of the public today, the primary purpose of this 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 the witnesses are recorded on the transcript. Uninvited interruptions are not recorded and would make it difficult for witnesses to fully express their views.

The 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. I therefore 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 any references or case studies in submissions that might identify individuals or families. If a witness makes serious allegations which the Committee believes reflects adversely upon a specific person or entity, then as a matter of procedural fairness the Committee would be obliged to provide that person with the 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 broadcast of 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 they place on anything that is said before the Committee.

Any messages from audience members should be delivered through the Committee staff. I also advise that 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. Please turn off all mobile phones for the duration of the hearing, including mobile phones on silent, as they interfere with Hansard's recording of the proceedings. I welcome our first witnesses, Mr George McLaughlin and Mrs Julie Gray.

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GEORGE McLAUGHLIN, Local Resident, affirmed and examined:

**JULIE GRAY**, Local Resident, sworn and examined:

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

Mrs GRAY: My name is Julie Gray. I am appearing as myself, as a resident and neighbour to a wind industrial site.

**Mr McLAUGHLIN:** My name is George McLaughlin. I also appear as a local resident and a near neighbour of the Capital wind farm.

**CHAIR:** We have your written submissions. You may presume that the Committee has read your submissions. You can trust that the Committee will investigate any material you already have forwarded to us. If you wish to make a short statement, given the limitations of time ideally it should be new material. Would either or both of you like to make a short statement before we commence with questions?

Mr McLAUGHLIN: With Julie's agreement, perhaps I will start. My wife, myself and my son moved to our current property about 8½ years ago. We did this largely for lifestyle reasons. My wife and my son are keen horse endurance riders and have competed successfully at both State and national levels. The property was well suited to the exercising and training of endurance horses. From that point of view, it suited us as well. In my role as an adviser to the World Bank, the European Commission, the U.S. State Department I have the opportunity to work almost anywhere. The ability to do that in a pleasant rural New South Wales setting was very attractive.

About 90 per cent of my income is derived from overseas and a large portion of that is redirected back into the local economy in terms of the goods and services that we acquire. Sadly, as a result of the implementation of the Capital wind farm we will now move from where we are. This will be at a cost to us, not just a cost as to whether or not there is any property price impact but the cost of relocation, the cost of disruption and, of course, the cost of stamp duty, which goes back into the New South Wales Government coffers.

If I could perhaps just refer to this image here, this is the image from our property. From the top of our property we can see 52 of the 67 turbines. This is just an image of 30 of them. There are another 22 down on the right-hand side. The three closest ones are about 1,700 metres from the point that this photograph was taken and slightly further from our residence. While we concede and accept that many people would consider this view acceptable and perhaps even pleasant in some cases, that is not our view. The only thing we are doing is taking the only action that we can and that is moving elsewhere. I take your point, Mr Chair, about keeping it brief. I did have a presentation, which you have, but I will skip through that.

**CHAIR:** If we have it, you can be assured we will look at it in our deliberations. Any new points you want to raise will be most welcome.

Mr McLAUGHLIN: I will leave the visuals and move on to the acoustics. The point I have been concerned about both from the evidence given in the hearings and in some of the material is a point that I think is not well understood. It is that acoustics are complex. Some of the commentary that is made has been, in my view, oversimplified. In addition, there are unrealistic comparisons being made about the sound of turbines. In one particular brochure it is described as being like a babbling brook at 500 metres, rather than like an airplane circling overhead at 20,000 feet. Both of those scenarios have about the same sound intensity, but the characteristics of those sounds are very, very different. A babbling brook has variability of tone, variability of pitch, variability of frequency. A turbine is a turbine. It is a constant drone, whether it is from an airplane or from a wind turbine. In addition, the pro-wind farm American Wind Energy Association caution:

However, in hilly terrain where residences are located in sheltered dips or hollows downwind from turbines, turbine sounds may carry further and be more audible.

This is the case for us and I know for a number of our near neighbours. I think as you are well aware, there are a number of claims on the New South Wales Planning site by the proponent of the Capital wind farm that in answers to questions 52 to 90 make denials about any noise impact. I will quote a few:

— there will be no annoying noise impact on neighbouring residents

- the distance to neighbouring residences is more than adequate to prevent any noise nuisance
- our studies have been conducted using a very conservative model. In short, there is no noise impact

That statement, for many of us, is false. In addition, the NIA [noise impact assessment] methodology has been shown to be flawed. That is the subject for another submission. Contrary again to some of the submissions, there are a number of reports illustrating the impact on the ability to sell neighbouring property. Again, I will quote from some of those:

Those in proximity to wind turbines had either a higher rate of non-sale or took twice as long to sell

The more intrusive the wind turbines in "lifestyle" terms, the bigger the negative price impact

Most developers limited financial rewards to landholders with turbines actually on their land

The next point is very relevant to the Committee:

In Europe there is a much more equitable payment system where people next door will receive 50% of the lease payment and residents further away receive a 25% payment as compensation

My understanding from talking to my colleagues in Europe is that this helps mitigate some of the concerns. In addition, many of the earlier studies referred to have now been disputed on the basis of expert review due to: bias, who commissioned the study, that no account was taken of distance from turbines, that no account was taken of properties that did not sell, that no distinction was made between wind farmers whose properties generate revenue and neighbours whose properties do not. Many of the conclusions generally were influenced by sales of properties more than five kilometres distance from the turbines. I will leave my introductory remarks there.

**CHAIR:** Mrs Gray, do you have any introductory comments?

**Mrs GRAY:** Yes, I do. Mine is very quick. First of all, I would like to say I believe that this Committee is some kind of *Fawlty Towers*. I do not believe that it has any kind of clout or that it has any intention of doing anything about this. I ask a question of the Committee: What have you done in your research to find out the actual data to do with wind turbines?

**CHAIR:** Mrs Gray, it is the case that we ask you questions at this point. It is unfortunate that you come as a witness feeling that way—which is your right—but we are here to gather as much information as we can. Is that your opening statement?

Mrs GRAY: Yes.

**CHAIR:** Perhaps I can commence with the questions. We have taken note of your position. In a submission you state that the noise is horrendous. Have you had the noise measured? If so, what is the average decibel two kilometres away from the turbine?

Mrs GRAY: We have been taking measurements since the turbines came on line. My husband has kept a complete record every single day five times a day. We also have noise monitoring by Viatech, who is employed by the Capital wind industrial site. That is another point to point out. The average on our farm can be from 45 up to the under noise—the low rating noise, the C rating—of at least 60 or 70. So it is very, very loud. That is 2.1 kilometres away and below a hill with lots and lots of trees and bushes.

**The Hon. TONY CATANZARITI:** Could we get the data that Mrs Gray refers to?

Mrs GRAY: We would be quite happy to fax it or send it to you in hard copy, so that you have the data.

**CHAIR:** Thank you. How many birds and bats have been killed by the turbines closest to your property? Do you report these wildlife fatalities to any agencies or local authorities?

Mrs GRAY: Of course, that is a typical question. The bats and wildlife that have been killed we have no idea with this particular one because it has only just started right now. But overall there are 16,000 a year

with one in New York, which is written here and recorded in the *New York Times*. That is 16,000 raptors, not bats as well. That is another amount. But raptors and birds, there are 16,000 on one farm, one wind turbine industrial site.

**CHAIR:** That is one example. Do you also have information of other representations that talk about massive bird kills in other regions and areas?

Mrs GRAY: Yes.

**CHAIR:** Comparatively, in most cases, it is not necessarily as high a kill rate compared to other risks for birds, such as motor vehicle accidents?

Mrs GRAY: It is actually. There are 8,000 killed in just one as well in—

**CHAIR:** That is one particular example. Do you have any examples in this local area?

**Mrs GRAY:** In this local area of course we do not because they have just come on line now. Of course, we will not find out because we are not allowed to go onto the property and there is nobody there monitoring the bird kill. The company will, of course, come around and clear all the birds and bats and insects off the blades regularly. So we will never know.

**CHAIR:** In your submission you talk about Denmark buying nuclear power from Germany due to an alleged deficiency in baseload power. Do you advocate nuclear energy production for baseload power?

**Mrs GRAY:** I do not advocate nuclear energy whatsoever. I advocate solar power and geothermal power. I believe that Australia has the unbelievable ability to go down the solar power way because we are now sending people overseas rather than keeping them here to have solar power.

**CHAIR:** Can you explain the genesis of Ms Pierpont's argument about the existence of wind turbine syndrome? What are the symptoms? Have you suffered any symptoms living two kilometres away from a turbine?

**Ms GRAY:** Nina Pierpont has been doing this research for a long time. It is not only Nina Pierpont. Studies are being done in Portugal, where wind industrial sites are really big. They have been saying that children are having nightmares because of the wind turbines. It is even worse than where they put grain in cellars. The constant noise of the grain going into the cellar produces less noise and impact than a wind turbine.

**CHAIR:** Do you have any work on wind turbine syndrome other than Dr Pierpont's?

**Ms GRAY:** Yes, we do. The Wind Watch site has a lot of evidence about wind turbine noise syndrome. We are 2.1 kilometres away and I definitely have an underlying vibration at night—not during the day. It is definitely there when I am trying to go to sleep. It is like a car or a plane revving up next door. We have never had that before, so it must be the wind turbines.

**CHAIR:** Are there peer-reviewed articles or has Dr Pierpont produced peer-reviewed articles on the wind turbine syndrome?

**Ms GRAY:** As far as I know, she has, and it is all there to see on the country guardians and Wind Watch sites. It is too big to bring here; it is massive.

**CHAIR:** I am talking about peer-reviewed articles.

**Ms GRAY:** Yes, it is peer reviewed by many different people.

**CHAIR:** Are you aware of any health authority's research on the potential health effect of wind farms?

**Ms GRAY:** They are doing that now in Spain, Denmark and the USA, because it is becoming too big. In America, of course, it is now one of the major growth industries.

**CHAIR:** Mr McLaughlin, you acknowledge in your submission that wind power has a place in the portfolio of energy solutions. Do you think that is the general feeling in the community? While they acknowledge the role of wind power in our energy portfolio, there are serious concerns about the capacity of the environmental planning aspect. Is that correct?

Mr McLAUGHLIN: Yes. The future energy portfolio needs to have a balance, and wind has a place in that. However, as far as this committee is concerned—and I am sure you are considering this—the important issue is the impact on neighbours. To take a very small percentage of the population and demonise them, as has often been done, as being not conducive to wind power is false. All that most of us are asking for is due consideration, respect and a sense of decency to be applied as would be applied to any other part of the community. I note in your earlier hearings reference has been made to legislated setbacks. I think that is appropriate.

**CHAIR:** What would the noise level be or the impact of a wind farm three to four kilometres away from residents? Would you have any idea of the percentage that wind turbine noise would reduce if a turbine were moved three to four kilometres away from a residential dwelling compared to two kilometres?

Mr McLAUGHLIN: I understand the question. However, I refer to the point I made earlier, acoustics are complex. The way that wind travels depends on a number of factors: the terrain, atmospherics, wind direction and temperature. There are very complex interactions between them. There is no single close figure that you can come with and say, "That is an optimal distance." I referred earlier to the American Wind Energy Association and the findings that noise level and noise travel are higher in valleys and sheltered areas. We are on the leeside of the hill. We have evidence from our neighbours who are more than two and a half kilometres away that they are still impacted by the turbines, particularly at night. That was my reason for saying two and a half to three kilometres. I do not have anything more definitive that I can offer, but it seems reasonable in our situation.

**The Hon. RICK COLLESS:** Ms Gray, I refer again to Dr Pierpont's work. Are you aware of any similar work being done in Australia?

Ms GRAY: There is no work done in Australia and I cannot foresee any being done in Australia, because as we know the New South Wales Government is being paid by the wind companies to do all of this. There is no point in going there because there is no work being done at the moment and there will not be because they are gagged.

**The Hon. RICK COLLESS:** Surely that work is done by doctors on a private basis. There is nothing stopping that being done on a private basis, is there?

**Ms GRAY:** It costs so much money to do these studies, why would they do them unless there is some gain? They would not unless there is some kind of gain.

**The Hon. ROBERT BROWN:** What would you like to see this committee recommend in its final report? What is your view?

**Ms GRAY:** Thank you for that question. I would like the committee to recommend that there be no wind turbines in Australia. It should give all of the money that is being put into these people's pockets to solar power and all the other benign energy so we can say we are now a green country rather than chopping down all the trees, raping the country and paying farmers to rape the country for wind turbines. We should give the money that we are giving to wind turbine companies to solar power people to provide more benign energy.

Mr McLAUGHLIN: There is probably a combination of things that should be done. There could be legislated setbacks. Perhaps the more appropriate approach would impact on the hip pocket nerve. If the wind turbine constructors were required to pay compensation on the basis of proximity to the turbine with much higher compensation paid the closer one is to the turbines, that would lead to a financial incentive to re-examine their business case in a much more careful way and would hopefully lead to a better outcome for everybody. Failing that, I suggest that the committee look more closely at the European compensation legislation, which appears to work fairly well.

**The Hon. ROBERT BROWN:** Would you see that as being promulgated on the basis that residences or properties further than two and a half or three kilometres away from a wind farm would drop off the scale so the immediate neighbours and those people within the two and a half kilometres would benefit?

**Mr McLAUGHLIN:** It is not for me to make that assessment. As a model, you could say anyone closer than one kilometre would receive so much per annum compensation, people between one and one and a half kilometres would receive a lesser amount and so on. How far you go depends on the model you come up with. I am not trying to be prescriptive.

The Hon. ROBERT BROWN: I understand that.

Mr McLAUGHLIN: I am trying to induce a sense of consideration of such a proposal.

**The Hon. TONY CATANZARITI:** What consultation with Capital Wind Farm has taken place with you in particular and any of your neighbours?

Ms GRAY: David Griffin—the chief executive officer at the time this all started—was found walking along our fence line by my husband. When my husband approached him, David Griffin said, "We are going to put a wind turbine site 500 metres away from your house." There was no consultation with the community. We cannot see them from our house. The Bungendore community was given one day's notice by the Palerang Council to go to a meeting with David Griffin. It was one day before the submissions were due to be lodged with the New South Wales Department of Planning to sort all this out. In a word there has been none.

Mr McLAUGHLIN: Perhaps if I gave you an example it would be much easier to relate to it. In September 2006, when it became clear that this was progressing quite well, all we had been told about visual impact was that it was something people liked. It was very fluffy. I went to the wind farm in Western Australia, which is a similar size and height. The major difference is that you cannot see a residence from those turbines. I came back with some concerns and wrote to Mr Griffin asking for a montage. I then wrote every month between September 2006 and until April 2008. Despite various queries about the delay, I was not afforded the courtesy of a response. That is just one example of the consultation with certain individuals at Capital Wind Farm. It has been appalling.

**The Hon. HELEN WESTWOOD:** You referred to the European model and you have given us the example of the compensation that we could consider as a model here. What other elements do you think we could learn from them that would improve the process here?

Mr McLAUGHLIN: There is no single European model. Many countries implement this in different ways. Of course, one of the other differences is that Europe is very different in terms of property ownership. There is a much lower percentage of property ownership in Europe. There is no way of picking up that model and applying it here. I was introducing a line of thought the committee could pursue. The other thing in both Europe and Japan is that wind farms are clearly built much closer to residential communities, so it is very different. They cannot be built too far away because you get transmission losses and they cannot be too close to urban areas because it is too hard. Perhaps I could introduce another element too, that in both the United States and Canada there is now a very strong move afoot to locate sources of renewable energy—and that includes wind, solar and geothermal—well away from rural areas, in other words in remote areas, and the reason that they are doing this is that, as we all know, the further away you get, the greater the transmission power loss, so what they do is co-locate sources of renewable power with data centres. Data centres or, if you like, server farms, are among the biggest consumers of power.

In the United States they account for currently 8 per cent of all power and that is predicted to go to 12 per cent. By locating renewable power sources and data centres together, the transmission loss goes away and you then transport the data from the data centres through optical networks to the wider national world and the global world, and of course this would be a great opportunity in Australia with the roll-out of the national broadband network to seriously consider locating sources of renewable power, like wind farms, in remote areas, and having them connect into data centres located within the national broadband network. That involves—and Julie has alluded to this—thinking outside of the box and making an investment. I am not suggesting it is easy, but it is something worth considering.

**The Hon. RICK COLLESS:** Could I return to the issue of compensation? You have talked about one kilometre and one and a half kilometre offsets and having different compensation levels. Do you not see that as

creating a line in the sand, so to speak, so that if you were just inside it you get one level of compensation and if you are just outside it you get a smaller amount of compensation? It does not really reflect the inconvenience that has been placed on individual properties.

#### Mr McLAUGHLIN: No.

**The Hon. RICK COLLESS:** I wonder if you would consider that a buy-out proposal might be the preferable way to go?

**Mr McLAUGHLIN:** Yes, and again I was not meaning to be prescriptive, I am just suggesting that those various things that we both suggested are better than nothing, whether you have some kind of phase operation, in which case—as you correctly point out—there becomes a line in the sand somewhere, but it depends how much you taper. I think the buy-out in fact would be a cleaner outcome, if that could be achieved.

**The Hon. RICK COLLESS:** What is your view on the valuation of properties adjacent to wind farms? I know you did mention that valuations were done more than five kilometres away. What about valuations within a kilometre or two kilometres?

Mr McLAUGHLIN: I just touched on it in passing, and I can certainly provide the reference, where there was a recent study in Australia carried out on a fairly extensive number of properties and the conclusion there was that the closer the property to the turbine the greater the effect. It was also modified by the kind of property. The effect was greatest on a lifestyle property and least on a farm property. I think in relation to some of the questions you are legitimately asking there are no simple yes or no answers, but that is the purpose of your inquiry.

**CHAIR:** We are almost out of time, but we do find in submissions and in discussion that to one the noise is not unpleasant—there are people who claim that—and to other people it is horrendous. Mr Colless has mentioned compensation buy-out and we are looking at the margins and how there can be some amelioration of the problem. That is not definitive by any means at the moment. Is there any combination where the community could be involved and there is more of a shared benefit from wind farms? You mentioned that in Europe there was compensation for neighbours and a regime that was more equitable. Is there any way that either of you could see of moving forward to calm some of the objection, obviously with the idea of involving neighbours in some benefit from the project?

**Mrs GRAY:** Why would they do this, though? The only thing this is all about—the wind turbines—is money. Why would any wind turbine company go to the community and have the community involved in having them being compensated when all it is about is money being made off the taxpayer? I cannot see any reason why wind turbine people would go to the community at all. Where is it happening? It is not happening.

**CHAIR:** I am asking a question, and if you do not have an answer that is fine. I am just asking if there are some ways forward that you could suggest? I appreciate the objection, but do you have any constructive input?

**Mr McLAUGHLIN:** I will give you an example of a suggestion I made to Capital Wind Farm two years ago and that was, "Why don't you consider, in the arrangements that you make with whoever you want to sell the power to, providing free electricity to properties"—and again we have the cut-off issue—and it was just dismissed as being too hard.

**CHAIR:** Thank you very much for your appearance today. We have quite a few questions that our staff have prepared, so we will send you those questions that have not been asked and if you are comfortable to answer those questions on notice we would very much appreciate that support.

(The witnesses withdrew)

**ROBERT FRANCIS MOWLE**, Director, Environment and Planning, Upper Lachlan Shire Council, sworn and examined:

**CHAIR:** In what capacity are you appearing before the Committee?

**Mr MOWLE:** I am the Director, Environment and Planning, with the Upper Lachlan Shire Council and I have been in that role for a bit over two years at the present time.

**CHAIR:** Before we commence questioning, given that we have already looked at written submissions and our time is very limited, if you have any further information, anything new is welcome.

**Mr MOWLE:** All I have is a minor variation to the submission that I made on behalf of the council, if I could pass some copies of that around?

**CHAIR:** Yes, if you could hand that to one of the secretariat they will distribute that for you, thank you very much.

**Mr MOWLE:** The submission is very similar, only some minor variations to it, but I do include a map at the back of the submission, which may give you some indication of the location of the current wind farm approvals that exist in the Upper Lachlan council area at the present time.

**CHAIR:** I will proceed with questions unless there is anything else you would like to state at this time?

**Mr MOWLE:** No, not really, I was only going to make a brief comment about the council itself, which I do not think was included as part of the submission, but if you are aware of Upper Lachlan I do not necessarily need to go through that, but if you would like me to then I can.

**CHAIR:** Is it specific to the features of this inquiry?

Mr MOWLE: I believe it is, yes.

CHAIR: Would you like to briefly outline that?

Mr MOWLE: Only very briefly, just to say that the Upper Lachlan council was created in February 2004, so it has not really been around for a great period of time, from the amalgamation of the former Crookwell Shire Council, part of the former Gunning Shire Council and the former Mulwaree Shire Council. It has an area of a bit over 7,000 square kilometres. It has roughly about a dozen small villages with the primary village being Crookwell, which has a population of around 2,000 people. The council area itself has a population of about 7,500 people. The area is very rural in nature. The primary activity is in relation to sheep and cattle with some cropping, and there have been some recent moves to expand that into olive growing, alpacas, horse studs and wine. The council has observed an increasing number of people moving into the area to retire and also for lifestyle because of the attractive nature of the landscape that the Upper Lachlan council has. We are also finding now that there has been increasing tourism happening in the council area. Again that is related to I think a number of issues, but two would be to do with the rural landscape, the rural nature of the council area, and also to do with significant historical features and the historical nature of a lot of the villages in the Upper Lachlan council area.

In brief summary, because of where the council area is located, it does attract very regular and high winds generally throughout the whole area and we believe that is one of the reasons why the Upper Lachlan is fairly attractive to proponents wanting to install wind farms in the council area. At the present time I have listed seven or six wind farm proposals that have been approved. Five of those wind farms have been approved through the Department of Planning as part of the Part 3A process. The Walwa wind farm was approved by the Upper Lachlan Shire Council in 2004. At the present time, based on approvals, there are 235 turbines to be installed in the council area and I am aware that in the foreseeable future there could be a further 250 wind farms to come, which is a total of about 500 turbines in our council area, so we believe that it is going to have a fairly significant impact within the Upper Lachlan council area.

**CHAIR:** You mentioned the mix with some local councils dealing with the situation and others under Part 3A. Could you describe the impact of Part 3A Director General requirements in terms of designing wind farms compared to development control plans and the community enhancement program at local council level?

**Mr MOWLE:** Certainly. One of the requirements that comes from the Director General as part of the requirements for the proponents to comply with when they are preparing their environmental impact study [EIS] is that the proponents demonstrate compliance with council's local environmental plan [LEP] and compliance with council's development control plans [DCP]. All the environmental impact studies that I have seen to do with wind farms to date go through and analyse compliance or non-compliance with those council documents. Obviously in relation to the local environmental plan the wind farm proposals are not prohibited within the zones, but invariably we find that the proponents are not able to comply fully with council's development control plans.

**CHAIR:** At the public hearing in Sydney representatives of the Department of Planning spoke about a referendum conducted by the council, which found 70 per cent of the community were supportive of wind farms. Could you tell the Committee about that referendum and the outcomes from your perspective?

**Mr MOWLE:** Certainly that is right, at the local government elections held in September 2008. Because of the ongoing discussion particularly in the Upper Lachlan council area to do with wind farms, there is and has been a degree of community concern to do with wind farms and the council saw the opportunity to put a question to the ratepayers in the Upper Lachlan council area when the election was held last year. I do not have a copy of the question with me, but it was to clarify—"Do you support the further development of wind farms within the Upper Lachlan council area?" The result of that was generally 70 per cent in favour and 30 per cent against.

**The Hon. ROBERT BROWN:** That was a non-binding plebiscite, I assume, rather than a referendum?

Mr MOWLE: Yes, it was non-binding.

**The Hon. RICK COLLESS:** In your submission you make the point that council's only involvement, with the exception of the Walwa site, has been as a party to a community enhancement program. You say that the council has been sidelined to a large extent in the planning approval process?

**Mr MOWLE:** The intent was not to indicate that the council has been sidelined in the planning process. The intent was to indicate that in relation to a community enhancement program, as part of those consents, the council has been sidelined to a large extent.

The Hon. RICK COLLESS: Do you believe the council's involvement in the planning and approval process has always been in the community's best interests? Have you had sufficient input into that to truly reflect the community's concerns? If you were in charge of part 3A—and I do not know many people would want to be in that position, the way it is operating—what sort of approval processes would you put in place for wind farms? What sort of assessment and approval processes would you have in place?

**Mr MOWLE:** That is a very complicated question. The council's involvement in the approval process at the present time is generally the same as anybody else. We need to prepare and to make a submission to the Department of Planning. We also make submissions in relation to the types of conditions we would like to see imposed if there is going to be an approval issued for these wind farms. Some of those conditions are supported or have been supported by the Department of Planning and some have not been.

**The Hon. RICK COLLESS:** In your development control plan you make the point that a development shall not be located within 15 times of the blade tip height or two kilometres, whichever is the greater. Is the approval that the Department of Planning is granting sticking to that part of your development control plan [DCP]?

**Mr MOWLE:** As part of the preparation of the environmental impact statement [EIS] by the proponents, they obviously have to demonstrate whether there is compliance or non-compliance with the council's DCP.

**The Hon. RICK COLLESS:** The Department of Planning can approve this development and not comply with your DCP?

**Mr MOWLE:** Yes. What I was going to say, as I alluded to earlier, invariably we find that the proponents are not able to fully comply with council's DCP and the setback distances is certainly one of those. The proponents then argue as part of the EIS process why they should not be required to comply with council's DCP. Obviously if those arguments are accepted by the Department of Planning, then they are happy to issue the approval knowing that the development does not fully comply with council's DCP.

The Hon. RICK COLLESS: With great respect—and I do not mean this is in any disrespectful way at all—does that mean your DCP for wind power generation is not worth the paper it is written on, if the proponents are not going to comply with it? What is the point of having a document if you know they are going to challenge it and get away with it?

**Mr MOWLE:** From council's point of view, we are certainly disappointed that the proponents do not demonstrate full compliance with the DCP. I do not agree that it is not worth the paper it is written on.

The Hon. RICK COLLESS: I did say that with great respect.

**Mr MOWLE:** I understand that. I think it is a document that the council spent a lot of time and energy on and a lot of effort in preparing to minimise the impacts of these wind turbines, knowing that they were going to come into our council area.

**The Hon. RICK COLLESS:** I suggest that one of the problems with this whole process is that your council as a community came up with those guidelines to reflect the concerns and needs of your local community and the Department of Planning has sidelined you altogether. They have no intention of complying with it. That is one of the problems or concerns that is being suggested to us by certain members of the community, particularly in relation to the setback distances.

**Mr MOWLE:** I can understand that but council is constantly forwarding off our DCP to the department and to the Minister and asking—we can only ask, we cannot insist—the department to totally ensure that there is compliance with the DCP. We continue to do that on a very regular basis and we are disappointed that wind farm approvals are coming through knowing that there is not full compliance with our DCP.

**The Hon. HELEN WESTWOOD:** I have some questions following on from the questions that the Hon. Rick Colless has asked about the council's DCP and its relations with the Department of Planning. Has council made a submission to the department that it should adopt council's DCP when assessing applications for wind farms within its local government area?

Mr MOWLE: As I said, it has been forwarded to the department and to the Minister.

The Hon. HELEN WESTWOOD: What response did you get?

**Mr MOWLE:** I cannot recall what the response was.

**The Hon. HELEN WESTWOOD:** Could you take it on notice? It would be interesting for the Committee to go what response you received from the department to that submission?

Mr MOWLE: Yes.

**CHAIR:** The Committee will forward to you the questions on notice.

**The Hon. HELEN WESTWOOD:** In your submission you talk about a community fund. You may have heard Mr McLaughlin's evidence about a different model for compensation. Has the council made representations to the department or the Minister along those lines?

Mr MOWLE: Do you mean in relation to a different model?

**The Hon. HELEN WESTWOOD:** A different model of compensation for neighbouring residents and a different model for allocating funding to a community fund by levying those developments on approval?

Mr MOWLE: Council has not involved itself in the matter of compensation between property owners and wind farm proponents. We see that as being a matter between those two. Council has had submissions and discussions regarding different types of compensation. But we do not see it as council's role to get involved in those discussions between a private individual and a company. We see council's role as being more pertinent in relation to the council area generally and the population generally. That is the reason why the Community Enhancement Program policy was developed by council—essentially because we feel that if these large structures are going to come into our council area then there should be a corporate social responsibility from these companies to make a contribution to the social fabric of the area in which they are being placed. We see the community contribution policy process as being a mechanism for those proponents to make that contribution.

**The Hon. HELEN WESTWOOD:** Have any of them been willing to do that?

**Mr MOWLE:** At this stage the consent for the Cullerin wind farm, it was the first consent that required the proponent to make a contribution, and that was \$25,000 per annum. That is being made. As you saw, it is operational and there was an arrangement entered into between council, the proponents and the Department of Planning, and that is fine. The only other consent that has been issued that does have a contribution is in relation to the Gullen Range wind farm. I am having discussions with those proponents. They advised us verbally that they are not happy with the level of contribution that has been imposed on the consent.

**The Hon. HELEN WESTWOOD:** That is \$25,000 per annum?

**Mr MOWLE:** No. The \$25,000 per annum, as I said, was based on the Cullerin one. In relation to the Council Community Enhancement Program I converted that back to a megawatt basis. That is where the \$850 per megawatt came from, and the Gullen Range wind farm had 73 turbines.

The Hon. ROBERT BROWN: That is about \$60,000.

**Mr MOWLE:** In round figures \$200,000, something like that. It was a pro rata based on the number of turbines.

The Hon. HELEN WESTWOOD: They are not keen on that, from what you say?

**Mr MOWLE:** They seem to think it is an extravagant amount.

**The Hon. LYNDA VOLTZ:** In relation to compensation for wind farms to local councils, does that get us back to this idea where people think governments and local governments are more prone to approval if there is a monetary gain to them?

**Mr MOWLE:** No, I do not think that is correct. I believe that the program and the policy that council has in the public domain now, which is its enhancement program policy, makes it quite clear that if there is going to be a development approved in the Upper Lachlan council area, then those proponents will be expected to make those payments. You cannot then infer from that if they are going to comply with council policy that the council or the department will issue that approval.

**The Hon. LYNDA VOLTZ:** I raised this issue because Mrs Gray said earlier this morning that the State Government was approving these developments simply because of the money received from wind farms. There is this perception out there.

**Mr MOWLE:** There may be a public perception but certainly from council's point of view and from my own personal point of view I do not see any relationship between any modest contributions made to council.

The Hon. LYNDA VOLTZ: Or government agencies?

Mr MOWLE: And any other determining authority.

**The Hon. LYNDA VOLTZ:** Returning to the DCP issue, you have already referred to the setbacks. What other parts of the DCP in particular do you have concerns about which development applications under part 3A were not meeting?

**Mr MOWLE:** Certainly the setback distance is the primary one that we find they are not dealing with. Some of the other ones we find are in relation to the removal of the turbines at the time they become non-operational or worn out. Council is seeking to have some sort of bond arrangement entered into so that there is some guarantee they will be removed and not just left there. Noise—I am not 100 per cent certain whether there has been compliance in relation to the EISs that I have seen that all applications have complied with council requirements for noise.

**The Hon. LYNDA VOLTZ:** The setbacks were to deal with those noise issues, were they not?

Mr MOWLE: Setbacks deal with noise but they also deal with visual impact as well.

**The Hon. LYNDA VOLTZ:** What is the life span of one of those turbines?

**Mr MOWLE:** I am not 100 per cent certain what the life span would be.

**The Hon. CHARLIE LYNN:** Mr Mowle, in your DCP you state that within six months of a wind turbine generator becoming redundant it will be fully dismantled and removed from the site by the developer. A security guarantee bond is to be lodged with the consent authority prior to operations commencing in an amount to cover the cost of this work. Would you give us your view on the status of that condition? Is that a condition that the proponent will comply with?

**Mr MOWLE:** No, it is a clause in council's DCP. Again, it is a matter that would need to be addressed by any proponent as part of the preparation of its EIS.

**The Hon. ROBERT BROWN:** There are 235 wind turbines that have been approved in the local government area and there is the potential for another 250 to be applied for in the future.

Mr MOWLE: That is a number I am aware of and that I have had discussions about.

**The Hon. ROBERT BROWN:** We will call that a minimum. Has the council done any comparative research or would you like to hazard a guess as to what the potential impact on current applications would be and on future applications were your DCP guidelines to be adhered to rather than the part 3A approval? Let us consider the 235 turbines that have approved. How many turbines would have been approved under your guidelines? Of course, you can take the question on notice.

Mr MOWLE: No, I do not have that number with me. I would need to take that on notice.

**The Hon. ROBERT BROWN:** If you are going to continue to make submissions to the Department of Planning in relation to future applications, it may well be in the council's interests to demonstrate the veracity of your DCP and the way that variations from it have resulted in overdevelopment.

**Mr MOWLE:** I understand where you are coming from.

**The Hon. ROBERT BROWN:** Council can perhaps provide on notice now many of the 235 would have been approved under the council's DCP. That gives us relative terms.

**CHAIR:** Staff will forward that information.

The Hon. TONY CATANZARITI: What action did council to take to measure the noise levels?

Mr MOWLE: Council has not physically taken any measurements itself.

**The Hon. TONY CATANZARITI:** If there is some noise that is intolerable to the neighbours, how do you manage that? What do you do in that situation?

**Mr MOWLE:** I would anticipate that complaints in relation to noise from wind farms would be referred to the determining authority.

**The Hon. ROBERT BROWN:** In your local government area there is one wind farm that was approved under a determining authority other than the Department of Planning.

**Mr MOWLE:** Yes, there was. That wind farm is not operational at present.

**The Hon. TONY CATANZARITI:** It concerns me that council does not have a noise level that would trigger action if it gets get a complaint from a neighbour.

**Mr MOWLE:** The council DCP details what it sees as being the noise that should be experienced by property holders.

The Hon. TONY CATANZARITI: That level has to be set.

**Mr MOWLE:** That level is set within council's DCP.

The Hon. TONY CATANZARITI: What is that level?

**CHAIR:** Perhaps you could take that on notice.

The Hon. LYNDA VOLTZ: Which approved wind farm is not operational?

Mr MOWLE: The Walwa farm.

The Hon. LYNDA VOLTZ: It has 31 towers?

Mr MOWLE: Yes.

**The Hon. LYNDA VOLTZ:** But it is not operational because it is not completed?

**Mr MOWLE:** No. The proponents are taking action to have the wind farm operational, but it is not operational at present.

**CHAIR:** I am sure you are aware of the issues being presented to the committee in written and verbal form about the difficulties of terrain, measurement, distance and impact on neighbours in a variety of situations, particularly where a property is on the leeward side of a hill and the residents are copping more noise than one would otherwise expect. Your DCP stipulates that developments shall not be located within 15 times the blade tip height or two kilometres, whichever is the greater, of any dwelling not associated with the development. How did council arrive at that setback limit? Has there been any input from the local community? Has this setback distance been effectively implemented? Can you describe how this has come about and from where you have drawn this distance and limit?

**Mr MOWLE:** I would very much like to, but unfortunately the DCP was prepared before I commenced work with the council. So I would need to take that question on notice.

**CHAIR:** Sure. People in the community and members of this committee seem to be struggling with what is an acceptable and unacceptable noise level and distance. This is a little bit out of the box, but have you or council come up with any other ameliorating opportunities, be it asking the company to revegetate certain areas to deal with visual and noise impact? Is there anything else that could be of assistance to affected neighbours?

**Mr MOWLE:** Certainly. The council DCP talks about better assessments being made of the visual impact of these turbines. I am aware that consent conditions are imposed, but I am not sure how many consents have been issued. They require the proponents to undertake tree plantings and similar landscaping works to minimise the visual impact of the turbines.

**CHAIR:** Has anything similar been done with noise impact? Has any research or project work been done that may be of assistance?

**Mr MOWLE:** I am certainly not aware of any research work done in relation to minimising the noise impacts.

**The Hon. LYNDA VOLTZ:** The Walwa farm was a very early approval—it was approved in 2004. It was probably the first project approved. Is that correct?

Mr MOWLE: It most likely was.

The Hon. LYNDA VOLTZ: Why has it taken so much longer to develop?

**Mr MOWLE:** The development of the wind farms is in the proponents' hands.

**The Hon. LYNDA VOLTZ:** But that was the first approval and it was approved under the local government DCP.

**Mr MOWLE:** No, it was approved under the Environmental Planning and Assessment Act by the former Gunning council.

**The Hon. RICK COLLESS:** Prior to the development of the DCP?

Mr MOWLE: Yes.

**The Hon. LYNDA VOLTZ:** So the proponents have not explained?

**Mr MOWLE:** I know the proponents are currently working on the consent, because I think it had a five-year consent period.

**The Hon. LYNDA VOLTZ:** So it will run out in about two months?

**Mr MOWLE:** Yes. But they have not physically commenced work.

The Hon. LYNDA VOLTZ: So if they have not physically started in two months they will lose their consent?

Mr MOWLE: Yes.

**The Hon. RICK COLLESS:** I understand that the Walwa farm was approved prior to the DCP being produced by Gunning council. Does it essentially comply with the DCP?

**Mr MOWLE:** Again, I would have to take that question on notice. I have not gone through the exercise to determine whether it does comply with the DCP.

**The Hon. HELEN WESTWOOD:** Does council have any role following the initial consent of wind farms under part 3A; for example, during the construction phase?

Mr MOWLE: No.

**The Hon. HELEN WESTWOOD:** Who monitors the compliance with conditions of consent once construction is complete and it is operating?

**Mr MOWLE:** It would be the responsibility of the consent authority.

**The Hon. HELEN WESTWOOD:** That is the department. It does not transfer that back to council/ So you have no role at all once they have been approved?

Mr MOWLE: No role at all.

**CHAIR:** Have there been any similar proposals in rural lands for solar energy power developments in your expanded shire?

Mr MOWLE: No. The only other power generation projects that we have are gas-fired power stations.

**The Hon. LYNDA VOLTZ:** If someone were to come forward with a solar power proposal would you have the water resources in the region to accommodate that?

**Mr MOWLE:** Without seeing the studies, I would believe that we would.

The Hon. LYNDA VOLTZ: You would have significant water resources.

**CHAIR:** You do not need water resources for solar. That is perhaps something we can debate later. It depends on the system.

Mr MOWLE: It does and I am not an expert.

**CHAIR:** Solar thermal is also relevant. But there is also solar that would not necessarily use a great deal of water.

**Mr MOWLE:** But knowing that, as I said earlier, there is a DA current in relation to two gas-fired power stations that use water. I imagine that if there is enough for those types of projects there should be sufficient for any solar power station.

**The Hon. RICK COLLESS:** Are the proponents of the gas-fired power stations part of the wind energy scenario as well? Are they open or closed gas turbines?

**Mr MOWLE:** I am not sure whether they are involved in wind energy, but the two companies are Delta Electricity and EnergyAustralia. I believe they are closed systems, but I am not certain.

The Hon. RICK COLLESS: I suggest they probably are given that it is Delta and EnergyAustralia.

Mr MOWLE: Yes.

**The Hon. TONY CATANZARITI:** How much employment has been generated by these activities in the shire?

**Mr MOWLE:** I believe that the long-term employment opportunities are fairly minimal. However, at the construction stage there are significant local employment opportunities.

**CHAIR:** Thank you. There are a number of questions on notice. Thank you for your cooperation today. The secretariat will send those questions and we would appreciate your response.

**Mr MOWLE:** Thank you for the opportunity to make a contribution.

(The witness withdrew)

(Short adjournment)

**ROSALIND BUSH**, Secretary, Molonglo Landscape Guardians, and

WENDY BELL, President, Molonglo Landscape Guardians, affirmed and examined:

**CHAIR:** Before we commence asking questions, as you appreciate, time is very limited. You may assume that we have looked at your representations so far, but would either or both of you like to make an opening statement with additional information?

Ms BELL: I would like to make a very brief opening statement, if I may. Thank you for giving the Molonglo Landscape Guardians the opportunity to appear before this Committee. The Molonglo Landscape Guardians was formed in 2004 when wind farm developers EHN (Oceania), now Acciona, announced their plans to build a 60-turbine wind farm on protected ridgelines near our rural residential communities. The Molonglo ridge itself is an area of remnant farmland surrounded by residential areas. The ridges themselves are too hilly to be subdivided. The ridges are protected by council's development control plan. I should stress we are not a farming community, we do not have large broadacre blocks, we are simply a rural hinterland of Canberra and Queanbeyan where the vast majority of the population work. They are lifestyle blocks and the typical size of the blocks is about 5 to 20 acres.

Our communities were very concerned about the proposal to build the wind farm and the potential impacts, and we addressed some of these impacts in our submission, and obviously the Committee is hearing from some members of the community who have operational wind turbines in their areas today. If there could be one positive outcome from this inquiry then for us it would be that the wind industry is made to acknowledge the downside to its activities and build their installations well away from residential areas. It is not good enough for the wind industry to shrug off these impacts or simply to say, as one wind farm consultant put it, "There will be collateral damage, and you're it". Communities who consist of ordinary, hardworking, decent people deserve better than that.

Ms BUSH: I would like to thank the Committee, firstly, for conducting this inquiry and, secondly, for giving us an audience here today. Our hope is that, apart from any recommendations that the Committee may make to Government, the inquiry will cast the disinfectant of sunlight on to the activities of the industrial wind industry and that they will no longer be able to brush off the problems that their projects create for neighbours and the wider community. The Committee has learned from the submissions it has received and through these hearings what we already know from bitter experience, that when the wind industry comes to town, division soon follows and lives are turned upside down, and it does not matter if it is a developer-led proposal or a so-called community wind farm, the result is exactly the same.

One turn of events that is of great concern to us is the New South Wales Government's recent announcement that vast areas of New South Wales have been unilaterally turned into renewable energy precincts, and worse—much worse—is that projects are to be fast-tracked through the planning process and public servants from the Department of Planning will be dispatched to essentially quell any local opposition. Can you imagine the uproar if, for instance, this approach was taken to planning matters of any size, let alone huge industrial developments like wind energy, in urban Sydney? What would be the reaction if huge slabs of urban Sydney were suddenly rezoned without any consultation, and development proposals bypassed local government scrutiny? Quite rightly, citizens and the press would be up on their hind legs and protesting, but because it is out here we are just supposed to accept it and go quietly.

The question for the Government and this Committee is whether fast-tracking the planning approval process for these imposing landscape and life-changing industrial developments leads to better project outcomes and a better outcome for residents, and I suggest that they do not. At its last public hearing, and in submissions received, the Committee heard from a number of witnesses who suggested that living near a wind farm would be preferable to living near a coalmine. Well, that may be so, but it is a non sequitur. Wind does not compete with coal-fired generation; it competes with lower-emitting technology, such as hydro and gas. We provided evidence about this in our submission, but it was recently confirmed by Michael Fraser, the Chief Executive Officer of AGL Energy, in an interview on the ABC program *Inside Business*, which was broadcast on the Sunday after the renewable energy target [RET] legislation had been passed by the Federal Government. He stated that, as more wind is incorporated into the energy mix, more peak-load generation—not base-load generation—will need to be built. If the purpose of the renewable energy target is to decarbonise our energy mix, dethrone coal as king, and this is something that needs to be tackled as a matter of urgency, then rolling out more intermittent wind is a backward step that would delay the transition from dirty coal-fired generation into

less polluting gas-fired generation and, according to Mr Fraser, that will not start until at least the end of next decade.

I do not present this evidence or this information because I want to disprove wind, but what is the purpose of these wind turbines and these developments? If it is to decarbonise our energy mix then perhaps somebody needs to take a bigger look at the question. I would finally like to make a correction to a statement in our submission. On page 26 we said that the Western Australian Planning Minister used her call-in powers to approve the Denmark community wind farm. In fact she used her powers to overrule the Denmark Shire Council, which had voted down a proposal to rezone the land from Class A Reserve to allow the controversial wind development to proceed. I brought copies of media reports, but what the Committee may prefer is that we make an additional submission to the inquiry with that information.

**CHAIR:** Yes, we would appreciate the additional information. On the Molonglo ridge area, I understand that development was abandoned. Perhaps you could give the Committee a brief overview of the main points. Your organisation was obviously able to mount an effective campaign. Were there any specific features of that site that lent itself to such an abandonment? Perhaps you could compare it to some of the other wind farm sites that have gone ahead subsequently.

Ms BELL: Sure. I think we are much more heavily residential than some of the areas. We are effectively a rural hinterland of Canberra and Queanbeyan. The ridge is surrounded by rural communities. It is very closely settled for a rural area; it is not a broadacre area by any stretch of the imagination. So our arguments were that it is too close to homes, too close to wildlife refuges—we have the Tinderry nature reserve, the Tallaganda nature reserve and the Googong foreshores—too environmentally insensitive. We had the unanimous support of both local councils, Palerang and Queanbeyan. We had the support of Steve Whan, our State member, the then Federal member Gary Nairn, and his successor Mike Kelly, and more importantly we had the community on our side too, and I think those things were what enabled the campaign to be perhaps a little more successful than some of the others that have been mounted.

**CHAIR:** Was there any noticeable or substantial community support for the project? How many property ownerships were involved in benefiting from that project?

**Ms BELL:** There was one property that would have benefited—one farmer.

**CHAIR:** How many properties in the vicinity would have been impacted upon?

**Ms BELL:** Immediately around the ridge, if you discount properties in the Queanbeyan City Council area because you would have the whole of Queanbeyan, which is about 15,000 homes, but just the rural properties, about 1,000 homes around the ridge.

**Ms BUSH:** And it is inconceivable that the developer when they visited that site could not have noticed there was heavy residential development around the site, but when questioned about this they said, "Oh no, it is 1A land, it's fine."

Ms BELL: "Nobody lives there."

Ms BUSH: "Nobody lives there."

**CHAIR:** It has been brought up with the Committee that renewable energy precincts have now been established. Is Molonglo outside or inside those?

Ms BUSH: Inside, and this is why we are continuing to keep a weather eye on this because nothing will change about that site that will make it an appropriate site. It is a highly visible ridgeline—it is visible from the national capital. In the Griffin plan for the national capital there are buffers and ridge zones around the Australian Capital Territory that are to be kept clear of development and the Molonglo ridge is one of those, but it does not stop the developer coming along and perhaps buying that project off Acciona—they bought it off a start-up company four years earlier. No-one knew there was a development proposal there until a flyer turned up in our letterboxes.

**CHAIR:** What is the nature of the ridgeline? Is it vegetated, cleared land or farmland?

**Ms BUSH:** Some of it is cleared land, it is vegetated, remnant vegetation is in there. The proposal they put forward was for 60 turbines. They said some of these would be micro-sited in wooded areas, which meant chopping down trees and putting a turbine in the middle of a wooded ridge.

**Ms BELL:** Some of the ridges are very heavily treed. They are treed ridges. There is forest right along the side and on the tops of the ridges. Some of them are bald but by no means all of them. The southern ridges are very heavily treed and they form a corridor down through into the Tinderry, across the Queanbeyan River and into the Tinderry and Tallaganda areas. In fact, that whole area is a wildlife corridor from Tallaganda, Tinderry, up through the Googong foreshores, up through to Lake George.

**The Hon. RICK COLLESS:** The project was not approved?

Ms BUSH: No development application [DA] was ever submitted.

**The Hon. RICK COLLESS:** Was it assessed under part 3A?

**Ms BUSH:** There was no development application submitted by the developer.

Ms BELL: It was abandoned.

**The Hon. RICK COLLESS:** If it had gone ahead, it would have been under part 3A?

Ms BUSH: Yes, it would have. What happened was the developer blew into town, for want of a better word, late in 2004. So-called newsletters about this development were distributed, letterboxed to residents, and they held four public meetings—one at Carwoola, one at Burra, one in Queanbeyan, and one mysteriously in Lyons in the Woden Valley in the ACT, far, far away from the wind farm. That was their one and only contact. At these meetings the overwhelming view of those present was disapproval. Nobody wanted it. The developer could not have got any other message from those meetings other than opposition.

So they went away, and they issued another newsletter, which was letterboxed. Apparently all we wanted to know from those meetings was to understand things. They set up a website and in March 2005 that was the last contact we had from them. Our campaign had got going by then. After that, the only statements they would make are, "Our studies are continuing". They dragged this on for another four years until eventually they made an announcement that they had it on permanent hold. Then they slipped out a press release that they abandoned it. For years we had fought it because we did not want to let up.

**The Hon. RICK COLLESS:** You mentioned that the council has a development control plan [DCP] for wind farms. Would this have been compliant with that DCP?

**Ms BELL:** It is not a DCP specifically for wind farms. The Yarralumla shire local environment plan [LEP], which Palerang council has now adopted—it was formerly Yarralumla shire—states specifically there is to be no development on prominent ridge lines. Locals could not even build a shed up on those ridge lines, let alone 125 metre 60 wind turbines.

**The Hon. RICK COLLESS:** One of the problems that have been identified to us is that DCPs may not necessarily carry too much weight when it comes to part 3A approval. Do you think it is appropriate that local councils have a DCP that is specific for wind developments? Do you believe that the Department of Planning should make sure that any development is compliant with that local DCP prior to approval?

**Ms BELL:** As far as at least the Yarralumla shire DCP is concerned, it would cover wind developments in any case. It protects the ridge lines and that is where the wind developers are targeting. I think it is a shame that local councils are cut out of the process. They are treated just as any other individual would be. They can make a submission and their views may or may not be upheld. I think local councils should have a much greater role to play in the decision-making process.

**Ms BUSH:** Local environment plans and DCPs are developed in close consultation with the affected community. Naturally we think these are primary planning instruments that should be taken into consideration. But, unfortunately, now that we are living in a wind farm precinct all bets are off. You have heard today that shire councils' DCPs are just ignored. That makes us feel powerless and that is not a good way to feel. It has not improved the planning process. Surely the elements of good planning, the essential part of it is that it has a good

outcome for human beings and the environment. By ignoring LEPs and DCPs that have been developed with this in mind, it is not good.

**The Hon. HELEN WESTWOOD:** Since the announcement of the precinct, has the Department of Planning been in touch with anyone in the community to discuss any concerns you may have or have they talked to you at all about developing a DCP for the precinct?

Ms BELL: They certainly have not been in touch with us. I cannot speak for anybody else in the community, but to my knowledge, no.

Ms BUSH: No, they have not. The New South Wales Cabinet had a meeting at Queanbeyan earlier this year. We went along and we did speak to the planning Minister. We asked her specifically, "When are we going to be consulted? You have declared these precincts. Where was the consultation?" She said to us, "You will be consulted afterwards. We will declare these precincts and then you will be consulted." That is most unsatisfactory—consultation without consequence, really. That is the only opportunity we have had to talk to anybody in government about it. As far as we are concerned, there has been no consultation.

Similarly, Premier Rees's announcement that wind farm developments are to be fast-tracked in a four-month period, this is a very short amount of time when you are dealing with a bureaucracy. Public servants will be sent out in these precinct committees. I read the transcript of the last hearing where you asked the officials from the planning department about this. I could not make head nor tail of what a planning precinct committee would be, except it is just another layer of bureaucracy to stop you getting to the decision-makers. That is from our perspective. If we go to the planning Minister to plead our case, we will be fobbed off to this precinct committee. What are the precinct committees? I doubt very much that Wendy or I are going to be invited to be on them. So what is the purpose of them? They have made this announcement and we still do not know what it is.

**The Hon. HELEN WESTWOOD:** Do you know whether or not your council has been approached by the department or has made representations to the department seeking clarification around those issues or requesting a DCP for the precinct?

**Ms BELL:** No. We have a fairly close relationship with most of the councillors. I think we would have known if that had been the case, and we have not heard. Certainly there has been nothing in the council papers. No, I do not think anybody has been consulted.

**CHAIR:** Before we continue, can everyone hear the evidence? I am not sure whether that can be remedied with the system. Perhaps the witnesses with quiet voices could speak closely to the microphones. In that way we can all hear the words of wisdom.

**The Hon. ROBERT BROWN:** I have two questions. The first question is to familiarise myself. Am I right in interpreting from what you said that the Molonglo ridge area is not all privately owned land? There are reserves there?

Ms BELL: The farm on which the wind farm was to be built is privately owned by a single farmer, but it is surrounded by reserves. On the western side is the Googong foreshores, which is a water catchment, the main dam for Canberra, and also a wildlife reserve. On the southern side is the Tinderry nature reserve. On the eastern side is the Tallaganda State nature reserve and on the northern side is the Queanbeyan nature reserve. Then it goes forward northwards and that ridge line becomes part of the Lake George escarpment area. It is surrounded.

**The Hon. ROBERT BROWN:** What physical size is the property that this wind farm was proposed to be built on?

**Ms BELL:** The wind farm would have covered about 50 square kilometres and about 12 kilometres of ridge line.

The Hon. ROBERT BROWN: That was all on one property?

**Ms BELL:** That was all on one property, one single property.

**The Hon. ROBERT BROWN:** My second question relates to your opening statements. Given that these issues are going to create tension between the common good and an individual's rights, how do you view what I will call the victory that you had in relation to your area? How would you see those lessons being applied to the concept of parts of this whole area sooner or later being developed for wind farms?

**Ms BUSH:** Do you want us to give away our trade secrets? Why we were successful and Mount Spring, which is on the other side of Canberra off the Nanima Road, what marks us was we got organised early and we were persistent. Because of the nature of our community, people live in Canberra, a lot of public servants who have worked with government, for government, we knew how the system worked and we worked it.

The Hon. ROBERT BROWN: You understood the process, in other words?

**Ms BUSH:** We understood the process. It was determination, being discouraged in your private moments but just ploughing on and continuing to plough on. We will not give up.

The Hon. ROBERT BROWN: What was the second development that you said had been stopped?

**Ms BUSH:** Mount Spring, which is on the western side of Canberra to the north near Hall Village. Coincidentally, I used to live over there. I feel I am being followed around by these things. That was stopped as well.

**Ms BELL:** Our case also was very strong. We are a very heavily developed residential area. It is a rural area that it is close to a city, two cities, and it is very densely developed as far as rural areas go. That was the crux of the difference, I think.

**The Hon. ROBERT BROWN:** Apart from your own skills and knowledge of how the process works, would you say a big difference between you and some of the problems being expressed here today is one of population density, in other words, a good body of people would be affected?

Ms BELL: Yes.

**Ms BUSH:** I think this is a pattern that is not just happening in New South Wales. This is a pattern throughout all of Australia where these developments are proposed. They are away from populated areas but they pick off weakened communities or communities that are reluctant to fight, to start a fight. If you are living in a rural area you are reliant upon your neighbour for lots of things. You are reliant on having good relations. If you live in a town and you are having a blue with somebody 500 metres away, they could be in another suburb. But if you live where we live and you are having a blue with someone 500 metres away, it is probably your next-door neighbour. In country communities, rural communities, there is a reliance that you may have to call on somebody to help you. So there is a reluctance to be fighting and stirring up trouble. It is hard for people; it is hard. Not everybody is cut out to be a campaigner.

**Ms BELL:** One of the tactics we have noticed that the wind industry employs to go into a community like ours, they start to, for want of a better word, buy off associations like the bush fire brigade. So they get the bush fire brigade onside by promising a new fire truck or new equipment or whatever. That means the community is left fighting the bush fire brigade. Who wants to do that?

**Ms BUSH:** Or the struggling local football club. In our community one of their supporters was encouraged to write to them and ask them to sponsor our local fair, which is the main fundraising event in Burra. When we heard about this there was uproar in the community. I might say that that fair has never been run since. It has created a division in our little community that exists to today. Here we are five years on and ironically it is the building of the Capital wind farm that has woken people up to what we were facing.

In fact, we had our annual general meeting [AGM] recently and sent out notices. People replied saying, "Yes, I can come" or "I can't come but, thank God, I have been out to Bungendore and I have seen that wind farm. What a lucky escape." This idea that developers want to put forward is that once people see wind farms they are happy about them. No, they are not, they are not happy about them. Even people who lectured us about, "It's the way of the future. I think they are graceful and beautiful", they have looked at that Bungendore wind farm and said, "Oh God, I didn't realise they were so big. Thank God we haven't got one."

**The Hon. ROBERT BROWN:** In light of what you have just said, you heard the previous witness talk about the local government area conducting a referendum at the last election and receiving 70 per cent support on a simple, straightforward question. How does that fit in with your experiences?

Ms BUSH: A person's positive impressions of a wind farm improve with distance. I like quarries, but I do not want to live next door to one. The further people are away from the turbines and the less they see them daily, the more they think they are interesting. It is quite different if you are looking at them and hearing them. You may not have them in your face, but it is the uncluttered vistas that have a value to us. We talk about property values, but these things have intrinsic elements as well. The things we value about where we live are being close to nature, being outside and the peace and quiet. We come to this part of the world for peace and quiet, to get away from the mania of a built environment. That is what is being threatened. I do not now how to express it in a way that people will understand. It is not just dollars and cents; there is a value.

Ms BELL: We tested the theory that 90 per cent of people love wind farms, which is what the wind industry was putting around, when the Molonglo Ridge was up for grabs. We went to Queanbeyan and talked to people about the potential of a farm being constructed on the Molonglo Ridge. A lot of people said they thought it was a good idea and they were happy to have one. However, when we talked about the size of the turbines, their proximity to homes and the impact on people in the area, I can say truthfully that 95 per cent of the people we spoke to signed the petition. Once people are informed about the impact, support for wind energy seems to dissolve.

The Hon. ROBERT BROWN: How many signatures did you get?

**Ms BELL:** That day we were out for only a couple of hours and we got only 350 signatures.

**The Hon. ROBERT BROWN:** And the petition was finally lodged?

**Ms BELL:** It never went anywhere. We did not finalise the petition. It was designed to test what we had been told that everyone loved wind turbines.

**Ms BUSH:** We planned to submit it to the New South Wales Parliament via our State member. But very quickly after the wind farm was proposed they backed off.

**CHAIR:** In terms of the physical aspect, how many houses would have been located within two kilometres or one kilometre of the wind farm and what was the potential impact? Would you have a rough idea?

**Ms BUSH:** We have an accurate idea. We might take that question on notice because one of our members is a cartographer who produced a series of maps that are on our website. One of the maps he produced was a resident proximity map.

**CHAIR:** Is that on your website?

Ms BUSH: Yes.

Ms BELL: We also have the residence numbers.

**The Hon. HELEN WESTWOOD:** Given the research you have done, do you believe that there is any area within New South Wales where it would be appropriate to locate a wind farm?

**Ms BUSH:** Some of the research we have done is about small-scale wind farms and community wind farms. There is a number of wind farms in remote areas in Western Australia that I can talk about. There is one at Denham, which is 850 kilometres north of Perth. It is an off-grid installation and the turbines are smaller. It is a gas-diesel synchro system. It is an inventive, Australian-designed program. The people there love it because it has reduced their energy costs and they are not having to truck in so much diesel.

**CHAIR:** What numbers are we talking about?

**Ms BUSH:** It is a population of about 700 people. Other remote areas have smaller-scale renewable energy installations. That would make a positive difference to people's lives. Unfortunately, in June this year the Federal Government subsidies for these things evaporated. Where renewable energy would make a real

difference to people and provide them with electricity to run refrigerators to store fresh food and medicines, they are now left on their own. Renewable energy target legislation has been past that will give wind, in particular, a leg up because it is a ready-to-go technology. Governments are saying, "Come on in." They will be gobbling this up and creating renewable energy certificates that are actually underpinning the financial side.

Miles George, the chief executive officer of Ingigen, which built Capital Wind Farm, was interviewed last Sunday on "Inside Business". He was quite gleeful about the fact that they have all these renewable energy certificates that are now worth so much money because there is a drought of certificates in the system. They will be making a big profit on this. I am sure the people living nearby will be thrilled that the company is making a lot of money and that that is underpinning this. It is not something that we can resolve or solve or prove, but it is something that Government really needs to be honest about. Wind farms are not about moving away from dirty coal; it is symbolism. I think that is why governments like them. It is not because the New South Wales Government or any other government is getting money from these things. It is a "Hey, look over there!" moment, "Yes, we are approving coalmines, but we are doing renewable energy over here."

**CHAIR:** You referred to small-scale systems in Western Australia with fossil fuel generation as the baseload or support, yet you say that wind cannot displace carbon emissions from coal-fired power. We have had evidence that a mix of wind or solar supplemented by a peak gas-fired station, for example, could momentarily shut down coal-fired power station. Can you see the contradiction?

Ms BUSH: Yes, I can certainly see the contradiction. Perhaps the energy regulators might be best positioned to answer this. When wind is blowing and it is dumping electricity into the grid, I do not know of any coal-fired power station in the Australia that shuts down. I spent the early part of my life living in the Latrobe Valley and I know that those coal-fired power stations keep ticking. There are small adjustments, which are a normal part of running any energy source, but they do not shut them down. When they have to shut them down for maintenance they are off line for several months. There is this fallacy. What NEMCO¹ and the wind farm developer AGL Energy have reported is that they are not moving away from coal. AGL has said that it will be building peaking gas-fired power. That is not desirable, because we want baseload gas to move away from coal. We have a good supply of gas in Australia. If the aim is to close down dirty power stations like Hazelwood in the Latrobe Valley—which is a very dirty power station—and replace it with a cleaner fuel source, which is gas, you will not do it by building wind farms everywhere. It does not work.

**CHAIR:** A few questions have been placed on notice and the secretariat will send them to you. Thank you very much for your time.

(The witnesses withdrew)

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Since July 2009 NEMCO has operated as the Australian Energy Market Operator (AEMO)

#### **DAVID MICHAEL BURRSTON**, and

**SARAH LAST**, affirmed and examined:

**CHAIR:** In what capacity are you appearing?

Ms LAST: I am appearing as an individual.

Dr BURRASTON: As an Individual.

**CHAIR:** Before we commence with questions, do you have a short statement or further information you would like to provide that we have not already received in your written submission?

**Dr BURRASTON:** Thank you for inviting us to appear. We appreciate the chance to answer questions. I am a researcher in computer science, complex systems and sound. We both run a farm, and Sarah is a long-term resident on that farm. Her parents owned the farm and we took over last year. Sarah is a freelance curator and a specialist in arts administration and regional community cultural development. She is currently doing a PhD in that area. We wholeheartedly support moves to achieve energy efficiency, particularly in buildings and transport. We support conservation and responsible renewable energy. I will point out some of the main points in the submissions, which are based on the research we have been doing since February. We did this research because our area has been approached by a wind energy developer.

**Ms LAST:** And we were personally approached.

**Dr BURRASTON:** We witnessed the process first hand, and it is ongoing. We have been considering whether to have turbines on our property. Because of the complete lack of information from the wind energy company, we decided to do our own research using the Internet and peer-reviewed journals. The basic results of our research are in our submission. Our research is ongoing.

We found that industrial-scale wind energy is a poor emissions reducer. There is significant research still required and there are significant negative environmental impacts. Something that was particularly alarming to us as potential hosts of wind turbines is the complete lack of funding for decommissioning the turbines and the misinformation the wind industry is providing in planning applications about decommissioning. There are also significant health and noise pollution problems, property devaluation and, obviously, significant visual impact.

We also looked into this notion of green jobs. Research has been done in Spain on that issue that demonstrates that producing green jobs is not as economically viable as we have been led to believe. We found that the wind industry is extremely divisive to rural communities and the lease agreements being put forward for landholders are quite onerous. That is really the short opening statement and we are happy to take your questions.

**CHAIR:** In your research have you been able to assess how long turbines generally last and have there been any examples of decommissioning?

Dr BURRASTON: I have not found any examples of decommissioning whatsoever as yet.

**CHAIR:** Have you found examples of turbines that are not in use?

**Dr BURRASTON:** Yes, California and Hawaii are the main areas. It seems that they become abandoned because there are not sufficient funds to decommission them.

**CHAIR:** How long have those turbines lasted? Do you have any idea?

Dr BURRASTON: I do not know, I could not say. I could potentially find out.

CHAIR: Perhaps you could take it on notice?

**Dr BURRASTON:** Yes, and try to find out for you.

**CHAIR:** You have described health problems. There has been quite a bit of discussion and presentation to the Committee about issues of wind turbine syndrome and vibroacoustic disease. Are we talking about one and the same thing?

Dr BURRASTON: No, they are different.

**CHAIR:** Perhaps you could describe those to the Committee?

**Dr BURRASTON:** I am not a health expert, my background is really in science and engineering, but from the research that I have done it seems that wind turbine syndrome, which is why I submitted the report by Dr Chris Hanning, is more related to sleep-related disorders due to noise disturbance, and vibroacoustic disease is related to low-frequency and infra-sound, and that research has come out of a university in Portugal. There has been a recent peer review paper and conference on wind turbine noise. The notion of wind turbine noise is very well known in the industry. As I mentioned in the submission, there is a two-yearly international conference called the international conference on wind turbine noise where research into that area is discussed every two years, as well as in periodic journals in the interim time.

**CHAIR:** To my understanding, we have noise volume, type of noise and also terrain impacting quite unevenly on dispersal of noise?

**Dr BURRASTON:** Yes, that is correct.

**CHAIR:** Could you comment on those issues and how they might have played out in terms of you being the host?

**Dr BURRASTON:** Yes, again that is something where, from the research I have looked at, it seems that there is not any hard and fast rule that you could put a particular distance on, which is why a lot of the models used in the planning come up with a particular distance after which the effects are not going to be felt. That is not something that is played out in reality after these things are built, so a computer model is run and they say, "Yes, this is what the expected noise will be at these distances." Then they build them and find it is not the case because the computer model is only an attempt at finding out what reality is going to give you.

**Ms LAST:** Low-frequency sound and noise travels further, and that is generally not acknowledged. It is the physics of sound.

**Dr BURRASTON:** Yes. The research of Van den Berg is the most interesting research because it looked at the sound at night-time as opposed to daytime and his research found that there is a certain distance away where the sound becomes louder, in effect. I would have to read his notes to give you the exact terminology but, for instance, when the wind industry says you can stand underneath one and hold a conversation—yes, you can, but one and a half kilometres away you would not be able to sleep.

Ms LAST: And I can hold a conversation next to my washing machine.

**Dr BURRASTON:** Yes, but you would not be able to sleep there.

Ms LAST: I mean really, what a silly point.

**Dr BURRASTON:** So the sound issue is very complex in terms of the way the sound is emitted and the terrain and meteorological conditions in which that sound is emitted.

**CHAIR:** Can you give an example of how terrain can affect the noise?

**Dr BURRASTON:** Well, for example, in a valley it can travel a lot further, and particularly as well in rural areas—and this is one of the more important points that is perhaps difficult for city or urban dwellers to understand—the ambient night-time, or daytime for that matter, sound level is extremely low, so people in those areas are accustomed to experiencing very low levels of sound and when these things are put up it is a lot more noticeable than it would have been previously or the effect on them is a lot more noticeable than it is in an urban area, so you are converting what used to be a quiet rural area into a noisy industrial area, and that is a significant change for the non-stakeholders.

Ms LAST: And such noise carries further at night-time too.

**CHAIR:** So you say that, for example, the Committee standing under a turbine yesterday in a fair wind is not necessarily a relevant assessment to make?

**Dr BURRASTON:** It is completely irrelevant to make that assessment because it is a purely subjective assessment in the first place, with all due respect. It is a completely subjective assessment. Unless you are doing an objective noise recording with a sound meter, there is no conclusion that you can scientifically draw from that. You would have to be recording it with a sound meter.

**CHAIR:** We did a lot of miles yesterday.

**Dr BURRASTON:** Particularly to address that point, standing underneath one is a popular ploy by the wind industry to stakeholders because obviously they are going to be the closest to them, they are going to have them on their properties, they are going to be living closer than their neighbours—which is why we looked into it because if we were going to have them on the property we would be a damn sight nearer to these things than the neighbours would be potentially, so we were quite interested to find out what the sound was going to be like—and standing underneath one is not any judge really of what the impact is going to be one and a half kilometres away.

**The Hon. RICK COLLESS:** Could I explore a little further with you the issue of particularly the low-frequency sound? Could you tell us what range of frequencies is audible to the human ear?

**Dr BURRASTON:** Roughly 20 hertz to 20 kilohertz, for someone with exceptional hearing.

The Hon. RICK COLLESS: What is the range of frequencies that are emitted by wind turbines?

**Dr BURRASTON:** I would have to take that on notice because those figures vary from manufacturer to manufacturer, for example. The other thing is that usually the figures that a wind turbine manufacturer gives are what are called dBA rated figures.

The Hon. RICK COLLESS: Can you tell us what frequency those dBA figures—

**Dr BURRASTON:** I could not give you the exact definition of dBA, but the dBA figure does not take into account the lower frequencies basically. The dBC figure takes into account lower frequencies. The manufacturers release noise figures based on dBA and the problem is that with a lot of the planning the noise guidelines discuss dBA figures only, and that is part of the issue that a lot of people are having with these. They want to have the guidelines changed to take into account the dBC figures because you do not get low frequency effects appearing on dBA.

**The Hon. RICK COLLESS:** So those low frequency noises that come from turbines are not being measured?

**Dr BURRASTON:** Correct, yes. That is my understanding. If you are measuring it with dBA they will not appear on the measure.

**The Hon. ROBERT BROWN:** Ms Last, you indicated that you had had some approaches from one of the developers. I do not want you to divulge any commercial-in-confidence information that you may wish to keep, but one of the issues on the slide that Dr Burraston has put up is that this industry has onerous lease arrangements for landholders. Could you quickly describe your experience of being approached and how you viewed the negotiation, for want of a better word, with the wind energy developer?

Ms LAST: Yes. When we met with the wind energy company we asked lots of questions about sound, environmental impact and planning, and do they have any idea of where they might be. They showed us a map that had red marks, which indicated that is where they thought the turbines would be, but then went on to say that if you sign the contract it does not guarantee what size of turbine you get or the location or where or when or how they put them in.

**Dr BURRASTON:** If I could also mention, because we are married—

The Hon. ROBERT BROWN: We figured that out.

**Dr BURRASTON:** When you sign this lease agreement, they cannot even specify if you actually will end up with any turbines on your property. You might just end up with a lot of access roads to turbines that are on other people's properties, for example.

The Hon. ROBERT BROWN: What land area is your property?

Ms LAST: It is 300 acres.

The Hon. ROBERT BROWN: And it is a working farm?

Ms LAST: Yes.

**The Hon. ROBERT BROWN:** How many turbines were they proposing—how many red dots—might be on your land?

Ms LAST: Well, I saw, from memory, four or five. They would not give us or anyone else a copy of the map and those figures have kept changing. We asked for minutes from the meeting. That never happened. We asked for some kind of formality to the meetings that were being held. We gathered that as soon as we started asking questions the company cooled off straight away. We said, "The research you have given us is a glossy pamphlet about your company. Could you please direct us to it ", and we were just sent to the Clean Energy Council and the propaganda sites really, and that is one of the biggest things we have found talking to our neighbours, the misinformation—

**Dr BURRASTON:** Or lack of any information.

**Ms LAST:** Or lack of information, and the information they do give is not substantiated, it is not peer reviewed, there is no proof or evidence of any of the statements they are making, and in talking to one of our neighbours we have convinced him against it because he said, "You have just drawn my attention to so many things that I did not even think of asking", and I think the same is true of the Molonglo people. I think their success was because of the lead-up time and community education that they had. As soon as people learn more about these things and the impacts there may be, they quickly change their mind.

**Dr BURRASTON:** Getting back to your point about the lease agreements, the other issue is that they include a gag clause for the leaseholder. I can give you some copies of leases, not lease agreements to do with us, but these are publicly available lease agreements. The landholders, once they have signed the lease, cannot publicly speak out about any negative effects that these things may have on them or their property or their livestock.

**The Hon. ROBERT BROWN:** During those discussions, at the time before you signed the lease agreement—

**Dr BURRASTON:** We haven't signed it.

**The Hon. ROBERT BROWN:** No, but what I am trying to find out is did they offer consideration as part of the discussions? In other words, did they tell you how much per tower they were going to pay you?

Dr BURRASTON: No.

Ms LAST: They gave quite a vague percentage.

The Hon. ROBERT BROWN: You got a range?

**Dr BURRASTON:** There was a range, yes.

Ms LAST: On the contract we saw they gave a very vague percentage that had a variable amount in it and what we found in talking to the farmers that we spoke to was that they were being incredibly misled about

the megawatt output. They were measuring their percentages on the size and scale of the turbines, so they thought they were getting a percentage of 2 megawatts, which is not the case.

**Dr BURRASTON:** And obviously it is not going to produce 2 megawatts.

**Ms LAST:** They cannot. Even the really good wind turbines—and I say "good" like this—which are out at sea, their capacity is 20 to 30 per cent, at best and rarely.

**The Hon. ROBERT BROWN:** From their map were you able to ascertain how many other property owners were in their plan?

Dr BURRASTON: Yes.

**The Hon. ROBERT BROWN:** Are you aware of how many properties they would have been approaching and have you discussed the issue with those property owners?

**Ms LAST:** Only from the fact that I know the area really well. I grew up on this property. I know that. I have individually approached them because I know them. They are family friends or long-term neighbours. There are many, many people who had no idea about this. We asked the company in writing several times, we have asked them, "Can we please have a meeting with all the people you are approaching at least, not the people you are not approaching", and they emphatically stated that, "It is counterproductive for us, it does not help at all." It was repeatedly said, "You have to see it from our perspective." I went, "You are coming onto our land."

**Dr BURRASTON:** We actually said to them, "Is this a strategy on your part to go to each landholder individually?" They said, "Yes, it is a direct strategy that we employ to get people to sign."

The Hon. ROBERT BROWN: If I were a developer I would do the same thing.

**Ms LAST:** At least they were honest.

**The Hon. ROBERT BROWN:** Since this proposal surfaced, have you seen any breakdown in community relationships across the range of people who are your neighbours?

Ms LAST: I think there are tensions. When we have written to neighbours either to alert them or to request that we discuss this issue with them and to share our research—we have very much taken a shared research approach—but there are certainly tensions. A lot of the time they are desperate. They have had six years of drought. They do not want to hear the bad things. But when you tell them, you can see there are even divisions within their family between husband and wife or father and son. So there are tensions. In every contact and communication we have had we have all tried to agree that we do not want those tensions.

We feel in a way a bit luckier than a lot of the people in this room in that we are at the pre-signing stage. If we can convince our neighbours that this is not a great idea for all our long-time futures, we might have a win. But if they all sign up and with the current planning legislation—what has been proposed, what has been happening and what we have seen approved—we feel we do not have a hope in hell even if we have a community active against these things. It is going to be approved anyway because there seems to be a lack of democratic process.

**The Hon. ROBERT BROWN:** On notice, could the Committee secretariat obtain the information about the lease agreements that Dr Burraston referred to as being publicly available?

**Dr BURRASTON:** I can send those to you. Bearing in mind they are not the lease agreements. These are just some that have been posted up on some sites.

**CHAIR:** We appreciate that, thank you. You obviously have a long-term, lifelong commitment to your property and community.

Ms LAST: Yes.

**CHAIR:** There is the issue of drought proofing and other problems, such as sons and daughters having to leave the land. I presume you are the next generation farmers with lots of new ideas. How does it sit with you

that quite apart from wind generation a lot of people are leaving the land? There is a drain to the cities. Many people have to get jobs off farm. There are those who view this as insurance for future generations, to be able to set themselves up and have a regular income, to drought proof their land. There is talk about massive bank commitments due to difficult times. How do you relate to that?

**Dr BURRASTON:** The first thing that came to my mind when we were looking at this is how secure an investment would this be for us, what is the level of risk to us? Again, the word "drought proofing" is something that is touted by the wind industry—drought proof your farm, put these up and you get a guaranteed income. That is why I looked at the decommissioning aspects of it. If these people do not put in any guarantee that these things will be removed and then the planning department insists that they are removed if they come to the point where they are not in service, and this could be in two years' time if they break down for some reason—I think it is if they are out of service for either six months or 12 months—they can be ordered to be removed by the planning department. If the company that owns them is not going to remove them, it then falls to the responsibility of the landholder to remove them.

Most of the landholders we have spoken to are under the impression, "Well, that doesn't matter. We will just get the scrap value for the turbine." I went to get this document from Energy Ventures Analysis for the Beech Ridge facility in the USA. That report is basically showing that not only is decommissioning not covered by scrap value, which has been explicitly rubberstamped by all these developments in this country and quite often abroad, it is a very expensive process to decommission it. The Beech Ridge one, for example, is 124 turbines. The developer underestimated the decommissioning by US\$10 million, which worked out at about \$100,000 per turbine.

That is not a legacy I want to leave my children as a risk, even for a single turbine. That could take our farm out, just having one turbine being ordered to be removed should the developer not be in a position to do that and there is no bond required. That is the key point here. There is no bond being required at the present time. All EA approvals for this so far accept on face value from the developers that scrap value will cover the decommissioning costs. Clearly, it will not. It will leave a large hole in a farmer's budget.

The second point I would like to address to that, there is some recent research looking at the large-scale effects of multiple turbines sited over areas of land. It is looking at the local climate effect, the local climate change from large numbers of industrial scale turbines, which have the effect of slowing down the winds. It is peer-reviewed scientific knowledge. Rainfall, for example, can be reduced; temperatures can change; the soil can dry. There is the potential if a large number of these things go up that not only will they not drought proof your farm, they could end up having an even greater detrimental effect environmentally on your farm.

**Ms LAST:** It can create local climate change. Another point I would say on the drought proofing issue, it hinders biodiversity. Having good biodiversity on a farming property, it is widely recognised, assists you in drought proofing your property. What we have found from our research about turbines, quite a lot of wildlife is destroyed. We live in box gum grassy woodland, which has been listed as endangered and vulnerable on both State and national registers, and we still manage it as a farm and we farm conventionally. If we lose a lot of the bird and bat populations that we have, we are going to have major other issues.

**Dr BURRASTON:** Particularly insectivorous bats, there are a lot of those around in box gum grassy woodlands, some of which are endangered. Bats are being killed in large numbers. I have peer-reviewed evidence, which I have submitted to the Committee. If those bats are being taken down in that amount of numbers, the insect population is not being kept down by those insectivorous bats. So the insect population increases. The effect on croplands is going to be detrimental from these insects.

**Ms LAST:** Generally crops are below the ridge lines, we do not crop because it is too hilly. It would not be practical.

**Dr BURRASTON:** The ongoing detrimental effects are going to be not only on your property, they will affect also your neighbour's property. Another answer to that question is I would not want to profit on my farm to the detriment of my neighbour by installing these things and affecting them either visually or with their property value, which then leaves me as the landholder liable to any potential action at a later stage. It is my land that I am hosting this stuff on. The responsibility ultimately, it seems to me, in all these cases rests with the landholder. If you cannot get any joy out of the power company, who is going to be ultimately liable? It is the landholder that becomes liable.

**Ms LAST:** A lot of those contracts that we have seen by power companies and the examples we were given when the company approached us very much put all the responsibility and liability on the landholder and quite unclearly. We know someone who signed it who had no idea that was really the case.

**The Hon. ROBERT BROWN:** Do you have someone in your group or area that has already signed with them?

Ms LAST: We know of someone who has.

**Dr BURRASTON:** One of our neighbouring properties.

**Ms LAST:** We are currently talking with our other neighbours. Two of them are major corporations. That is another issue that is going to impact on us. They do not live here. If any of those board members lived here they would say no.

**The Hon. ROBERT BROWN:** Two of the landowners are major corporations?

Ms LAST: Yes. They hold between 8,000 to 14,000 acres. That is a lot of land.

**Dr BURRASTON:** The landholder who had signed, who is an adjoining landholder to us, has not even had the courtesy to write a letter to us or let us know himself he has signed this contract. He has not even spoken to us about it.

**Ms LAST:** Or any of the other neighbours, who have all been approached.

**Dr BURRASTON:** He has not even informed any of the other neighbours either who have been approached.

The Hon. HELEN WESTWOOD: Going back to the science of acoustics, which you spoke about earlier, through your research are you aware of any model that is being used here, but perhaps more likely overseas, that predicts or maps sound impacts from turbines taking into account climatic conditions, the topography, the time of day and so on?

**Dr BURRASTON:** Not that I am aware of, no. As far as I am aware there are more limitations to these models. The models have a lot of those limitations in them. From what I can see, it is not something that can be stated. They can have a model, but what happens in reality is going to happen. You can only measure afterwards what is actually going to happen.

**The Hon. HELEN WESTWOOD:** I know there are models that are used to predict water overflow and it can be calibrated depending on various conditions. I wondered if that sort of modelling had been developed in this area?

**Dr BURRASTON:** Not that I am aware of.

**The Hon. HELEN WESTWOOD:** You spoke about a conference.

**Dr BURRASTON:** The wind turbine conference.

**The Hon. HELEN WESTWOOD:** Are there experts within Australia who contribute or present papers to those conferences?

**Dr BURRASTON:** It seems to me that because this is such a newer thing in Australia—there are a few wind farms that have been around, and I believe some of the first wind turbines put up were in Australia—that very little research has been done in this country at all on the effects of these things.

**The Hon. HELEN WESTWOOD:** As to the issue of dBc versus dBa in the guidelines, do you know whether Standards Australia is reviewing that?

**Dr BURRASTON:** I do not know if they are reviewing it. I know they are in New Zealand or it has been recently reviewed in New Zealand and the World Health Organisation also has guidelines on those issues as well, which I recommend you look at.

**The Hon. HELEN WESTWOOD:** Is your property within the precincts that have recently been announced by the department?

**Ms LAST:** I have not found a map of the precincts. I have just seen the town names. That is another thing we are really quite anxious about. Yass and Jugiong, which as the crow flies are near us, we think they are in the precinct and they have quite a few proposals. Some have been approved and some are being looked at. That really has founded a lot of our fears that wind turbines, industrial wind turbines are going to be approved in our area even if we do have endangered and vulnerable species.

**Dr BURRASTON:** Could I again come back to your point about drought proofing and farmers leaving something for future generations? The other thing that came out of my research is the fact that these things are very poor emissions reducers and in some cases can end up increasing emissions, particularly nitrous oxide and sulphur dioxide. Again that comes down to the point that I am not convinced that this technology is a good greenhouse gas emissions reducer, nor are a lot of other people. They have produced peer-reviewed scientific evidence to that fact. Because I am interested in conservation and reducing greenhouse gas emissions, I would not want to be contributing to greenhouse gas emissions by putting something like this on our property.

**CHAIR:** I am fascinated that they are possibly a sulphur dioxide producer.

**Dr BURRASTON:** Did I say sulphur dioxide or nitrous oxide? A National Academy of Sciences 2007 study stated, I think, actually that they did not expect any reduction in sulphur dioxide. I might have mistaken that one. Certainly nitrous oxide can be increased from gas power stations.

**CHAIR:** Gas power stations?

**Dr BURRASTON:** There is a paper submitted by J. Apt.

**CHAIR:** I think your submissions are coming at a late stage.

**Dr BURRASTON:** That paper was in with my original submission. It is by J. Apt and it is called "Air emissions due to wind and solar". That was a model of two different types of gas turbine. J. Apt is a professor at the Carnegie Mellon University Electricity Industry Supply Center. His research has showed nitrous oxide emissions can be increased by two or four times and the amount of carbon dioxide emission reduction is not as great as expected. To my mind, they are not a very good emission reducer. In terms of the percentage of energy consumed, whether that be electrical energy or fossil-fuel energy for transportation, the amount of total energy used is quite minimal. I included in the submission the case for the United Kingdom, which came at out at about 0.3 per cent of total energy consumption. These are contributing to a minimal reduction in that percentage of the entire amount of energy used. We are talking about a very tiny amount.

**The Hon. LYNDA VOLTZ:** Was that the percentage use in Britain?

**Dr BURRASTON:** Yes, that is the United Kingdom. America is very similar.

**The Hon. LYNDA VOLTZ:** It was 0.3 per cent?

**Dr BURRASTON:** It is in one of my submissions. It is a report by the Renewable Energy Foundation. They wrote to Ed Milliband in the UK to clarify the issue about the homes powered statement he made in the newspapers. They said that it would be better if he said what it is as a final percentage of energy used by the entire country that these things are contributing.

**The Hon. LYNDA VOLTZ:** But if you told a punter on the street that you have put in a 400-megawatt system that does not mean much visually.

**Dr BURRASTON:** No, it does not.

**The Hon. LYNDA VOLTZ:** Quite frankly, 0.3 per cent for 60 million people does not mean much to me. I assume the Milliband premise is that if you take average household use, it can be a visualisation for people of what that means on the ground.

**Dr BURRASTON:** Yes, but that is open to misinterpretation. People interpret that to mean that this wind farm is now powering these houses and nothing is else is required. That is misinformation.

**The Hon. LYNDA VOLTZ:** I would assume that that would mean that this wind farm can produce the power required by this number of houses with average electricity bills.

**Dr BURRASTON:** Yes, but it will not produce it for the entire year with the security of supply provided by a normal power station.

The Hon. LYNDA VOLTZ: It is a visualisation.

**Dr BURRASTON:** But it is also a misinterpretation of the facts. It is not powered by that system.

**CHAIR:** We will have to re-examine that. I am no scientist, and sometimes I do gloss over when I am trying to understand that level of scientific analysis. Perhaps if members have further questions they can be provided to you on notice. We can continue the dialogue in that manner. Thank you for appearing and your very interesting contribution.

(The witnesses withdrew)

(Luncheon adjournment)

PAUL MISKELLY, President, Taralga Landscape Guardian Association, sworn and examined, and

MARTHA RACHEL GRAHAME, Member, Taralga Landscape Guardian Association, affirmed and examined:

**CHAIR:** Thank you for your attendance here today. In what capacity are you appearing?

**Ms GRAHAME:** I am a schoolteacher and I work casually for the Department of Education. I am here in my capacity as the secretary of the Taralga Landscape Guardian Association.

**Mr MISKELLY:** I am a retired professional electrical engineer. Presently I am working casually for Australian Nuclear Science and Technology Organisation as a tour guide. I am appearing in my capacity as the president of the Taralga Landscape Guardian Association.

**CHAIR:** We have received written information, including material from you, Mr Miskelly. We have the latest addition with the in-confidence material. Would you like to make a short statement or provide additional information?

Mr MISKELLY: Thank you for allowing us the opportunity to address this inquiry into the impact of wind farms on rural people. We each wish to make a brief opening statement, after which we are happy to take questions on both our submissions to the inquiry and any matters arising from the several Land and Environment Court cases regarding the Taralga wind farm proposal. I will comment briefly on three aspects of the imposition of wind farms in rural New South Wales. My analysis includes wind energy's ability to offset greenhouse gas emissions, wind turbine noise generation and its impacts and the recalcitrance of the New South Wales Department of Planning.

In our submissions to this inquiry we provided graphs and charts of the output of some wind farms to illustrate several important points with regard to the ability of wind farms to reduce greenhouse gas emissions. The intermittent nature and the extreme variability of wind farm output literally screams out, "Who in their right minds could seriously propose that this is in any way a credible, useful form of grid-connected electricity generation?" Incidentally, who would seriously propose that such generation might be used to prop up the local grid? That such claims have been made to this inquiry beggars belief.

The performance data shows irrefutably that, because it is so volatile, wind generation requires permanent online shadowing from completely controllable generators. An analogy is the requirement for the use of a life-support system for a critically injured person. When their breathing or heart stops, a fully operational, permanently available substitute kicks in. Similarly, having to be ready at all times means that such shadowing generation is consuming fossil fuel. Worryingly, this data shows very clearly that an increasing amount of large-scale wind generation, even supplied from many small generators distributed over a wide region, will very quickly destabilise the eastern Australian grid.

The graphs in our submission are merely a snapshot of the available data. The amount of such detailed data in the public domain on the Australian Energy Market Operator website is enormous. Why seemingly noone else has sought to analyse it and make it available is baffling. Should the committee request any and all of the five-minute data for each of the wind farms connected to the eastern Australian grid, we can supply it.

Expert witness testimony provided to the Land and Environment Court at both the Taralga appeal and in the subsequent modification application matters demonstrated conclusively that wind turbine noise will be a problem for the Taralga development. It follows then that it will also be a problem for all subsequent approvals granted by the New South Wales Department of Planning. The department simply has it wrong. Its incompetence is mind-boggling. That noise will be a problem at these developments, particularly at night, is an absolute certainty.

Another facet of the noise issue that has emerged in other jurisdictions is that certain wind farms are generating very high levels of subsonic noise or infrasound. At Waubra in Victoria, for example, levels of up to 70 dB have been measured at a nearby resident. This energy level is equivalent to that coming from an operating chainsaw being held in the hearer's hands. As the sound is being emitted at frequencies below 20 hertz it cannot be heard, but is very definitely felt. A common factor in wind farms where this occurs seems to be that turbines are constructed at closer than the manufacturer's specified minimum spacing. The unacceptably close spacing of

the Taralga wind farm was made known to the Department of Planning during the submission process of the modification application. The Department of Planning has or had the somewhat embarrassing duty to inform us that they had no engineering expertise within the department and were unable to address this issue.

Regarding the Department of Planning's attitude, what is very, very disturbing is that the Department of Planning—you can see from their opening submission to this inquiry—seem to have learned absolutely nothing about the nature of wind turbine noise during the last five years. The Department of Planning staff have been present during the presentation of the expert testimony presented by recognised, accredited noise and meteorological experts at the several Taralga hearings. In summary, the analysis of the electricity data from wind farms in eastern Australia shows that there is no discernible public benefit, that is, the reduction of greenhouse gas emissions. Why then should people on rural properties who happen to be inconveniently in the way of a developer collecting a very lucrative subsidy have their lives totally wrecked by the impact of these monstrosities?

Ms GRAHAME: I also have a short statement and then I am happy to answer any questions, especially on the Land and Environment Court cases that we were involved in. With five years of experience behind us it is quite hard to unpack the amount of knowledge that we have gained during our journey through this saga. It is the sixth year that our group has been fighting the proposed Taralga wind farm. We have had two major court cases in the Land and Environment Court, which were test cases in this country, and the proponents took part of the decision at one stage and appealed it. It is our view that the public benefit of wind farms needs to be properly investigated. This was cited by Judge Preston in our original court case as the major reason for his approval of the Taralga wind farm, even though he did uphold our appeal that the Department of Planning's original assessment was flawed. All other environmental as well as neighbours' and the villages' concerns could be overridden because of that perceived public benefit or the greater good.

However, we believe that the public benefit of wind farms is negligible and our president Paul Miskelly has ably illustrated this with his data on the Capital and Cullerin wind farms locally and indeed for wind farms across the eastern States. If it is shown to be negligible, why is the State Government assisting wind farm developers to the detriment of the environment and neighbouring landowners? Why has the investigation into the validity of the public benefit argument had to be done by private people like us? Where is the official analysis from the Department of Planning?

It is our belief that wind farms are being used by this Government as a symbol to indicate that they seem to be actively combating climate change and to persuade the public that something is being done. I am not against symbols—they can be used very ethically and for good reason. Sometimes even the symbol itself can achieve some measure of healing and good, as was the case with the apology to the Stolen Generation, but when a symbol is just an empty con, which allows the public to believe truly that something concrete is being done when it is not, and there is also an environmental detriment and ordinary people's rights are trampled on, then the use of that symbol is wrong and it is even deceitful.

The Taralga wind farm will be located 3 kilometres from the historic village of Taralga and will run for approximately 11 kilometres on the ridges to the east of the town, totally dominating the landscape. The village was listed by the National Trust specifically because it is an historic village, which is in harmony with its setting in the surrounding open landscape, but the wind farm was approved. The Taralga wind farm will cause the clear felling of a ridge of bushland and the ripping up of areas of natural temperate grasslands, an endangered ecological community under Federal legislation, and the destruction of tablelands basalt forest, an endangered ecological community under Federal and New South Wales legislation. Nevertheless, the wind farm was approved.

The Taralga wind farm, according to the court-appointed expert in the Taralga court case Dr Charles Meredith, has the potential to have a significant impact on the local wedgetail eagle population and possibly on the regional population, but the wind farm was approved. The Taralga wind farm will cause four properties to be so badly affected that the court ordered that the proponent must purchase the properties if the owners require it, and yet the wind farm was approved. The improvements we fought for and won in the court—the extra environmental assessment, the reforesting of a similar sized area to that which will be lost, the purchase of the four properties, the penalty for the killing of wedgetail eagles and the extra noise testing—came at a huge financial and social cost to our members, some of whom are farmers battling drought just as grimly as those who have signed up for wind farms and who claim the right to make money from the despoiling of the landscape to drought-proof their incomes.

The Department of Planning failed to protect the interests of the environment or the average person. We were forced to go to court to protect our interests and the interests of the environment and it cost us more than \$130,000 of our own money. The Department of Planning assisted the proponent throughout the case. They consistently tried not to help us in any way whatsoever. We believe we will be back in court if the Taralga wind farm is built because we know it cannot meet the noise conditions set out in the judgement, but we also know that the Department of Planning will not properly police this. Even if they wanted to, which they do not, they do not have the resources to properly police it. Although they are required to police it, we will have to go back to court using our own money and resources again to police that. We will probably have to have our own noise monitoring equipment.

Subsequent to our case the Department of Planning appears not to have learned anything. They have approved developments subsequently of turbines that are too close together and will cause noise and visual pollution to neighbouring properties without any compensation or acquisition rights. I feel it important to inform the Committee that in taking this stand against the Taralga wind farm it has meant that some of our members have received poisoned pen letters and telephone and face-to-face abuse. Our families have put up with all this, but I really wish we could have those five years back living in our idyllic country town, as it once was.

I would like to stress that it is sometimes asserted that groups like ours are funded by some shadowy overseas anti-wind farm groups, and that is something that is put around by a lot of the wind farm companies, but we have raised every single penny of the money ourselves and from other affected people and groups in the southern tablelands. It has been a huge struggle, especially when the wind farm proponent would not pay court-ordered costs as he was required to do for a full 18 months while we were being pressured to pay the costs that he was supposed to pay. When all this started we knew nothing about wind farms or wind farm companies, but we soon learned, and learned very quickly, what the wind farm companies and developers are like.

There are two other issues I would like to mention. The first is about decommissioning. Previous witnesses from various wind farm companies have stated that when the wind farm is decommissioned they will repatriate the site. Skipping over all the concrete and steel in the ground and the road building exercises, I would like to present to the inquiry the decommissioning clause in the Taralga wind farm decision, which is clause 114-116. When you look at it you will note that it provides the option for the proponent to force the landowner to take responsibility for the dismantling of the wind farm. In the event of the landowner or proponent becoming bankrupt or insolvent, there is absolutely no comeback. Given that the companies involved are often shelf companies with no assets, it is a very worrying issue for the future. There should be a bond held by the Government or the council to cover the contingency of decommissioning. We feel that very strongly and we fought for it in our case, but we were not successful.

The next issue is that wind farm proponents often say that there is a lot of misinformation on the Internet against wind farms. It is interesting to note that there is not a lot on the Internet from resident hosting landowners saying how wonderful it is to have a wind farm on their property. I suggest that that is because wind farm companies force landowners to sign a confidentiality clause preventing them from speaking out about the development and how it affects them.

The final thing I would like to raise is that it is often suggested by many in the wind farm industry that wind farms are always on improved cleared pastureland. This is definitely not the case with the proposed Taralga wind farm. Turbine row 6, with nine turbines on it, will be located in a wooded range. Part of it is Crown land and part is private. Other turbine rows will be located on remnant areas, tablelands basalt forest and natural temperate grasslands. The con of wind farm companies often that it is just on cleared land, "There's just sheep on it", is not true. I will hand this up for the Committee to look at the beautiful ridge where row 6 is going to be and where they will be clear felling the bush. Thank you for listening.

**CHAIR:** Thank you. Both of you have certainly raised a number of points. Mr Miskelly, you mentioned earlier the actual spacing of the turbines, if I understood it correctly, the noise implications from that type of activity and that the proponents have not been receptive to those issues. Could you explain that in more detail to the Committee?

**Mr MISKELLY:** Yes. I was remiss simply because of meeting the deadline in handing up the document in relation to the Vestas wind farm. I put that up with the supplementary submission. Do you have that?

CHAIR: Yes.

**Mr MISKELLY:** I think I highlighted in the initial submission the points where the specification quite clearly indicates that turbines—I cannot remember exactly where it is now—should be a certain minimum distance apart. I think it is five rotor diameters when they are not in rows and four rotor diameters when they are within rows. Presumably the rows are across the prevailing wind direction.

**CHAIR:** I have to say from my position as Chair that sometimes reading the submissions it becomes all too much, but rest assured I will go back and have another look at that, but does the positioning of the actual rotors have another dimension in terms of noise impact?

Mr MISKELLY: Yes, and sorry to have to refer to the relevant section. The dimension is that, as with any other screw propeller, and you will see it looking at a boat crossing Sydney harbour or any screw-powered vessel, a wind turbine generates a wakes just as a power propeller does. The particular difficulty is that where the wind is not straight into the row but coming from an oblique direction particularly, the wakes from one turbine interferes with turbines that are downwind. Coming back to what I said in the submission about helicopter rotors and helicopter noise, where you have turbulent air striking a propeller you get increased noise. It is just the laws of physics—that happens—and as I have said with the Waubra issue it does seem, and it does need to be investigated, that we get the generation of very low frequency noise as well.

**CHAIR:** Was there any response from the proponents in terms of raising those issues?

Mr MISKELLY: The response from the proponent in the court—and I do not know if that is in the public domain from the submission, and it is probably better coming from Martha because she was doing the cross-examination—when he was advised that the Taralga wind farm violates those spacings, violates the spacing as we then understood in the SEDA guidelines, the 5r-8r rule in the SEDA guidelines, he said, "Oh well, they are only guidelines". That was the only real response we had. He introduced himself as a wind engineer, so one can go from there. Subsequently we have obtained this document, and it might be worthwhile saying that the document comes from a party to a matter presently in the courts in the United Kingdom. A community group is fighting a wind farm at a place called Den Brook Valley. The company involved, the wind farm proponent, is RES, the United Kingdom partner to RES Southern Cross, so my point was that the proponent in the Taralga matter should have been aware of these specifications. The other thing that we did was to try to obtain expert witness assistance during the court case from a mechanical engineer experienced in fluid flow. The department said to me, "Go and find an academic". They had no expertise. Quite simply, people refuse to help you. This is sustainable energy, after all.

**CHAIR:** In your submission you say the electricity grid supply and demand balance has to be managed on a second-by-second basis and wind generation as a result is unacceptable. You emphasise that quite strongly. Do you discount any possibility of wind—perhaps there are other alternative peak generation type sources, but let's just look at wind for the moment—combined with gas being a viable way of delivering reliable energy?

Mr MISKELLY: The point that I am making is that any intermittent source that is particularly as volatile as wind requires back-up generation from pretty much fast-acting gas turbines, and in the proposals that are made invariably the greenhouse gas cost of that gas backup is never ever costed. In other words, you often see—I think it was in one of the opening submissions—one megawatt of wind offsets one megawatt of coal. That is not true because you have to include the cost of the gas backup, which is a fossil fuel itself, and in fact looking at the volatility, if you install a 100 megawatt wind farm you have to install somewhere on the grid 100 megawatts of gas-fired capacity to do the backing up.

**CHAIR:** But that can be successful. Is that correct?

Mr MISKELLY: It is correct.

**CHAIR:** I am simply asking—I am not telling you by any means—but is that not still a vast improvement as a transition power mix, if you like, away from reliance on coal-fired base-load power?

**Mr MISKELLY:** It is a sort of "Yes, but" answer. If you have the wind farm in one place and you have the gas generation at an appropriate place several hundred miles away then you have to augment the transmission grid. One of the things that said is that if you put in sufficient wind farms several hundred kilometres apart it will smooth the output. First of all, the data shows that that does not happen. To connect it up

with the necessary gas backup you have to strengthen the entire grid in and around and between, and it comes at enormous cost.

**CHAIR:** I understand. It is for the record. We are digesting this as we go along. That is the purpose. We are not making conclusions now.

Ms GRAHAME: If I can add, if one were to put a gas turbine plant in any particular area, I think that the view would be quite clearly from most people, "Fair enough, the people around that gas turbine plant would have to be compensated properly." But they should not have to have a certain amount of noise, they should not have to have a certain amount of visual pollution, they should not have to have the gas turbine plant not even one metre away from their boundary. I think there would be a lot more people willing to say, "Of course, that should not happen. Surely you could not build a gas turbine plant and have it right up to the boundary of another person's property without even giving them any compensation." Yet because this is wind turbines, it has become the situation that the people around them are seen to be people who are complaining and do not have any rights in the situation.

**The Hon. ROBERT BROWN:** In relation to property values, during the five-year period you have been addressing this issue, have you been able to gather any evidence on diminution of property values of affected properties around the wind farm? Has anyone moved out and tried to sell their property? Is there any real estate data you have been able to gather?

**Ms GRAHAME:** The problem with our situation is that it has not been built. Some real estate agents would say to you that properties that will be very affected, they would not even mention to people that it is going to be built. Those people would not even know. There are very few real estate agents that will say, "You are going to have a great big view of 61 turbines." They just will not say it. When Paul tried to sell one of his properties he said to the real estate agent that he wanted them to specifically tell people that, and it has not sold. You would not find many real estate agents actually admitting that there will be a view. Because it is not up yet, it is hard to know.

Mr MISKELLY: The personal case is certainly we want to move on and retire from grape growing. It is hard work. We have had the property on the market for over 2½ years. We have certainly had the situation a number of people have come along very enthusiastic about taking it over and running it as it is, because it is a very good vineyard site, but when they hear about the wind farm you never hear from them again.

The Hon. ROBERT BROWN: So there is direct evidence?

Mr MISKELLY: It is only one person.

**The Hon. ROBERT BROWN:** Have those people made any comments to the real estate agent that is the reason they do not continue?

**Mr MISKELLY:** That is what the agent has said to us.

**The Hon. RICK COLLESS:** In relation to the planning issues, how do you see local community's concerns should be taken into account at the planning stage and ultimately the approval process?

**Ms GRAHAME:** In our particular experience we were just given a flyer in the mail to come to a meeting at the sports club where the proponent advised us there would be a wind turbine farm built just out of our town of 84 turbines, we should be pleased about it and they showed us some very small pictures of how it was going to look. That is all we got from them. There was no consultation at all, none at all.

**The Hon. RICK COLLESS:** Taralga is in what council area?

**Ms GRAHAME:** The Upper Lachlan shire.

The Hon. RICK COLLESS: You would be aware of their development control plan?

**Ms GRAHAME:** I am aware of it but the proponents did not do anything in any way to try to conform to it. The Department of Planning did not require them to either, nor did the court.

**Mr MISKELLY:** The development control plan was certainly canvassed and discussed at length in the court.

The Hon. RICK COLLESS: And the court did not take any action on that?

Ms GRAHAME: The court felt because of the greater good it had nothing to say. It is important to say that if you build a garage in the Upper Lachlan shire it has to be at least one metre from your boundary. With wind turbines now in this State, it does not have to be anything from your boundary. As long as it is not actually passing over your boundary it can be built. So they do not even have the minimum setbacks of a garage in this State. That is an absolute disgrace.

**CHAIR:** Mr Miskelly, you mentioned that you have been working with ANSTO [Australian Nuclear Science and Technology Organisation]. Do you see the nuclear option as a viable way forward, given your experience?

**Mr MISKELLY:** I think really what I should say to that is that I am here representing the Taralga Landscape Guardian Association. We do not have a policy on other forms of energy generation. I have to say that first up. Whether I should in that capacity respond to that question I do not know.

**CHAIR:** It is up to you. If you do not wish to respond that is fine. Given your experience as an engineer in that area and your criticism of the sensitivity of the system, I thought your similar knowledge in nuclear energy may put you in a reasonable position to make a comment.

**Mr MISKELLY:** It is more a point of saying that I do have over 30 years' experience in energy research and development. This is certainly not about picking winners, one technology over another. It is using my expertise to make an assessment of a given technology. This is what I come up with. I am not comparing it to any other form of generation in the conclusions I come to.

**The Hon. ROBERT BROWN:** In relation to the size of the wind turbine development as proposed, particularly in relation to the fact that it does not seem to comply with the turbine spacing, do you have a rough idea what effect compliance with the local plan would have on the number of turbines—in other words, if they had to comply with the DCP?

**Mr MISKELLY:** I have not got the map in my head. I would have to take the question, in some respects, on notice. From memory, it would take out at least half the turbines. You would have to take out every second turbine down along the rows adjacent to—I cannot remember the turbine row next to Keith's property.

Ms GRAHAME: Rows 6, 7 and 5?

**Mr MISKELLY:** Rows 5, 6 and 8, I think it is. On the northern section of the wind farm there are several rows where the turbine spacing similarly is very close together. I think it is four plus four, two separate rows. They are very close together, but they are also on very steep slopes. So the entire rows would have to come out if the specification were satisfied.

**The Hon. ROBERT BROWN:** Were the development viable under the restrictions imposed by the Upper Lachlan DCP, what would be the attitude of your group were a wind farm to go in there in accordance with the DCP?

**Mr MISKELLY:** We cannot answer off the top of our heads in the sense that the properties are relatively small. I think the maximum sized property is 400 acres. It is closely settled. So we are left with a situation that even if you have better spacing you still have the night-time noise impact. They are certainly much closer to properties than, for example, what little I know of the Capital wind farm.

**The Hon. ROBERT BROWN:** The Taralga development is moving towards what was described here earlier as the Molonglo ridge development where there are a high number of people affected by the location?

**Ms GRAHAME:** I think so in the sense that also the town itself is 300 people and it is only three kilometres from the actual development. We will see them all from the main street. I think you can definitely say ours is one of the worst for more people being affected.

**The Hon. ROBERT BROWN:** Because of the locality of the town?

**Ms GRAHAME:** The locality of the town and also the closely settled nature of the blocks because in our area they are soldier settler blocks, smaller blocks than big stations.

**Mr MISKELLY:** There would be no neighbour who is that two kilometres distance, according to the DCP, from any turbine, if the specification were addressed.

**CHAIR:** Is that picture a mock-up?

**Ms GRAHAME:** That is not the EIS. That is what the proponent thinks it is going to look like. That is at 110 metres. Now they are going to be 130 metres.

**CHAIR:** To clarify, this is the same ridge line we are talking about but from a different angle?

**Ms GRAHAME:** Yes, that one is up here further along.

**CHAIR:** In terms of the proposed development, I am looking at a very heavily forested ridge line. Can you give a rough percentage of how much of the development would be on cleared land and how much on reforested land, if it were to go ahead?

Ms GRAHAME: Nine on that row are very heavily wooded. In our area the top of the ridges is not very good farmland, so it has tended to be left. Those are the remnants of the endangered ecological community of tablelands basalt forest. Although they are not heavily wooded, they are just remnants. They also will be affected. In our area because of poor—it is not a poor area, but a lot of farmers over the years, probably because the soil is good, have not improved their pasture. That means that the native pasturelands are throughout the area. They are also an endangered ecological community or they just might be grasses but they are also an endangered ecological community. It is not really a case of how many trees will be knocked over but the importance of what will be taken up through the rows and the footprint of the turbines. Definitely nine on that very wooded ridge and probably another 15 or so on other ridges that have got remnants on them.

**The Hon. HELEN WESTWOOD:** From your experience with the Land and Environment court, was the issue of monitoring compliance with the conditions of consent raised?

Ms GRAHAME: Yes, we have a very big document that says all the conditions they have to follow. But the trouble is it says blanket, for instance, they should not have more than 35 dBa at a certain place at a particular time. But the only way that that can be measured is if a person puts in a complaint to the department and if the department considers it is a valid complaint then and only then will an independent monitoring be undertaken. We have had so much problem with the Department of Planning getting them to even answer our letters, let alone trying to get them to spend some money to look up whether or not someone is having too much noise. I just do not see it happening. They probably do not have the resources to do it, let alone the political will, which they certainly do not have.

**The Hon. HELEN WESTWOOD:** Has the department communicated to the community how residents can report non-compliance?

**Ms GRAHAME:** If the wind farm is built the proponent is required to have a complaints line and to publicise that complaints line and so forth. They were required to do that by the court in our hearing. That is what they were required to do. We did push that a lot during the court case. It comes down to ultimately the political will of the government department to do anything about it. I do not think they have the resources, nor the will to do it.

**The Hon. HELEN WESTWOOD:** Does your association have a policy position on wind farms generally outside of Taralga? Do you believe they should not be developed anywhere, or you do not have a position on that?

**Ms GRAHAME:** It has never been our view that they should not go anywhere. I think there is probably room for people if they want to put a turbine on their property and go off the grid, something like that. If they want to put up with the noise and they want to put a small turbine up, just like private solar power, I do not think there would be any problem with that. But for large-scale wind farms you have to look at the reason

why you are doing it. If the reason is that it should displace greenhouse gases, it does not do that. What is the other reason you might do it?

As we put forward, you might do it so that it looks good. The Capital wind farm looks great, doesn't it? All those politicians can go up and down the highway and think, "I've got that warm, fuzzy feeling that we are really doing something about the planet." But if you are not doing it, then you should not have that feeling. You should be feeling that people's lives are being affected by those wind farms and it is just a con.

**CHAIR:** Thank you very much for your submissions and your presence here today. This material, the picture and the explanation, will be photocopied and distributed to the Committee members. It is very likely that supplementary questions will be forwarded to you.

**Ms GRAHAME:** We will be happy to answer any supplementary questions. Could I just hand this up? This is supplementary information about a particular property in our Taralga wind farm case where the owners were subject to a lot of hassles and a lot of very unethical behaviour by the wind farm proponent. This is just some supporting evidence on that matter.

**CHAIR:** There may be potential adverse mention on that material. We will accept it, but we will consider whether we publish it.

Ms GRAHAME: Can I say one last thing? You asked me about community participation and how the community can be involved more. I think a major problem, an inherent problem, with wind farms is that the wind farm companies do not want the community involved. They do not want the community to know what is going to happen. In our particular case the people who were signed up were signed up into confidentiality agreements three or four years beforehand. They could not speak even if they wanted to. Wind farm companies want that lack of knowledge because that way nobody can talk about, "How much are you getting?", "Should we be doing this?", "Are you really doing this or is he just telling me you are doing this?" That way, if they can keep everyone quiet, then they can do what they do best, which is to divide and conquer.

**Mr MISKELLY:** I will hand up my opening statement. It may be of interest, I will also hand up copies of Capital and Cullerin for the last couple of days. I do not know which sites you visited, but it may be of some help.

**CHAIR:** Thank you for your attendance here today. We recognise the significant effort you have put into your submissions and the amazing effort in running your court case.

(The witnesses withdrew)

# JOHN RICHARD FORMBY, Chairman, Friends of Crookwell, affirmed and examined:

**CHAIR:** Do you wish to make a statement prior to questioning by the committee?

**Dr FORMBY:** I am the chairman of the Friends of Crookwell, but the material I am putting forward today is my own opinion. I would like to make an opening statement because I have had time to read the transcripts of previous evidence and some of the submissions. The points I want to make now are for the most part different from the written material I have provided to the committee.

First, I do not live close to a wind turbine development and I am not personally affected by any fear of living near one. There does not seem to be any plan for my area, but that may happen. As an environmental policy analyst, my concerns about these developments are at the planning and policy level, not the personal level. I am concerned with the current State Government policy of ramming through wind turbine developments because it is simply bad policy. There are far too many reasons that it is bad policy for me to cover in the time available. Because of time constraints, I will limit myself to only five key unresolved problems with wind turbine developments. I do not think any rational planning of wind turbine development can take place until these problems are resolved. I hope that this inquiry will go some way towards that.

The first problem is that the New South Wales planning process for wind turbine developments simply does not work. There are three main reasons for this. First, the environmental planning legislation is heavily biased towards development with provisions such part 3A and the critical infrastructure provision. The Department of Planning has become highly politicised in favour of wind turbine development, and that is apparent from the transcript of the first hearing. The department does not have the technical expertise to assess complex developments, even if it wanted to. The current environmental approval process is a disgrace to this State. Various academics I know who work in this area feel the same way. The environmental assessment process should be taken away from the Department of Planning and given to an independent body. Until that is done we will keep on having decisions pushed through in a pro-development way.

My second point is that due to planning failure the real costs of wind turbine development are not understood. These include not only the social and environmental costs but also the costs of integrating this unreliable source of power into the electricity generation system. Despite the claims of the wind farm developers, there is plenty of evidence that backup fossil fuel power generation will have to be provided for about 95 per cent of wind turbine capacity. As well as Paul Miskelly's comments on this point, I understand the committee has been given a paper by Peter Lang that demonstrates this. If the committee does not have that paper, I can provide a copy. The cost of this backup capacity and resultant instability in the grid need to be factored into decision-making about wind farms. I suggest that the inquiry should request a submission on this matter from the Australian Energy Market Operator, if it has not done so already. I would also like to see an independent study into the real cost of wind turbine development, including the capital and running costs of the necessary backup capacity.

My third point is that the alternatives to wind turbine development for reducing greenhouse gas emissions have not been adequately assessed, including the hidden costs of wind turbines. As an example, energy consumption has grown almost six times as fast in New South Wales as it has in California because it introduced a major energy saving program 25 years ago. Even gas turbine electricity generation is a far morecost effective way of reducing greenhouse gas emissions than wind turbines. By rushing into wind turbine development we are missing the opportunity to look at other means of reducing greenhouse gas emissions that may be more cost effective. Another example is the Sydney transport system, which is a mess. Enormous reductions in greenhouse gas emissions could be achieved by getting cars off the road and getting people on to public transport. I am concerned that we have only limited resources and that we are not looking at the options for where they can best be used.

My fourth point relates to land values. There has been a denial of the adverse impacts of wind turbine developments on land values by the wind farm proponents. This issue is important not only for nearby residents but also for the local economies where wind farms are to be built. Epuron claims in its submission to this inquiry that "no quantitative study anywhere has ever shown a measurable reduction in property values". That claim was repeated to the *Sydney Morning Herald*. By using the term "quantitative" they are sidestepping the numerous opinion surveys of the real estate agents that show that properties affected by wind farms are harder to sell and sell for less than unaffected properties. More importantly, Epuron's statement is plain wrong. There are quantitative surveys that show a reduction in land values.

I table a copy of a quantitative study carried out in Wisconsin, of land values affected by two wind farms. The values of the properties affected by one wind farm were reduced by 40% compared with unaffected properties and the value of properties affected by the other wind farm reduced by 30%. These studies do exist. I understand the Valuer General's Department will do a study of the effect of wind farms on land values. I would like to see how they are going to go about that. I would prefer it to be done by an agency totally independent of government. I do not know what the New South Wales Valuer General's Department is like, but I worked with the South Australian Valuer General's Department and it was doing what the State Government wanted it to do. I have some concerns about that study.

My final point is that there has been a failure to recognise, let alone evaluate, the adverse impacts of multiple wind turbine developments on the economic growth and social fabric of regions in which they are being built. Even this inquiry does not have that as a specific term of reference. It is essential to look at this point on a regional basis. For example, the Upper Lachlan Shire is heavily dependent on immigration by treechangers and the employment that they bring. The population of the shire in 2006 was 7,347, which does not sound a lot, and the net growth in that population in 2005-06 was 73 people. However, at the same time, 315 people moved into the area from outside. So if we had not had those people coming in we would have experienced quite large negative growth. Also, 1,600 of the shire's rate notices are sent outside the shire to people who own land or houses here but who work elsewhere and who come her only on weekends. I do not think those people are going to want to come here to be confronted by a row of wind turbines. However, there has been is no assessment of the overall effect on the economy of the Upper Lachlan Shire of the multiple wind farms that are confronting us. We were made a wind farm ghetto or precinct without any consultation whatsoever and without any study of the impact.

I believe that rational planning cannot take place unless those five problems have all been resolved. I therefore request that this committee recommend a moratorium on the further construction of wind farms in closely settled rural areas such as Upper Lachlan Shire until those five matters at least have been thoroughly examined and remedied as far as possible.

**CHAIR:** Thank you. You are understandably highly critical of the New South Wales environmental policy with regard to wind farms. Has any jurisdiction got it right or are you against wind farms as a type of development?

**Dr FORMBY:** I am not against wind farms as a type of development. There are parts of New South Wales that would have both the capacity to transport the electricity to urban centres and where the population density is very low. If I were living on a 10,000 square kilometre property near Broken Hill, I am sure that a wind farm could be sited so that I did not see it. It is a matter of paying much more attention to where we are siting them.

**CHAIR:** You referred to transport and other mitigation measures that the Government should be implementing. I think you related that to the politicisation of the issue of wind farms. Can you expand on that? What solutions do you see working and why do you think wind farms have come to the fore in the way that they have?

**Dr FORMBY:** I do not see any solution in the Upper Lachlan Shire except not to have them. If we are going to have them, I would want legislation with a whole lot of restrictions that they do not have now. I would want a three-kilometre zone between a wind farm and the nearest house. I think they have come to the fore because at the moment they are an available technology. As I said, I do not think the real costs of wind farms have been factored into the planning process against other possible forms of technology. There is confusion between reducing greenhouse gases and introducing renewable energy sources. It seems to me that in the case of wind farms those two things be are being mixed up. If we want to reduce greenhouse gases there is a whole range of things we can do. If we are trying to introduce renewable energy I would see that as not such an urgent problem and therefore we can be much more measured about doing it. I think the emphasis on wind farms is a political fix that is being shoved through in order to get votes by people who do not have to live near them and do not know a lot about them.

**The Hon. ROBERT BROWN:** We have heard the previous witness from the council talk about the development control plan. They arrived at a figure of two kilometres and you have put three kilometres. Is there any reason why you think three kilometres would be more acceptable?

**Dr FORMBY:** I am not an acoustic engineer and I am not an expert in the appearance of landscape. That is simply a personal judgement that, if I had to have them imposed on me, two kilometres is not very far away and three kilometres would put them pretty much out of sight, depending on where you lived in relation to them. What I am doing is making the best of a bad job and saying I do not want them, but if I had to have them I think three kilometres would be a reasonable level. I must admit I was extremely annoyed to read Epuron expressing contempt for council regulations and saying, "These council regulations are unnecessary; they don't know what they are doing", which you will see in the transcript, because I just think that is totally the wrong attitude for a company that wants to host up to 84 turbines in the area to have as to what the local council wants because it does represent what the people are saying.

**The Hon. ROBERT BROWN:** In the five points that you put forward to us you suggested that the Department of Planning should not actually be doing the technical work on this because they do not have the expertise and that in fact it would be better to put these determinations into another body. How would you see that sort of body being constructed? What type of expertise would that body need?

**Dr FORMBY:** I would create an environmental assessment commission, which was responsible for all the scientific assessment, so you would have to have a variety of relevant scientists either in it or on call, and on call would probably be a cheaper way of doing it, so that if you had a wind farm, for example, you could contract acoustic people, landscape people, wildlife people and bring them in to assess the environmental assessment. I am not suggesting, as I have said in another venue, that the Minister should not have the final decision, but I think it is wrong for the Department of Planning run by the Minister to be assessing the environmental assessment.

**The Hon. ROBERT BROWN:** So the technical aspects could be handled in the fashion that you have just mentioned?

**Dr FORMBY:** I would have thought so, yes, by seconding people or putting them under contract for a short period. There are lots of academics that like those jobs.

**The Hon. ROBERT BROWN:** You would have to make sure that the chair of the panel was also an expert, otherwise somebody might try to take them to the Land and Environment Court.

**Dr FORMBY:** Possibly. I think if he had enough expertise he could get away with being a generalist.

**The Hon. RICK COLLESS:** Do you see the development control plan that the council has as a document that does provide the appropriate amount of advice and direction to the approval authority?

**Dr FORMBY:** No. I think it is better than what we are getting from the State Government, but I do not think it is adequate. There is a problem with our council because let's say some of them have relatives or friends who are in the business of wanting to have a wind farm on their property, so I do not think local council can be said to have a detached view of the matter.

**The Hon. RICK COLLESS:** In the model you are suggesting, to make the whole thing able to flow a bit easier, would it be appropriate perhaps to have that environmental assessment commission you are talking about working on the development control plan guidelines rather than assessing each application? It therefore becomes a much easier process for the development to comply with the plan.

**Dr FORMBY:** Yes. I think it would have to do both, and I think it would also be responsible for setting the guidelines for the environmental assessment because at the moment I see those guidelines as being deficient as well.

**The Hon. RICK COLLESS:** In relation to the land value issue that you raised, and correct me if I am wrong, I understood that you said that one of those studies showed about a 40 per cent reduction in land value?

Dr FORMBY: Yes.

**The Hon. RICK COLLESS:** Over how many farms was that assessment done, and how close were those farms to the development?

**Dr FORMBY:** I do not have a detailed memory of the study, but I think the number of farms sold close to the wind farms was much smaller than the number that was sold outside the range but in the same area, for the reason that they gave that people were not buying in that area, so I think the number of affected farms was something like eight against maybe about 30 outside the wind farm area, and there were two cases of that.

**The Hon. RICK COLLESS:** Do you know what the separation was from the wind farm? Was it one kilometre or five kilometres?

**Dr FORMBY:** No, I could not give you that data without referring to the study.

**The Hon. LYNDA VOLTZ:** I wanted to ask a question in relation to the cost. You were asking to look at the cost benefits of the wind turbines and their output. Is what you are suggesting looking at the cost against the \$18 billion that is going to be spent over the next four years in New South Wales, in terms of the delivery of that and the delivery of wind turbines as a cost example or as a percentage of energy?

**Dr FORMBY:** You have lost me a little bit because probably what I was saying was something different. What I am saying is that when people look at the cost of wind turbines they do not include all costs, they just talk about what the cost of erecting the wind turbines is, and what I am saying is that that costing needs to include the cost of the additional power supply that you will have to put in when the wind is not blowing.

**The Hon. LYNDA VOLTZ:** So for the gas-fired peaking plants?

Dr FORMBY: Yes.

**The Hon. LYNDA VOLTZ:** But not for the additional transmission improvements that go into the system as a rule anyway, so for example over the next four years we will be spending \$18 billion.

**Dr FORMBY:** Not if it was going to be done anyway. I would be separating costs in relation to wind farms.

**The Hon. LYNDA VOLTZ:** So it would be a comparison of the efficacy between gas and wind turbine, but you would have to look at associated resources. People have raised the possibility of geothermal. I have not heard any suggestion that New South Wales has the resources for geothermal. Gas has a similar problem in terms of supply. It is really just monetary benefit?

Dr FORMBY: Yes.

**CHAIR:** Dr Formby, in your submission you say you were not satisfied with the terms of reference, and I am not worried about that because it is constructive criticism, but reference 6 allows us to consider any other relevant matter.

Dr FORMBY: Yes.

**CHAIR:** You did mention the moratorium and such like, and I appreciate the input you had on those issues, but is there any other relevant issue that you think we are missing in terms of this inquiry that you would like to raise at this point in time?

**Dr FORMBY:** This is not another issue because I cannot think of one off the top of my head, but this is an issue I did want to raise if I had the opportunity, and that is that I was very concerned reading the transcripts from the wind farm industry that they were trying to snow you—and you are intelligent people, so you will see that.

**CHAIR:** That is the name of the game all round.

**Dr FORMBY:** I am totally honest, according to the affirmation. Can I give you an example? They tendered to you a document which was purported to be their community survey that they did before they started construction and they said, "This is what we did, this is where we got community opinion that they were favourable to wind turbines" and so on. Professor Laurie Brown, from the National Centre for Social and Economic Research at the University of Canberra, and I did a review of their social survey and it was not worth

the paper it was written on. It was full of leading questions, it was not clear where the people lived that were surveyed, whether they were going to be anywhere near the wind turbines—just a whole lot of things.

**CHAIR:** It was not necessarily affected parties that were being surveyed but a general community survey?

**Dr FORMBY:** Yes, but what you would have liked to know is which were which, which answers were coming from which group. Also the questions were the classic push-polling questions you would be familiar with from politics. They give you five questions and the first two are very favourable to wind turbines, so by the time you come to the fifth question you have been put in a mental framework of being favourable towards wind turbines. Our review of that was given to Epuron as part of the environmental assessment, but they totally ignored that and they were still treating their survey as if it had total validity when they gave it to you, so that is something that concerned me about a great deal of their evidence. If I could make an analogy, they are a little bit like James Hardie—they keep denying everything for as long as they possibly can. That was just an impression I had that I hoped to pass on to you.

**CHAIR:** Do you have anything in writing that you can submit of your analysis?

**Dr FORMBY:** Yes, we can let you have that.

**The Hon. ROBERT BROWN:** Given that statement you have just made, what is your view on the veracity of the local government area plebiscite that was held in the Lachlan shire?

**Dr FORMBY:** I have heard allegations that there was a bit of branch stacking going on, but I cannot confirm those. The problem with that was that most of the people polled are not going to be anywhere near a wind farm. Again, what they needed to do was say, "These are people who are going to live within five kilometres of a wind farm and this is what they thought, and this is the opinion of people who live in Bigga", which is 90 kilometres away and will possibly never have a wind farm and will not see wind farms on a daily basis, and the people who live in Crookwell and Gunning, which makes up over 50 per cent of the population in the shire anyway, who will not see these wind farms because they live in the town and they will drive past them. I do not mind driving past one, I just do not want one next door to me, so I do not think that survey was a valid assessment of opinion either and my judgement would be that if you ran that poll again now it would be a lot less favourable because there has been more information going out.

**CHAIR:** You clearly stated a three-kilometre setback was the recommendation you would like to see being made and also you were clear about the concept of a moratorium on wind farms in the Lachlan shire in the immediate future. Do you have any other suggestions that you might like to see the Committee consider in terms of recommendations?

**Dr FORMBY:** I made two in particular in my written submission. One was that all non-host properties within three kilometres of a turbine should be given the option of purchase by the wind farm developer at prewind farm values. To me that is just fairness. If you are going to be near one and you do not like it, you did not know it was coming, you might have lived there for 50 years or one year, but surely you should be entitled to have your property purchased at the value that it was before the wind farm was suggested. That was my first one.

The second one, and this is a little further out but it is possible, is that a wind farm compensation commission should be established to hear claims for compensation because say your family has lived on a property for three generations and then you find that you are going to have a wind farm next door. You may not want to move because your whole life is bound up with that property and your whole ancestral memories are bound up with it. Surely there should be some compensation you can be given if you are going to have wind turbines 1½ kilometres from your boundary. I suggested that a wind farm compensation commission should be established to hear claims for compensation, which would be paid by the developer. That would be an interesting task to decide what is a reasonable level of compensation, but I would have thought it could be attempted.

**CHAIR:** In other jurisdictions there are aspects of that. I have one more question in the time remaining, and I am having second thoughts about asking it. Nevertheless, I will ask it, given your position in the community, your obvious interest and the fact that you are not directly affected, which is of value to the Committee. We have seen different situations where people suffer from real or imagined, but to them very real,

impacts from the noise of these types of developments that they are not involved with. It is agreed it is a real imposition. There is the person who might sit back and listen to the swish of the wind farm and feel good because they are making several hundred thousand dollars a year out of it. In terms of compensation, is there any way to alleviate people's angst? If they were compensated and felt they were part of the project, would they feel reasonably comfortable? Is that a reasonable projection?

**Dr FORMBY:** Are you talking about the suggestion that the neighbours might be included in the payment?

**CHAIR:** If a neighbour is affected and their land is not gaining anything from it, if they were included and received just compensation perhaps on an annual basis, it may create a different perspective on the interruption to the person's lifestyle.

**Dr FORMBY:** I am a bit worried about neighbour against neighbour conflict getting worse over this one in terms of, "How much am I getting here? You get 90 per cent because you have them on your property. I am getting 10 per cent because I am next door. That is not enough. I want more, I want 30 per cent or 50 per cent because I am just as badly affected as you are." I can see that developing into a huge neighbour-to-neighbour conflict, which we have enough of anyway.

**CHAIR:** If there were an independent arbitration body, as occurs in many other jurisdictions, that looked at the consequences—I know it is difficult in human terms to add everything up—made assessments and awarded an amount, which could even occur before the development took place, every party would know what they may benefit or lose if it were to go ahead. There would not necessarily be a sense of loss if the developer or wind company paid this compensation as part of the process.

**Dr FORMBY:** It is my personal view, but I would like that to be looked at as part of what the wind farm compensation committee did. I think that should be part of their task. But I would still not want to see wind farms go ahead in an area such as ours because within three kilometres of that wind farm where we went to the top of the hill yesterday there are 118 dwellings and probably also that number of blocks owned by people who have not built yet. I can see an enormous problem of getting an equitable balance between the people who have the turbines and the people who do not. I think it may be a can of worms. I would like to see a compensation commission but I think you have to limit the problems that they are dealing with by not building wind farms in areas that are basically now rural-residential and depend on that. People might get more scared than ever: "There is a wind farm compensation commission but I do not know what I am going to get. Should I move into this area? Probably not. I should probably go somewhere where there is no wind farm."

**CHAIR:** Thank you very much for your attendance. The Committee secretariat may send you questions on notice.

The Hon. ROBERT BROWN: Thank you for your excellent presentation.

(The witness withdrew)

**DAVID BROOKS**, Deputy Chair, Parkesbourne Mummel Landscape Guardians, sworn and examined:

**CHAIR:** Mr Brooks, do you appear today representing an organisation?

**Mr BROOKS:** I am David Brooks. I am the deputy chairperson of the Parksbourne Mummel Landscape Guardians.

**CHAIR:** Before we commence questions, would you like to make a short statement?

**Mr BROOKS:** Most of what I want to say in this short statement is a summary of the salient points in the submission I have made to you. I want to bring them back onto the table, as it were, to provide some focus. After that, I have one topic that is new. It concerns things I have only discovered in the last week or so. I have brought some supplementary documentation here.

The first topic is simply to do with the problem of wind energy, which has been much discussed today already. I have sent to the Committee the three articles that were discussed in the *Herald Sun* by Terry McCrann. Two of these are relevant to the issues of whether the wind blows everywhere at the same time or whether it blows in different places. So that you can use wind farms in one area when they stop working in a different area. That is one of the articles. The second article by Peter Lang, which John Formby has mentioned, deals with the problems of introducing electricity from wind into the grid. All this has been much discussed already today, so I do not want to go over it all. But the salient points seem to be that wind energy is not, strictly speaking, just a renewable source of energy. In reality, it is a combination of renewable and non-renewable energies because, if Peter Lang is right, the wind farms must be backed up by open cycle gas turbines.

Like John Formby I would like to emphasise to you that we seem to have a muddle between two quite distinct questions. One question is: Do we want to reduce greenhouse gas emissions? The other question is: Do we want to go over from non-renewable sources of energy to renewable sources? These are both very important questions and no doubt they overlap, but they are nonetheless distinct. If Peter Lang is right, then it would seem to be more sensible to use closed cycle gas turbines to reduce greenhouse gas emissions in the immediate future, say, over the next 5 to 10 years. I would assume that is very possible for Australia because Australia has massive supplies of gas. On the other hand, if we do want to go over to the renewable sources of energy because in the long term the non-renewable sources are going to disappear, fine. But then, I think, we have a whole new set of problems as to how we provide baseload power from renewable sources of energy. It seems to me that is not, as John Formby suggested, not quite so urgent a problem as what we do in the next 10 years regarding the reduction of greenhouse gas emissions.

I am not an expert on this. I used to teach English at the University of Sydney, so I cannot give you expert testimony on this. But what I would like to say is that the questions raised by Peter Lang and the people who think like him are the kind of questions to which there must be a correct answer. When I teach literature and poetry it is possible to have a variety of different responses to the same poem which are valid even if they are different because a poem is a very complex entity and you can come at it from lots of different points of view and what you say is a combination of what is in the poem and what you are feeling yourself. This is not true of greenhouse gas issues and electricity production. There must be a correct answer and I can only urge you to try to find out from expert testimony what it is. If it is the case that it would be better to use closed cycle gas turbines than wind farms plus open cycle gas turbines, then we should all act accordingly. There is also the problem of instability in the grid, but I will not go into that.

The second major topic is the need for equity for local communities. Again this has been much canvassed already. I would like to start simply with what is involved with the location of turbines. As I put in my submission to you, it seems to be quite demonstrable that it is not wind itself that is the primary determinant of where wind farms are to be sited. The primary determinant is proximity to a power line. The explanation for this is we are talking about private enterprise and private companies must reduce their costs. The proximity of residences, as I said in my submission, seems to be a matter of complete indifference. So in some cases you will have a turbine that has no or two or possibly three non-involved residences within say two kilometres. Elsewhere you may have a comparable sized wind farm, like the Gullen range wind farm, which has 60 non-involved residences within two kilometres. Naturally we in the area think it is quite preposterous to site a wind farm in that area.

This issue of location, it seems to me, raises two issues. One is the issue of externalities. Assuming, and I have to assume this, we will not get the evidence until the wind farms are built, there will be falls in land values and property prices. Assuming this is true and that there are problems with noise and visual impact then, in reality, an external cost is being imposed on local communities. That is the first problem. There is a very great disparity in the gains and losses among the various parties to the wind farm development—the wind farm developer and the owner operator, the landlord who hosts the turbines, the State government which has its own particular interests, non-involved residents and the general community. Given the fact that there is such a disparity in gains and losses—some of these parties are gaining immensely whereas the local residents are really just losing—then there is a need for equity. This means that we must act on some sort of principle of compensation and justice. That is the first thing connected with location.

The other thing I mention in my submission, there is a problem with the effectiveness of wind farms. Even if we assume that wind farms are a good thing, if you put one down in the middle of a residential area, as it is proposed should happen with the Gullen Range wind farm, then you are going to have the problem that either the turbines are going to have to be smaller capacity or they are going to have to be moved to a less effective location or they are going to have to be removed altogether or they are going to have to be turned down regularly when the wind blows and they have reached the noise guidelines.

At the moment there are legal obligations on the owner-operators of the wind farms to do one or other of these things if the turbines breach the noise guidelines. This means that such a wind farm in the middle of a residential district is not as effective as a comparable wind farm of a similar size elsewhere. From the point of view of the public interest, it would be better if the wind farm were located outside a residential district. The planning framework needs to be drastically reformed, part 3A and the critical infrastructure provisions should be abolished and the whole procedure should be tightened up.

Like John Formby, I believe the Department of Planning has behaved deplorably over the Gullen Range wind farm, and we intend to prove that in court. There is a need for a strong regulatory regime, which currently does not exist, and ongoing disclosure and monitoring. At the moment much of the debate on wind farms is shrouded in obscurity and uncertainty. The proponents' environmental assessments say that there is no real evidence about this, this is uncertain and so on. We need definite information about the costs, the amount of electricity generated, the amount of greenhouse gas reduction and so on. Until there is disclosure and permanent monitoring, we will not know any of these things.

That is a summary of what is in my submission. The new information concerns the global economy and its relationship to wind farm development in New South Wales. What I am about to say is not intended to be denigration, so I hope members will not have an adverse reaction. It concerns specific companies. Epuron, which is the proponent of the Gullen Range wind farm, is a major developer in New South Wales. If you add up all its turbines either existing or under construction, proposed or approved, there are about 900, possibly a few more. That is the overwhelming majority of turbines for New South Wales at the moment. Epuron is not a public company. Epuron in Australia is the branch of a German company called Epuron GMBH. It is not a public company, either. It is a wholly-owned subsidiary of a company called Conergy AG. Conergy is a public company—you can buy shares in it. Since 2006, Conergy has been in deep and ongoing trouble. At the peak of its performance, which was early October 2007, its share price in Germany was just under €70. Yesterday, on the Frankfurt stock exchange its share price was 83¢, less than one euro. It has lost virtually all its share value over the past few years. The last time it made a net profit was in 2005. Ever since then, every year it has made a net loss and they run in the hundreds of millions.

I will provide one other fact and then talk about the significance of this for New South Wales. In June this year, it was announced to the press in Germany that the Hamburg prosecutor was investigating, not so much the company itself, but several unnamed employees, for share price manipulation, insider trading and balance sheet manipulation. Conergy has been the victim of a kind of boom and bust cycle in solar power in Germany. Its main business is solar power generation. Under the regime of public subsidies in Germany there has been a massive boom and bust—an asset bubble that has now burst. It is retrenching, restructuring and sacking people. It is doing everything that companies do to restore the bottom line.

I suggest that Epuron, being substantially in the wind farm business—although it does other things as well—is one of the areas in which Conergy can actually make money. The wind farm business is still very profitable, even though the solar business is not so profitable. Solar is apparently beset by excess capacity, overcapitalisation, downward pressure on prices, shrinking profit margins and so on. All of this is reported in the German press and it is on the Internet. It is certain, I think, that Conergy is going to want Epuron to

maximise its profits and reduce costs as much as possible because Conergy needs every bit of money it can get to restore its bottom line.

Looking at this from the other end, we around here who have been dealing with the Gullen Range proposal, which began in 2007 and was published in 2008, have noticed that the environmental assessment is perfunctory; it is not serious; it is mystifying; it is disingenuous; and it is totally deficient as an environmental assessment. The assessment done by the Department of Planning is also deficient. All of this stems from the fact that Epuron could not do a serious environmental assessment without exposing the inappropriateness of this particular development. Clearly, it does not want to do that; it wants to get it up and running. I would suggest that, given the global financial crisis and the global economic downturn, the very globalised nature of so much investment in wind farm technology in New South Wales will mean in practice that local communities are not going to have their interests regarded—not by the proponents; not by the Department of Planning; and not by the current State Government.

I am not asking the committee to reform the global economy, but it seems to me that there are things in New South Wales that can be done. It is possible to put in place a regime of disclosure and monitoring so that we have exact data. It is possible to put in place a regime of strong regulation. We can do this because the wind farm companies want to come here. If the Government says to the wind farm companies, "You come here on our terms", the wind farm companies will not say, "No, we will go to Victoria." They will want to invest everywhere in Australia. It is a new and open market, so we can do that.

Finally, we can restore the right of appeal against planning decisions. That is absolutely essential. If we do not have that, it will not be possible to hold the Department of Planning to account, standards will slip and local communities will be disregarded. It is essential that in the background somewhere there is a right of appeal. Lastly, if the regime of strong regulation includes buffer zones, hopefully that will lead to a decline in the number of appeals, or even a complete cessation, because issues of equity could be dealt with administratively instead of everybody having to go to court every time there is a wind farm proposal.

**CHAIR:** You have provided valuable information.

The Hon. LYNDA VOLTZ: I refer to the grid itself and the placement of wind farms. Given that the national energy regulator controls what is essentially a monopoly in terms of the grid, wires, poles and the transmission, and in New South Wales that is controlled by the New South Wales Government, do you have a view about invest in clean coal? Do you believe that the New South Wales Government, as the monopoly holder of the transmission grid, has a responsibility, given that that is a determining factor in the placement of wind farms? Should it provide a more cohesive planning policy for transmission lines? Should the Government and the national energy regulator ensure that wind farms are placed in more appropriate environments?

Mr BROOKS: I certainly do. I know that one of the complaints of people who are enthusiastic about wind farms is that governments will not spend adequate funds on new transmission lines and infrastructure. I assume this is so. It seems to me that the problem with locations is that there are so many variables. One scenario could be, as you seem to imply, that we could have public spending on new infrastructure so that it would be possible to locate wind farms away from residential districts.

However, if governments were not willing to do that, what would we do instead? Are we looking at wind farms still being constructed and operated by private enterprises but under a strongly regulated regime, or are we talking, as we are at the moment, about private enterprise doing it under a very weakly regulated regime? Would we have buffer zones or would we have acquisition rights or acquisition rights plus compensation? How far out would the buffer zones go? Would they be in two or three tiers? There are many possible scenarios. I certainly think, in general and as a principle, that if there is going to be social benefit from wind farms, and assuming that they are a good thing, then it is only just that whatever costs are involved should be socialised as well. It seems to me quite wrong to say that we must have wind farms in the general interest—that is a social benefit—but that the burden is all going to be privatised on a small section of the community. That is essentially unjust in a most elementary and straightforward way.

**The Hon. LYNDA VOLTZ:** To some extent that happens in the energy market in terms of investing in clean coal, where the costs are socialised to a large extent across the taxpayers of New South Wales—all the people who pay electricity bills. I am not clear about the German company. I understand that there was a problem with the solar industry in Germany because the feed-in tariffs had been set too high and a large amount of agricultural land was converted to solar power production. The feed-in tariff was about 3:1 or 4:1 or some

remarkably high amount and it was never going to be economical. Is that what has contributed to the oversupply of solar power in Germany?

Mr BROOKS: My understanding from reading the documents on the Internet within the past few days is that the German Renewable Energy Sources Act provides that solar power operators receive 43¢ per kilowatt hour of electricity. As you suggest and according to the journalists in German newspapers, this has seen a massive boom in solar power plants, even in places where there is not much sunlight. The next thing to happen was the world competition between the German operators and the Chinese. The German operators complained and said, "We must have protection from the Chinese. We want higher subsidies." That caused an outcry amongst consumers and consumer groups, so solar power operators backed off and said, "Alright, lower subsidies then, sure". So the subsidies are going to be reduced next year, in 2010, and the latest thing that journalists are saying is that the fact that they are going to be reduced next year has led to a stampede to install more solar power plants as soon as possible so that they can take maximum advantage of the subsidy as it currently exists.

**CHAIR:** Your comments on Epuron, the parent company and the global economy—I assume that is well ventilated in the German media, as you have said?

Mr BROOKS: Yes.

**CHAIR:** Do you have any light to throw on the matter of why that is not obvious in Australia, or has there been any interest from the media to look at what is quite a consequential factor in terms of potential industrial collapse in this area?

Mr BROOKS: The only article in the Australian media I have managed to find is from the *Sydney Morning Herald* and I think it was the end of 2007 when the crisis had just blown up, it had just been revealed. What had happened was that the first financial statement for the year 2006 said that the company had made a net profit of \$30 million Euros and some time later they were forced to put out a revised statement saying that in fact they had made a net loss of \$640,000 Euros. The *Sydney Morning Herald* had an article saying that the chief executive officer at that time was going to resign because of the difficulties in the company and it noted that the share price had already fallen to about 32 Euros. That is the only thing in the Australian media I have been able to find so far, but I have only been looking for the last week because I did not know about all of this until the last week. I have no definite knowledge as to why this has not been in the Australian media and I do not want to offer you a conspiracy theory. I do not know.

**CHAIR:** Your submission raises the idea of compensation for affected landowners. We have discussed that to some degree in the Committee today and in submissions. What would you see as effective compensation and who should be entitled to it? Do you have anything to offer the Committee in that area?

Mr BROOKS: I think this is the issue that is going to cause most debate and it does not have one single definite answer. Whatever we eventually arrive at will reflect people's sense of justice and also presumably the balance of power. I think there have to be acquisition rights for at least a section of the people living around the wind farm. The question will be how far out do you take those acquisition rights. I think the Taralga wind farm case implied that acquisition rights depend upon particular adverse impacts—noise and visual particularly, and the fall in property values to some extent as well, but particularly noise and visual.

**CHAIR:** Not distance?

Mr BROOKS: Well, distance comes into it because in the Taralga wind farm case—this is what I have been told, I have not checked it out myself—I believe most of the properties were within one kilometre and I think one was just over one kilometre, so distance obviously has a correlation with the noise and visual impact. I think there have to be acquisition rights and the debate over that has to be how far out do you take them. I would also want to argue that if there is to be real justice for everybody living around the wind farm there ought to be compensation for any property that suffers a fall in land value, and the compensation should be the equivalent of that fall in land value. For example, we have some neighbours whose property is about four and a half kilometres from the Gullen range wind farm, so they are well outside any likely buffer zone, but they were intending to subdivide their property. They might have made a considerable sum of money selling off those blocks to people like myself as lifestyle blocks. They will either only be able to sell them off at a much reduced

price or possibly with some of them not at all. If they are four and a half kilometres from the wind farm I think it is only just that they should receive equivalent compensation.

**CHAIR:** Thank you very much for your attendance today. There may be further questions that the Committee will send to you.

**Mr BROOKS:** I should say one last thing: the English translation of the German articles is by Google and it is sometimes rather baffling.

(The witness withdrew)

## JENNIFER MARY PRICE-JONES, and

**HUMPHREY PRICE-JONES**, Spokesperson, Friends of Crookwell, affirmed and examined:

**Ms PRICE-JONES:** I am an executive member of the Friends of Crookwell Incorporated, but I give evidence today as an independent witness.

**CHAIR:** Thank you very much for your attendance here today. Before the Committee asks you any questions, you have given substantial extra information. If you have any further comment or statement that you would like to make, please do so?

Mrs PRICE-JONES: Thank you for the opportunity to speak today. I would like to put your minds at rest that I do not come here today with any intention to snow any one of you but to express my heartfelt views based on personal experience. The most negative aspect of wind turbine development is the manner in which the public is, in effect, disenfranchised by the current processes of approval. On paper it appears that the public is consulted in a number of ways. Firstly, the developer must undertake a community consultation process as part of its development application. This is nothing short of a charade, simply a tick-the-box exercise to say that it has been done and to satisfy the Department of Planning.

The information presented to the public by developers and their so-called experts is often misleading, inaccurate or disingenuous, and there is no attempt to genuinely consider community concerns. I have tabled documents that specify numerous examples of this. Wind turbine developers all present a similar corporate image, that of integrity and a desire to form close and meaningful liaisons with community—and that is a quote from their public relations document. In reality, nothing could be further from the truth. Andrew Durran, Epuron director, publicly stated that he did not care what communities felt and it did not matter to him whether the community wanted turbines or not. In order to persuade landholders to host wind turbines, developers tell them that their neighbours have already signed up when this is a lie. Seemingly this is common practice.

Wind turbine developers often are flexible with the truth. Epuron's submission to this inquiry—to you, ladies and gentlemen—involves glaring examples of this. When it comes to the actual environmental assessment presented to the Department of Planning, community members are at a distinct disadvantage. These documents can be in excess of 1,000 pages, omit vital information and make sweeping statements. It takes a vast amount of time, energy and expense to adequately read, research and accurately refute the assertions made in these documents, and the community is only given 30 days in which to do so. People like ourselves often have to give up working in order to adequately respond to the environmental assessment within the given time. Even when we do this, our refutations are ignored by the Department of Planning. For example, in my submission regarding the Gullen range development I specified a number of internationally renowned medical specialists whose research has proved that wind turbines do cause a number of negative health impacts for those who live in close proximity to them, yet the Department of Planning chose to simply believe the developer's statement that there is no evidence of negative health impacts. I table the list of medical research papers for you.

When my husband and Mr Maurice Newman met with the current Minister for Planning she assured them that our community concerns were important and instructed planning officers to take them into account when assessing the Crookwell 2 modification application. There is no evidence that this occurred as the development was approved with no changes to accommodate any community concerns. The problem is that these environmental assessments are not closely scrutinised by the Department of Planning. We can only wonder why. In evidence given to this inquiry by Ms Stone of the Department of Planning it was stated that the intention of creating precincts was to make these areas more "attractive to investors". She also stated that precinct committees would serve to educate the community in regard to the importance of the area for renewable energy production. By that I take it we are to be told how lucky we are that we can have turbines on our boundaries. It is of great concern to residents such as myself that these committees will simply present communities with spin and take as little notice of heartfelt community concerns as the current Department of Planning officers.

People like to think that there is great community cohesion in the bush. From the time a wind turbine development is even mooted for an area the tension is palpable. Neighbours become mistrustful of neighbours. Social cohesion is destroyed. People feel helpless to protect what they love, and clinical depression is often the

result. In essence, developers create mistrust in the community. There is no code of conduct that developers have to follow. The Department of Planning does not carefully analyse wind turbine development applications, but simply accepts what developers state, despite submissions to the contrary, and with critical infrastructure legislation community members cannot appeal on merit against such developments.

We are left without recourse, without a voice—second-class rural citizens whose amenity can be sacrificed to assuage the conscience of urban voters who want to continue to use their air-conditioners and their clothes dryers without pangs of guilt. Ladies and gentlemen, it is easy for rural residents such as myself to feel that the prevailing attitude is that it is okay for our landscape to be despoiled but heaven help the politician who suggests that wind turbines be constructed off the coastline of New South Wales or in national parks. Urban voters would be up in arms and votes would be lost. I am sure Humphrey would like to make some comment of his own. Thank you, ladies and gentlemen.

Mr PRICE-JONES: I would like to thank the Committee for visiting Kialla and hope that you found it useful and informative and that you got a good view of what it is we are talking about regarding landscape values. I would also like to thank you for allowing me to address the Committee. This inquiry was, in fact, instigated by three members of the executive of the Friends of Crookwell, namely, Dr Formby, Jennifer and myself, and the case was taken up by the Hon. Katrina Hodgkinson, member for Burrinjuck. We are extremely grateful to her and for the work she has done in bringing this about. The request for an inquiry stemmed in great part from a total lack of confidence in the Department of Planning's ability and/or willingness to genuinely assess application developments for wind turbines.

Our concern is not only for ourselves, our neighbours and our immediate area but for the Southern Tablelands generally. I speak about these in deference to the views of the Friends of Crookwell generally. If the hundreds of wind turbines proposed for the Southern Tablelands were ever built, it would have a devastating effect on this iconic and historically important area. It is an area, as far as we are concerned, which is not only historically important to New South Wales. In fact, the top of the range, the Great Dividing Range, has Australia-wide importance. It would change the way in which this area is seen both literally and metaphorically. It would also change the way the area actually sees itself. In other words, we are already in part seen as a dumping ground for things that the Sydney basin does not want. I believe wind turbines fit into that category.

As has been mentioned, the environmental assessments [EAs] presented are voluminous and they are fundamentally flawed. They are demonstrably flawed documents. As you have heard, community consultation is a complete and utter sham. I can give you many, many examples of why this is. Visual experts so-called will attempt to convince people that our landscape is ideally suited to wind turbine development. In fact, one of them told me that our landscape because it was a complex landscape would absorb wind turbines and that the 84 turbines supposedly destined for the Gullen Range would simply become part of the landscape. He was suggesting that 84 structures, each one about as high as the Black Mountain tower in Canberra, painted white with a wing span of 100 metres would simply become part of the landscape. This kind of information is pushed at so-called information days. Most of the information at the information days is also fundamentally flawed.

Wildlife studies are also a sham. The Gullen Range site is rich bird habitat. This is not reflected in the EA. Mitigation for raptors, birds of prey, is absolutely hilarious, or it would be if it were not a serious issue, as far as I am concerned and various other people. The Crookwell II site is a much degraded wildlife habitat but it is situated between two bodies of water, or it used to be when it rained, and they are both of great local importance. It represents a trans-fly zone. This was completely ignored in the EIS that was presented. They did not in any way at all admit that the land between these two particularly important waterfowl habitats would be crossed and crisscrossed by waterfowl. In fact, they said that the habitat around the site was poor waterfowl habitat. It was at that time because we were in the middle of the worst drought ever and there was not any water. A pre-requisite for waterfowl to visit is water.

I firmly believe that the relationship between the Department of Planning and the developer is an extremely unhealthy one and that developers are correct when they say to me and others, "We know this is going ahead and there is nothing you can do about it." That is frequently stated. The department seems to have become a rubber stamp and wind energy has been politicised to such a degree that no objective assessment of wind farm applications is possible, at least by the Department of Planning. In conclusion, I hope that the result of this inquiry, because I have observed how genuine you are in your approach to it, is not more of the same and that little or no notice is taken of it and that we have not all wasted our time writing more submissions and turning up here today. I would like to thank you for your time and your attention.

**CHAIR:** Mrs Price Jones, where did the Minister give those undertakings that you mentioned?

**Mrs PRICE-JONES:** In the Minister's office.

**CHAIR:** As far as you are concerned, there has been no concrete response to those recommendations?

**Mrs PRICE-JONES:** No, not one. The Department of Planning officers admitted that they had been given that directive by the Minister but when you read the Director General's report on the Crookwell II modification approval there is no change to the application whatsoever to accommodate community concerns.

**Mr PRICE-JONES:** I would like to add to that, I have also subsequently written to the Department of Planning asking them to explain to me exactly what notice was taken of the Minister's correspondence with them. I have not received a reply as yet, despite the fact I did this some four weeks ago. I also got in touch with the Minister's office again and explained my dissatisfaction. The Minister's office or the Minister's PA assured me that they would make further contact with the Department of Planning and suggest that my concerns were adequately addressed. We still have not heard anything from the Department of Planning.

But I will pursue them on this matter because it is all part of an established pattern as far as the Department of Planning is concerned. The Department of Planning, as far as I am concerned, does not have the resources at its disposal to make any adequate assessment of these kinds of development applications. I requested the department to send officers out to view sites and they will quite seriously say, "We can't do that. We don't have the staff." They do not have compliance officers enough to look at existing wind turbine developments to see why complaints are being made regarding visual impact, noise, et cetera, let alone looking at the adverse effect that wind turbines have on various other aspects, like wildlife.

**CHAIR:** Mr and Mrs Price Jones, you both obviously have an expertise and interest in raptors and you have discussed the trans-fly zones. We have heard a great deal of varied information. On the one hand we hear some shockers about the amount of bird and bat strike that is occurring. On the other hand, we have heard it depends where the turbines are sited, that there are zones where strikes can occur but otherwise it is vastly overstated. Do you have any proven or scientific evidence that points towards the impact of turbines on bird species?

**Mr PRICE-JONES:** Probably the most current example in Australia is the Woolnorth development in Tasmania, which has killed, according to Roaring Forties who operate it, 11—

**Mrs PRICE-JONES:** I think they are now suggesting it is up to 18.

**Mr PRICE-JONES:** The developer admits to 11 wedge-tail kills. Birds Tasmania, the ornithological society, says that it is 18. Whichever it is, it is a significant dent in the dwindling population of the Tasmanian race of the wedge-tailed eagle.

**CHAIR:** How does that compare with other issues affecting birds, such as poison baits, which is hard to trace, motor vehicle accidents? Many other issues take their toll, one would suggest compared to the wind turbines a far greater toll on those endangered species.

Mr PRICE-JONES: Most wedge-tailed eagle deaths that are recorded are at the hands of man one way or the other. They are hit by cars, they are shot, they are poisoned, they hit overhead power lines, et cetera. In the case of either a local population or in this particular case in Tasmania, any extra kills can of course become important, particularly if we are dealing with a species like the wedge-tail that has a very slow replacement rate. Generally speaking they do not breed until they are five or six years old and then they do not produce a viable young every year. Consequently, killing one wedge-tailed eagle has a much greater impact on either the local population or the population generally than killing one silver gull, for example—unless you happen to be the silver gull, of course it is fairly fatal.

I would not argue that road kill has a greater impact but that in no way justifies killing more by other means. The way out of this, if we are going to build wind turbines at all, and I have my own personal views about that, but if we are the way out is to try to site them where the impact is minimal so that we kill as few birds as possible. Wind turbine developers will always say it does not kill many birds, whichever ones they are talking about. I have just alluded to this fact. It is not necessarily the number of birds it kills, it is the species of

bird it kills. One wedge-tail could equate to hundreds of thousands of starlings, if one wants to look at it in those terms.

**Mrs PRICE-JONES:** It is also interesting to note that if I killed a wedge-tail I would be prosecuted. If a wind turbine company kills a wedge-tail it pays a fine, which is less than you would have to pay as an individual if you killed one.

**Mr PRICE-JONES:** Fines for killing a wedge-tail can be up to \$8,000 for individuals. For wind turbines, in the case of Taralga, from memory, it was \$1,500. It is significantly less than if an individual deliberately killed a wedge-tail.

**The Hon. ROBERT BROWN:** This question is to either or both of you. We have heard from a previous witness, Dr Formby, that he felt some recommendations could be made to the Committee in relation to the inquiry's terms of reference. As you said, you and Dr Formby put the proposition to your local member. What are your views on the terms of reference of this inquiry?

**Mrs PRICE-JONES:** We could send you or mail you the list of terms of reference that we initially wrote, if that would be of any help to you.

**The Hon. ROBERT BROWN:** We would probably already have that, if the local member forwarded it on to us.

**Mrs PRICE-JONES:** Maybe, I do not know.

**The Hon. ROBERT BROWN:** Everyone seems to agree, and it is patently obvious, that wind farms have an impact on the cohesion of communities. You stated you felt it went so far as creating medical problems such as clinical depression within community. I am not being facetious in asking this question. Do you have any suggestions as to how those outcomes could be minimised or eliminated?

Mrs PRICE-JONES: It is my experience that what in fact causes the clinical depression is the overwhelming feeling over a very long period of utter helplessness. You spend hours and much-needed personal financial resources doing a job that as individual we should not have to do. We take hugely supposedly technical, voluminous documents and spend every waking hour for the month we get analysing it, researching it, contacting experts and getting them to send us documents. We do all of that. The Department of Planning should be doing that; I should not be doing that. Even when we do that, it is all for nought.

We initially went to community consultation meetings with the idea that this is the place where we present the developer with our concerns so that they can start to develop mitigation measures. We quickly learnt that that was completely incorrect. There was no attempt to be concerned about how we felt. That is what has to be eradicated. The community has to feel somehow or another, perhaps through the newly formed precinct committees, that they have a direct and meaningful voice in how these applications are assessed, and not just on a huge precinct level. It needs to be on an application-by-application basis, because every area is distinct and different and involves different problems for individuals.

**The Hon. ROBERT BROWN:** Dr Formby also suggested that because of the short time period to respond and because of the size of the environmental assessments, that perhaps inserted into the process somewhere should be an independent expert panel that would take on the assessments.

**Mr PRICE-JONES:** I fully support him in that. There should be an independent review of competence regarding the development applications that are lodged, because one can demonstrate to the officers in the Department of Planning that A is A and B is B and they will simply ignore you. They have ignored concerned people like ourselves for a number of years. I have met with them, I speak to them frequently on the phone, and we email them. They simply ignore anything that they think does not fit in. Let us face it, these things are predetermined, which is why the developer will say it is going ahead and we do not care what you say.

Mrs PRICE-JONES: They quite openly say, "We know it's going ahead. There is nothing you can do about it."

Mr PRICE-JONES: Wind turbine development has been politicised to such a degree that the department has simply become a rubber stamp. I spoke to [Name omitted by resolution of the Committee] at

the Department of Planning about this very matter. He did not deny it. I said, "Is this the worst EA you have ever seen?" He said, "Yes, it would be up there with the worst we have ever seen." Then he added that there was one in Black Springs that was in part almost as bad. So I said, "You okayed that, didn't you?" He replied, "Yes." Where do you go from there? Jennifer was there during that conversation. It is nothing short of a bloody disgrace as far as I am concerned that the developer can present us with 1,200-pages of repetition, fundamentally flawed methodology and is demonstrably so, and the Department of Planning officer admits that it is very bad, but he has seen one almost as bad, but he okayed it.

**CHAIR:** There is an issue with naming people. I suggest you say "the department" rather than name people.

Mr PRICE-JONES: I understand that. I am sorry.

Mrs PRICE-JONES: Thus far today no-one has mentioned the fact that noise studies are done based on what people will hear in their are houses, and sometimes what they hear in their bedroom. What has been point out a number of times to the Department of Planning but no-one takes account of is that this is a farming community. We work outdoors in the paddocks seven days a week, regardless of the weather or the wind strength. We work with turbine noise. As far as I know, no study has been to done with regard to this being an occupational health and safety issue. We know of people who have been fencing near much smaller turbines and who had to abandon the work because of the intensity of the migraine headaches they were suffering. The headaches were the result of the throbbing, pulsating noise of those small turbines. If this is truly a rural inquiry, someone at some point has to recognise that people are not inside their house. We do not spend our time inside our house; we do not come home from the office and go straight inside and then next morning get into our car and drive to the office again. We work outdoors and that is where we will hear most of the noise, and we will hear it most of the day.

The Hon. ROBERT BROWN: Surely the approval documentation calls up noise measurements at external points.

Mrs PRICE-JONES: It does. For example, they are taken near a dwelling.

The Hon. ROBERT BROWN: Not in a paddock?

Mrs PRICE-JONES: No. If we are fencing immediately under a turbine, it could be a kilometre closer.

Mr PRICE-JONES: The issues that have been spoken about here today are all planning issues. For example, the case of how far away turbines should be from dwellings is a planning issue. It should be site specific. For example, five kilometres away from a dwelling may be totally inappropriate in one location, whereas perhaps less intrusive in another location. The same goes for neighbour compensation. If there were any genuine faith in wind turbines as generators of electricity then let us put enough of them somewhere where they will have a minimum effect on landscape values, wildlife and human habitation. No-one that I have spoken to has genuine faith in them.

For example, a spokesman for Origin Energy when asked a question said, "We really don't care whether they are efficient or not; we want the carbon credits because we have interests in gas-fired power stations." That was an added insult to the people who were going to, and are now, living with those wind turbines. This was said front of witnesses. Once again, it is an outrage. It is a question of planning. Let us put them where none of these issues that are causing such angst even crop up. That is a planning problem that I think can be solved. We are not a densely populated country.

**The Hon. RICK COLLESS:** You would have heard the discussion earlier today about the suitability of the Upper Lachlan shire council's development control plan. What are your views on the appropriateness of that plan? Should we look at development control plans on a precinct basis rather than on a shire-wide basis?

Mr PRICE-JONES: I am totally opposed to the concept of precincts as it exists at the moment. They were imposed upon unsuspecting populations. Community groups were not involved in this process; local councils were not involved in the process. It was a decision handed down from above. It is a great infringement upon our democratic rights. For the Labor Party, which in the past has justifiably claimed to be the party of social justice as far as many issues are concerned, this is something that does it no credit whatsoever. As far as I

know, this is the only such dictate that has been imposed upon populations in New South Wales since Federation.

Mrs PRICE-JONES: I refer to the DCP in relation to precincts. It was stated in evidence given by some of the Department of Planning representatives to the hearing in Sydney that they want precinct-based conditions rather than council-by-council DCPs. Call me cynical if you will, but I have a terrible feeling that that might be to get to the lowest common denominator across a very wide area of the State. For example, in the Upper Lachlan DCP for a two-kilometre setback from a tower to a non-host resident. I doubt whether the people organising the precincts would be happy for that distance to be accepted precinct wide. We fought long and hard with our council for them to agree to read all the health documentation and to realise that two kilometres was giving some protection to residents.

The Hon. RICK COLLESS: If we were going to have precinct DCPs imposed by the Department of Planning, they would all be generic and exactly the same. Perhaps we need to look at a site-by-site, specific control plan that the local council could coordinate by involving the local communities, identifying the issues of concern and trying to overcome them. You would end up with a Gullen Range development control plan that would address the specific issues.

Mrs PRICE-JONES: It would give communities some sense of meaningful interaction in what happens.

**The Hon. RICK COLLESS:** I return to the area of birds, in which you are obviously an expert, Mr Price-Jones. What species of birds would be most affected in the Gullen Range area?

Mr PRICE-JONES: The most affected species in our area are birds of prey, because they are the most adversely affected species worldwide. Whenever detailed studies have been done on bird deaths due to wind turbines, eagles, hawks and falcons are overrepresented. Of course, the developer will say, "Why don't they see them and fly around?" That is not necessarily what kills large birds of prey. The tip of the blade has a vortex that will knock a bird out of the air. It does not have to come into contact with the tower or the blade. Some eagles are chopped up by blades because they are not used to something coming out of the air at 200 kilometres an hour and slicing it in half. It feels fairly confident in that environment.

Other problem is that, without going into too much detail, the wedge-tailed eagle population can be divided into three groups: The happily married couple living in a territory; the adult eagles looking for a territory; and the roaming teenage bands. When one eagle is killed another one will move into that territory, which is why Woolnorth has killed so many. When one is dispatched, another comes in and that eagle is dispatched. It is not that the eagles never learn; they do not have time to learn because when they move into the area they are frequently being killed.

The Hon. HELEN WESTWOOD: If I can take you back to the evidence that you gave about your concerns with the application and approval process, I am wondering whether, through your research, you have seen any jurisdiction where you think that process is more democratic or where you think residents' concerns are being addressed? For example, is there any jurisdiction where you have seen the residents' advocate or defender who can play the role you have referred to, Mrs Price-Jones, of interpreting very technical data and then preparing submissions?

Mrs PRICE-JONES: No, I do not know of one. I know that some people in Victoria will say that having a panel system in which they can give evidence application-by-application gives them a chance to actually have their voice heard. There are others who will say, "Yes, and then it is ignored", so that provides difficulties. I can see that in the current political climate no-one is going to take the most sensible road and say, "Okay, listen, we don't know a lot about this kind of energy production, so let's wait a bit. Let's look at this, let's spend some time—and perhaps money—in researching what will be best for the long-term future of New South Wales and put our money into that." I think for the short term wind towers will continue to be built, but I think what must happen is that the planning process must, or I would hope that the recommendation from this Committee will be that it must, take a far more serious and genuine account of the concerns raised by the people who live there and by their councils. They are the people on the ground. They are the people who know what is happening, what is likely to happen to their community and the economics of the area as a result of this industry—and it is an industry—coming in. But I cannot help you by saying, "This is a model that works brilliantly". I wish I could.

Mr PRICE-JONES: I think it gets back to a planning question and where they are put, if it is decided that they should be put anywhere. I would request that the Committee recommend, as Dr Formby did, that there is a moratorium on wind turbine development because it is plain to see from what we have heard today that there are conflicting views as to whether these things are effective in any way at all. Some people would argue that they are not, in which case why are they being built, and why is the social dislocation occurring? I think that this Committee ought to recommend that more be done about that.

The Hon. ROBERT BROWN: Sort of like marine parks?

Mr PRICE-JONES: Yes, and that environmental assessments be revisited and assessed—and these are environmental assessments that have already been accepted by the department being revisited and assessed—by an independent review of competence, not a fully politicised body which seems to okay them. I gave an example of that earlier, I think. I would respectfully ask that the Committee consider those points, the moratorium and the fact that these things ought to be revisited and subject to an independent review of competence.

**CHAIR:** Thank you for your time today and your hospitality yesterday. I am sorry we are completely out of time. You may possibly get some questions sent to you on notice.

Mr PRICE-JONES: Thank you, and we would like to thank the Committee for your time and attention.

(The witnesses withdrew)

(Short adjournment)

## **COLIN PATRICK DOOLEY**, and

## **JOHN EDWARD CARTER**, sworn and examined:

**CHAIR:** Before the Committee asks you questions, if you have any statement you would like to make, please go ahead now.

**Mr CARTER:** Thank you, Mr Chairman. I make a statement on behalf of us both. We thank you for giving us the opportunity to address your inquiry. You have heard and will hear a lot about the effectiveness and effects of wind farms. Colin Dooley and I are different because we represent the only families that have actually lived beside a wind farm in New South Wales for 11 years. Others make conjecture; we have experienced. Our comments are based on actual factual experience. Mr Dooley is two kilometres to the south of the wind farm and I am two kilometres to the north-east of the wind farm, Crookwell 1.

Follow your terms of reference in order, the first is the role of utility scale wind generation. It is my belief and the belief of others who are experts in the field that it is inefficient. We opposed wind farm 1. The first we actually saw of it was a marquee, which was visible about a kilometre and a half from our kitchen window, which was erected for the ceremony for the laying of the first site. We were told it was a trial and there would be no more wind farms in our area. I have had both Peta Seaton and Katrina Hodgkinson separately seek the economics of wind farm 1 under freedom of information—all to no avail. Clearly it is an embarrassment to the Government.

In my daily observation—and I see those wind farms from my kitchen window at breakfast every morning and I have lifetime experience with water windmills on our own property, which we have had for 130 years, and I have been there for 70-odd of them, and we have been told that the wind farm operates at 12 per cent efficiency and I have confidential information in my submission that it will be up to the Committee to decide whether they will allow it to stay—basically there is insufficient wind in this area to run a viable wind farm. A dispassionate analysis of the 11-year performance of Crookwell 1 wind farm would indicate the economic insanity of erecting wind farms in this area. I spoke with Professor Michael Dureau, the chief executive at the Warren Centre at Sydney University, and he said that no Australian wind farm with any landmass between it and the South Pole will ever be profitable. That is why the Woolnorth one of Roaring 40s makes sense and why ours makes no sense at all.

The second point is locating rural wind farms to optimise wind resource use and minimise residential and environmental impacts. We see this as aesthetic vandalism for absolutely no purpose. We made requests to see the independent assessment of the visual impact of Crookwell 2 done by Dennis Williamson. We were not allowed to see it. I love the valley, and I have planted over 40,000 trees over 50 years, and if there was a proven case that the public good was an overriding factor I would have to accept the desecration. However, despite eight years of requests for the results of the Crookwell 1 wind farm trial, they have never been released. Also a lot of the conditions that were placed upon Crookwell 1 have not been overseen and some of them have not been complied with.

Turning to health risk, some of you have probably seen people on television near Ballarat complaining about health troubles. My wife has experienced strange problems with her health. We are in an electronic bubble from Crookwell 2 wind farm. It took our television out. It is still out. We have had to put up a dish and we still cannot get Wollongong. We have to get Imparja, which invariably does not seem to be showing the sport I want to see, and I missed a full Ashes series because of this—and I will never forgive the people responsible. But it gets more serious than this. I am illustrating that we are definitely in an electronic bubble.

My wife has had severe pain, headaches, trouble sleeping. She was diagnosed with polymyalgia rheumatica. She has had to maintain that. They have removed the pain, but she had the vertigo, the numb left finger, the numb left side, the flickering focus and severe headache—I thought she was going to have a stroke very often. Her face would turn scarlet. Then I read on the Internet about wind turbine syndrome. Dr Nina Pierpont in the United States has become the world authority. I checked the list of symptoms and many fitted the ones listed. We contacted Tim Strachan at an energy store at Bondi. I had read of his work on electromagnetic problems. After an interview with my wife, he manufactured a pendant made of metals and crystals, which is meant to interrupt the electromagnetic waves, and it has removed the symptoms. She is sleeping far better than for years, and of course we go to Sydney about twice a month and none of the above symptoms occur when she is at our unit in Sydney.

You would have been made aware yesterday of Colin Dooley's brother-in-law's death from cancer and the horrendous time that he went through. Whether the wind farm contributed to that or not it would be hard to prove, but there is no question that they had great trouble sleeping at night because of the noise. We do not get the noise; we get the electromagnetic bubble. I believe that erecting wind turbines near any dwellings is just crazy and will finish with very large claims for health deterioration. The bushfire risk is also there. It has happened in Europe and, of course, it will happen on a much larger scale should it proceed here. I have a photograph of one on fire in Europe. There are quite a lot of cases, and it could see the southern highlands wiped out if we had another 1965 or 1983 day. I will quickly mention ice throw, blade failure and tower collapse. I find the siting of Crookwell 2 wind farm so close to the busy Crookwell-Goulburn road quite extraordinary.

Looking at the impact of rural wind farms on property values, we are told by developers that there is no impact at all. That has to be about the silliest thing I have ever heard in my life. The Dooley family, to realise full value, would have to subdivide and it has been pointed out to them quite rightly by the planning officer at the Upper Lachlan shire that people cannot put in for a subdivision if they are within two kilometres of a wind tower. Of course, they have them right around. To suggest that it has no effect on the value of the place is real Groucho Marx stuff, but it got worse. An officer from the development company approached a Goulburn valuer and I am informed that he was told \$600 today would be a suitable value. Well, \$1,800 is the going rate without wind farms. I am absolutely disgusted, along with a lot of other people, that the Dooley family, who have been there for 160 years, should be surrounded by wind towers.

In relation to mechanisms for encouraging local ownership and control of wind technology I say again that no sane person would put money into wind technology away from the Southern Ocean in Australia. To quote Bob Carr, we could cover all of New South Wales with wind farms, kill all the kookaburras, and still not generate 10 per cent of our power needs. To quote Mitch Hook, to equal the output of one coal-fired power station we would have to erect a wind turbine every 200 metres on the road between Melbourne and Sydney. It does not make any sense unless the Government subsidises. The potential impact of energy generated by rural wind farms in relation to the Australian Government's proposed renewable energy target will be negligible, as I have said.

We get to number 6, "any other relevant matters". Earlier speakers have been somewhat critical of the Department of Planning. I think they have been extraordinarily restrained. I was chairman of the New South Wales Meat Authority and I was on the senior executive service in New South Wales for 10 years. I know how to run a department. I can tell you that that Department of Planning is either incompetent or corrupted, and I say that advisedly. We have constantly asked questions. We have been asked to make comments at various dos. We have made our comments, we have written in. I have not had one response to any of those questions until the end when I get a letter from the acting director of the Department of Planning telling us that Crookwell II will proceed, the department having looked at all the submissions. My response was somewhat short and to the point. I said that I would be preparing a case to take to the ICAC, as simple as that.

There has been too much money given to councils. I was in the room in Crookwell back in 1998 when I was speaking against the erection of Crookwell Wind Farm I. I said, "What happens when this reaches the theoretical 20 year life span? Who is going to take the wind towers down?" Oh, nobody had thought about that one. Of course, in America they had old rusty things spinning, falling over and all sorts of things round the place. I said, "I think it should be the responsibility of the people who are putting it up and I would be quite happy to work with the manager of the then shire to draft a clause as a condition of licence". I have had a lot to do with conditions of licences. Any abattoir operator in New South Wales will tell you so. I had 440 successful prosecutions. Lo and behold, the shire manager said, "No, no, no, no. The representative of the company and I will draft it." Of course, the draft was something quite meaningless. So anything that has been said that is critical of the Department of Planning I believe to have been understated. I will be pursuing that matter in another house of review. Thank you.

CHAIR: Thank you, Mr. Carter. Mr. Dooley?

**Mr DOOLEY:** Thank you very much for allowing me time to speak. I am only going to speak on the issues regarding the Elmgrove property. The three owners are family owners—myself, another brother and sister, Rose Anable, who lives on the property. She is an aged pensioner and not in very good health. One of her daughters is only in her early 30s. She is on a disability pension. The doctors told her she had bones of a person nearly 70 years old. Firstly, Elmgrove, as you saw yesterday afternoon, is situated in a beautiful valley with high hills, ridges, on both sides. If this Crookwell II wind farm goes ahead, the number of turbines including the

turbines that are already there with Crookwell I will amount to 23 turbines ranging from 600 metres to  $1\frac{1}{2}$  kilometres from the residence. Some of these turbines—I have copies of maps if anyone would like to have a look at them—the one on the southern side will be built virtually right up against the boundary fence. The other one on what is known as Monumental Hill on the western side is not much further away.

When Gamesa, the first developers, were doing the EIS, we said that they were not coming on the property. We had a big doing with Crookwell I. They were supposed to come back, fix the TV and up along the boundary fence sow trees to try to screen the thing out. The TV, now all you can see is snow on it. The noise coming down the valley sounds like it is coming out the end of a funnel. On a frosty night you can hear it for miles. They were trying to con us—I call it conning—into working with them. We refused. They kept going on about the noise issue and we said, "Right, we will allow you to put a noise monitor on the property to the southern side of the house to measure this proposed Crookwell II but we also want one on the northern side of the house to measure the noise coming from Crookwell I." The wind farm developers refused to do it. The first noise monitor they put there for Crookwell I was on the southern side of the house on the opposite side to where the wind turbines are and it was put in behind a big elm tree. Offhand, I think it showed 32 on the noise decibels or whatever they are.

They were trying to negotiate with us. We were dealing through our solicitors. There were letters, private letters, going to the wind farmers. These were supposed to be private letters. At a later stage they were going to have submissions. Lo and behold, they never called for submissions. The first thing that came out in the EIS, if anyone cared to look at them, are all our private letters between our solicitor and the wind farm developers there for the public to see, just private letters. I think that is a disgrace. Then I tried to get the local council to submit a submission on our behalf regarding the noise and everything else, the amount of turbines being so close to the homestead. They would not do it.

The fire control officer, I had a talk with him. He said, "There will be no aircraft used for water bombing on Elmgrove." We have been spraying for years now on the rough hill that you saw yesterday on the western side of the property. We have been using a helicopter to spray serrated tussok. We tried for years spraying by hand and all we did was waste our money until we got a helicopter in. We have not killed the weeds but we are definitely holding the spread. I was speaking to the council weeds inspector the other day. We both had a look at it and he said, "I think we will get away without it this year and we will keep just chipping and spraying." They would not send a submission, the Upper Lachlan council, regarding the water bombing or as far as the weed spraying is concerned. I would like to now read a letter. We submitted an appeal against the wind farm.

**CHAIR:** Given we are running short of time and the Committee wants to ask you questions, would you table the letter and we will all receive copies of it?

**Mr DOOLEY:** I will, but I will just speak quickly on this. We lodged an appeal. They were going to hold a hearing at Elmgrove. Two days before they pulled out and it was forced into a higher court. Then the wind farm developers and the Department of Planning, it was too big for them, they said they were going to sue us for damages. If we proceeded with it and lost the case they would go us for all costs. The property is just not worth it. We had no option but to withdraw. Quickly I will sum up. That is about all I can say. We would all like to say it is an absolute disgrace.

**CHAIR:** You mentioned specific problems around the wind farm generators in the advent of fire and in relation to fighting fires particularly from the air. Would you like to put that on the record, Mr Dooley?

Mr DOOLEY: I have been fighting fires since about 1950. I have been in all the major fires in the area and a lot of smaller ones. The first time I saw water bombing take place was the big Narrawa fire. I think that was 1983. It was with fixed wing aircraft. I thought what a wonderful thing this is. I have been to a lot of fire scenes and in very rough country. These water planes, when they work, to water bomb a fire they cannot do it from hundreds of feet up. They had to dive down; they have to get low to have any effect. At Golspie in the last four years I have been to two fires. You would see these planes go into it. You would lose sight of them in the smoke. Next thing you would hear the engines roaring as they pull out of it nearly right in front of the mountain. How they were not killed I do not know; it is beyond me. This water bombing, they have to get down low to do it. As far as the weed spraying is concerned, with those turbines there, these weeds are very close to where some of these turbines are situated and the helicopters are reluctant to go there, I think, and I do not think the aviation people would let them do it.

**The Hon. RICK COLLESS:** Mr Carter, in your submission you mentioned the issue of the electromagnetic bubble. Do you have any details or references on how that has been described and by whom?

**Mr CARTER:** It was done by a technician from the actual owner of the wind farm because of the fact that the television had gone. We have got the material and we can supply it to you.

**The Hon. RICK COLLESS:** Thank you, I would like to have a look at that. My other question relates to what you term "ice throw". These blades travelling at 300 kilometres an hour or thereabouts would be subject to ice accumulation when it is very cold. Do you have any figures on how far the ice is thrown when it comes off?

**Mr CARTER:** It can be hundreds of yards and the velocity would be tremendous obviously. This does happen. I have been up in aircraft where the propellers have iced up. It is not a pretty feeling with the ice hitting the fuselage. It is regarded as serious in Europe and it could happen here in this high country in a cold winter. It would not happen every day obviously. I will add to the health one, it is not everybody who is going to be affected by wind turbines but there are a significant number of people who are and they are badly affected.

**The Hon. RICK COLLESS:** The Upper Lachlan Shire Council's development control plan clearly states that wind turbines should not be constructed where they will completely enclose a property. In the case of Elmgrove, that is the case. It is completely surrounded.

**Mr DOOLEY:** It is completely surrounded, yes.

The Hon. RICK COLLESS: Has the Department of Planning been made aware of that?

**Mr DOOLEY:** I have had numerous phone calls to the Department of Planning. Back in the early days they held a workshop in Crookwell. The first morning Jackie Ingham from the Department of Planning, Neville Osborne from the Department of planning and that Williamson who did the view and the assessment, they visited Elmgrove and I pointed that out to them. I think Jackie Ingham left the department.

**CHAIR:** Mr Dooley, you can just mention just "people from the Department of Planning". There is no need to mention names.

**Mr DOOLEY:** I am sorry. I have had many, many calls to another officer there at the Department of Planning. He has answered my questions but that is as far as it goes. I think it was just swept under the carpet. At Elmgrove, it has been pointed out to them that we are completely surrounded. They do not want to know about it.

**The Hon. LYNDA VOLTZ:** You said the original Crookwell I was built 11 years ago. What year was it approved?

Mr CARTER: It was 1996.

The Hon. LYNDA VOLTZ: Was it the Department of Planning that approved it or the local government?

Mr CARTER: No, it was local government approval.

**The Hon. LYNDA VOLTZ:** Crookwell II had original approval in June 2005, is that correct?

Mr CARTER: Yes.

The Hon. LYNDA VOLTZ: Then they have gone back and had a modification to the original approval?

**Mr DOOLEY:** They got 12 months' extension on the three years. Then they got a modification in after that.

**The Hon. LYNDA VOLTZ:** So 10 June 2005 was the original approval and they got an extension on the time to build?

Mr CARTER: Yes.

**The Hon. LYNDA VOLTZ:** Then on 29 June they went back for a modification and reduced it from 55 to 46?

Mr DOOLEY: Yes.

The Hon. LYNDA VOLTZ: Do you know why they went back for that modification?

**Mr DOOLEY:** I do not know why they went back for the modification.

**Mr CARTER:** Could I suggest that they know that Crookwell Wind Farm I is hopelessly uneconomic. They decided they better stick their wind farms a bit higher up in the air to get a bit of wind.

**The Hon. LYNDA VOLTZ:** When they went back they looked at the site and reduced the number. I assume this map is of the 46, is that correct?

Mr DOOLEY: Yes.

**The Hon. LYNDA VOLTZ:** I take it that is the other side of the road to your property, Mr Dooley? The red line is the road.

**Mr DOOLEY:** That is the road.

**The Hon. LYNDA VOLTZ:** The white bit is your property?

Mr DOOLEY: Yes.

**The Hon. LYNDA VOLTZ:** Did they reduce the number of turbines on your side or the other side?

**Mr DOOLEY:** This was a staged wind farm. Only stage one has been approved. Stage two is not shown on this map. Stage three is over near Woodhouse Lee. That is why only 46 are showing.

**The Hon. LYNDA VOLTZ:** I see. Are they building only 46, or are they building more?

**Mr CARTER:** They have some that are subject to further conditions.

**The Hon. LYNDA VOLTZ:** Do you know where they are? Are they closer to your property or further away?

**Mr DOOLEY:** They are included in that 23 that would be surrounding the property.

**The Hon. LYNDA VOLTZ:** I know it is very difficult to do anything once they are approved. Obviously you are in a terrible situation in being surrounded. I suspect that this has been your family land for a long time.

Mr DOOLEY: Since 1840.

**The Hon. LYNDA VOLTZ:** And compensation does not make any difference?

Mr DOOLEY: No.

**The Hon. LYNDA VOLTZ:** Given that things cannot be changed with regard to those approvals, is there anything else that can be done to alleviate your situation?

Mr DOOLEY: I know what I would like to do.

**CHAIR:** It would take more than a chainsaw, I am afraid.

**Mr DOOLEY:** We just want to preserve the heritage of this property, which has been there for generations, for future generations. We have no money; I can guarantee you that. But, as far as we are concerned, if they said to us, "If you agree to all that is going on, we will pay you x dollars," as far as I am concerned, we do not want the dollars. Just get rid of them.

**The Hon. LYNDA VOLTZ:** If we cannot turn back time, is there anything that would alleviate the situation? It will not help you with the whole problem, but it might alleviate some of the issues.

**Mr DOOLEY:** These developers offered to plant some trees around the house. You saw yesterday afternoon the height of the ridges. How they will find a tree high enough to screen them out is beyond me. We do not want any more trees around the house. We do not want to live in a jail. The view is part of the beauty of the place to us. They offered to plant a few trees and to soundproof the dwelling. It is only a fibro house that was built back in the early 1950s. It is just not suitable. We said, "Right, as far as we are concerned, we want a new house with double insulation and \$3 million in compensation."

CHAIR: You are a tough man.

Mr DOOLEY: Not as tough as I would like to be.

**CHAIR:** I appreciate that. I am sure I am correct in saying that the entire committee is sympathetic to your situation. Given what Ms Voltz was alluding to, that you have a massive problem with the reality of the turbines going in, is there a possibility of stepping back and finding a compromise such as, for example, placing a number of the turbines on your property and getting the income given that you are being impacted upon in a very severe way anyway?

**Mr DOOLEY:** Do you mean placing turbines on our property?

CHAIR: Yes.

Mr DOOLEY: They have no hope.

**CHAIR:** But you understand what I am saying?

**Mr DOOLEY:** Yes, I do. There is no way a turbine will be on that property. It would be over my dead body—and a few others.

**Mr CARTER:** We are talking about vast sums of compensation. That money may be coming from people who do not have any money, either. Four companies have talked about constructing a wind farm in our part of the world. The proponents of the Cullerin Range wind farm are unable to pay the subcontractors who have done the work. An investigation of one of the companies found that it had a total paid up capital of \$1,100. These are not the sort of people who can pay \$1 million in compensation. This needs a really good investigation.

**The Hon. ROBERT BROWN:** Mr Carter, you mentioned that as part of all this investigation either you or Mr Dooley asked the council whether Mr Dooley's property could be subdivided and the answer was not if there are wind farms in the vicinity. Did the council explain why subdivision was not possible around wind farms?

**Mr CARTER:** Yes. The plan that the council developed provides that a residence cannot be within two kilometres of a turbine. The actual application was not done by Mr Dooley; it was done by another neighbour and it was knocked back on those grounds.

**The Hon. ROBERT BROWN:** That is fair enough. The DCP already existed. I was trying to draw a long bow by saying that if there was nothing wrong with these things and there are no ill effects, a subdivision would be possible.

Mr CARTER: This is where they have themselves properly caught. Society is being very inconsistent.

**The Hon. HELEN WESTWOOD:** You spoke about when Crookwell 1 was first approved by the previous council under the existing DCP. It was suggested that you had not been notified and that the first you were aware of it was when you saw some evidence of the construction. Is that correct?

Mr CARTER: Yes. We saw evidence of a party to which we had not been invited.

The Hon. HELEN WESTWOOD: The DCP did not require you as neighbours to be notified?

**Mr CARTER:** Not at the time. It was a political marquee.

The Hon. HELEN WESTWOOD: Had it been approved?

**Mr CARTER:** The council was apparently going to approve it.

The Hon. HELEN WESTWOOD: But it had not been approved at that stage?

**Mr CARTER:** No. As we got further on when they had the full approval and they had to start building, we were asked what we would like done in the way of trees being planted and so on.

The Hon. LYNDA VOLTZ: Was the marquee event about local government turning the first sod?

Mr CARTER: No, it was for Michael Egan, who was the Treasurer at the time.

**The Hon. HELEN WESTWOOD:** It was a government event?

**Mr CARTER:** Yes, Michael Egan was there. I have the press release here.

CHAIR: Can you table that?

Mr CARTER: Yes. A retrospective invitation might be nice.

**The Hon. HELEN WESTWOOD:** I am not sure we can recommend that or how effective it would be if we did. It has been suggested to the committee that when wind farms are approved compensation could be offered as a way of addressing concerns. Another suggestion is to purchase affected properties. Has such an approach been made to you?

**Mr DOOLEY:** No approach has ever been made. The property was settled in 1840 and it has never been for sale, and it never will be—full stop.

**CHAIR:** Thank you very much for your time, efforts and presentation. It is valuable. We may forward some questions if we need further information.

(The witnesses withdrew)

# **CHARLES JEFFREYS PRELL**, affirmed and examined:

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

Mr PRELL: I am one of the landholders under the Crookwell 2 wind farm. I thank the committee for the opportunity to speak. I appreciate the contentious nature of this issue and I hope that your deliberations assist in resolving the conflict that exists. I am a family farmer near Crookwell and a neighbour to the last two witnesses. My family has been on the property for 100 years. It is 30 kilometres north of here, just near the Prejar Dam. I understand that the committee was there yesterday. It is a shame I did not know this because I would have been happy to show you around my property as well. I have been involved in this debate from the beginning. I live next to the Crookwell 1 wind farm and have been working for the past 10 years to build a wind farm on my property. This new wind farm is known as Crookwell 2. It is probably the first wind farm to be embroiled in the current controversy.

While I have very serious concerns about climate change, and most particularly the impact that that may have on agricultural land, my primary motivation for building a wind farm on my property is to drought proof it. If I can establish a passive income stream that is not dependent on rainfall then I am in a position to run an economically and therefore an environmentally sustainable farm. I will also establish a viable superannuation scheme for my wife and myself that will allow the farm to be passed on to future generations—either my children or a purchaser—intact as a long-term, sustainable farming operation. I believe that farming as a standalone business in Australia is currently economically, and therefore environmentally unsustainable in the long term. Farmers everywhere are looking to off-farm income to subsidise their farming business. It seems that farmers are not going to be paid to sustain their land in the near future, so I see the offer from wind farm developers for a secure long-term lease payment as a way to achieve this diversification of my income stream.

The effect of the demise of the agricultural profitability of the economy of the Upper Lachlan shire area has by far outweighed any potential advantage from new incoming residents, and that has been over the last 20 years. You may see this as a selfish devil-may-care attitude, but I have empathy with all of my neighbours and the local community and the vast majority of them have the same empathy with me. I would also point out to you that, like most family farmers, the vast majority of my spending is for the local community. The only real exception to this is the interest payments I make to the multinational banking industry, which are considerable and have been rising over the last few years due mainly to the extended dry period we are currently experiencing. This is not a drought; it is an extended dry period. There is a huge difference.

**CHAIR:** Mr Prell, I am aware that we have that information in your written submission. Do you have anything in addition to that?

Mr PRELL: I was assuming the members had not seen this.

**CHAIR:** No, we have that submission and rest assured we have all had a look at it. If there is any other material, otherwise we could ask you questions—and I am only saying that because our time is limited.

Mr PRELL: I could not agree with you more and I am happy to take questions from members of the Committee.

**The Hon. LYNDA VOLTZ:** Crookwell 1 is not your property?

Mr PRELL: No.

**The Hon. LYNDA VOLTZ:** Who owns that property?

**Mr PRELL:** A family that my family sold it to in the 1950s, the Seaman family. I should not mention names apparently, but—

**The Hon. LYNDA VOLTZ:** It just identifies in my mind whose property that was.

**CHAIR:** Mr Prell, you are assuring the Committee that this represents a reliable income stream. We have heard other reports that there is not that level of reliability. Could you describe your dealings with the wind farm proponents and the stages, and whether you have been treated in a transparent manner?

Mr PRELL: I certainly would love to. Negotiations over a complex 30-year agreement with an option, so potentially a 60-year lease agreement, are always going to be complex. I am reasonably well educated, without demeaning anyone else, and I am quite worldly. I have really serious concerns about farmers of my age who do not have either the intellectual capacity or the training to negotiate on a fair basis with wind farm developers. Like all new industries, there tends to be a flood of developers coming into new industries. The wind farm industry in Australia is very new still. There are good developers and bad developers out there I know, because I have spoken to most of the people that are interested in developing wind farms in this area. They have approached me.

Since the Crookwell 1 site was commissioned in 1996 my cousin and I—and we are now dealing with a third landholder, as a group—have always been aware of the potential for a wind farm on our property. I understand the experiences that the Dooley family had with the Crookwell 1 wind farm, which is 10-year-old technology, and I sympathise totally with that, but my point of view would be that new technology, 10 years later, is a lot more efficient and less noisy than the Crookwell 1 wind farm. I think I have demonstrated that. You probably experienced that yesterday when you went to Cullerin.

The negotiations with developers have been extensive. The original documentation that was presented to me and my cousin was very thin. We spent a lot of time, a hell of a lot of energy and a big amount of money in legal fees getting that agreement to a position where we were all happy to sign off on that agreement. We have signed off on it. I started working on this project, as I said in the letter, nearly 10 years ago. Unfortunately, with the political situation at a Federal level there were never going to be any renewable energy resources, whether wind, solar or whatever, under the previous Government. Now that there is a change of government and a change in the political environment on the planet there is a new push for renewable energy of all sorts, not only wind farm, solar, wave technology—you probably know all about those things—and I think that is a great thing. Does that answer your question?

**CHAIR:** Yes, it does, thank you. We heard earlier today about issues of decommissioning, a potential lack of funding and that people in your position could be left with disused wind farms, and so on. Could you perhaps describe to the Committee how you see your situation regarding the overall life cycle of the product?

Mr PRELL: Absolutely. At the end of the day the submission you heard earlier in the day is right. The landholder will be eventually responsible for the cleaning up of that land at the decommissioning stage of the turbines. I know that and I was a sitting councillor, so I understand planning law—not to the point of a planning officer, but reasonably competently. If I am responsible for removing the turbines from my land in 30 years time, or maybe even after five years if they become unviable, I have done extensive investigations—I cannot table those here today, but I can send them to the Committee—and, contrary to the evidence you heard earlier in the day, these turbines are rolled steel, they are full of copper wiring and the investigations I have made are that I will not be paying someone to come and pull those turbines down if I ever get to that situation, but a scrap metal dealer or somebody similar will pay me to come and pull those turbines down. The arrangement we have in our contract, and I am certain this is not breaching any confidentiality, is that the concrete hubs of the turbines would be fractured and covered with a considerable amount of topsoil. Our country is all basalt and granite, as you would have seen yesterday and the basalt and granite is going to last a lot longer than the concrete in the ground, I can guarantee that.

**CHAIR:** In relation to negotiating contracts or leases for turbines on your property, could you expand on your experience dealing with that? You have in some ways answered the question by saying you have had some experience.

**Mr PRELL:** As Mr Carter said, we have actually dealt with three companies over the life of the Crookwell 2 project.

**CHAIR:** Perhaps you could also enlighten the Committee on gag clause situations you might have experienced. There has been a complaint that there is a lack of information and inability to share that information with people.

Mr PRELL: Some of that is commercial-in-confidence, but in relation to the contract I have with the developers we are working with, they are a Spanish company, the current ones. Originally, Eraring Energy Corporation, which is a New South Wales government corporation, were involved and were a 50 per cent shareholder in our deal. As part of the renegotiation of the contract when we moved from one company to another—we have done this renegotiation three times—we have learned as we have gone along over the last nine years. We were probably at the cutting edge of this issue nine years ago. As I said, the original documentation we got was very thin. I got very good legal advice, not so much from wind farm experts but from contract law experts in Sydney, and at the end of the day the developers paid those costs because I just said, "Well, it is not worth signing this contract unless you pay the legal fees", and they were happy to do that. I know that those contracts that we developed pretty much for these companies are now being used as templates for further ongoing negotiations with other farmers. Maybe that is my intellectual property, but because I know the veracity of the document we signed and that it covers the landholders' interests, I am happy for that intellectual property to be used because it is helping these people to become as educated as I am.

**CHAIR:** Mr Dooley is pretty much going to be surrounded. You must have a degree of sympathy for his situation?

Mr PRELL: Yes.

**CHAIR:** Do you perhaps acknowledge that, in terms of the balance of things, he is getting a pretty raw deal? Can you see any way through that? We have had a lot of discussion about social cohesion and neighbours. It must be a difficult situation.

**Mr PRELL:** It is very difficult. Our families have lived together for 100 years—we have been there for 100 years, the Dooley family has been there for nearly 200, and the Carter family has been there for a similar period of time. Despite that, and despite the friction that this issue has caused between our families, I still believe that we have a relationship.

**CHAIR:** Is there no room or can you see any room in the overall negotiations for some sort of compensation for your neighbours?

Mr PRELL: I actually proposed that in the attachment to my presentation. It may be difficult, but I actually think that the solution to this issue about jealousy between people getting money or not is to have a compensation arrangement that takes into account specific issues of individual wind farms. The basis of my presentation to the local council, which I believe is the institution that should be facilitating this, is that a two-kilometre exclusion zone is not based on anything but visual amenity and, as you just heard, you can be 50 metres from a turbine and not see it if a tree is in the right spot or you can be five kilometres from a turbine and you can see it. The two kilometres is a very arbitrary measurement of visual amenity, but we need to find a base for compensating adjoining landholders to wind farms. I am totally in favour of that and I think there is the capacity with wind farm developers, because wind farms actually do work they are profitable businesses, for that commercial arrangement to be made. The hard question is: who facilitates that negotiation? I believe it should be local government.

**The Hon. RICK COLLESS:** Could I ask if you were on the council when the referendum that indicated some 70 per cent support for wind farms was held?

Mr PRELL: I was a sitting councillor on the council. I was actually not re-elected at that election.

**The Hon. RICK COLLESS:** Do you recall what the questions were in that referendum?

**Mr PRELL:** There was only one question and it was, from memory, "Are you in favour of further wind farm development in the Upper Lachlan shire?"

**The Hon. RICK COLLESS:** Were you on the council when the development control plan was produced?

**Mr PRELL:** I was, and I participated quite vigorously in the construction of that document because I thought it was a very important document, but people do not understand the legal level of a development control plan. It is really only a guideline. Nobody needs to comply with a development control plan. If companies are good citizens, they will obviously make attempts to do that, but what I am suggesting is that that development control plan could be the basis for a new way of negotiating with developers.

**The Hon. RICK COLLESS:** As that development control plan was produced, did you agree with the conditions based on 15 times the blade tip height or two kilometres, whichever is the greater?

**Mr PRELL:** That was the compromise. The original proposal was, from memory, 10 times the blade tip height and I think one kilometre. There were other proposals put forward for a five-kilometre exclusion zone. So the two-kilometre 15 times tip height, with a 125-metre turbine I think is about 1.8 kilometres, so the two-kilometre exclusion zone on visual grounds alone was a compromise.

The Hon. RICK COLLESS: Did you feel comfortable with that?

**Mr PRELL:** I always thought that that would be challenged because, as I said, it is totally arbitrary.

**The Hon. RICK COLLESS:** If you, as a councillor, agreed to that development control plan, why would you agree to putting 15 or 16 towers, or whatever it is, within two kilometres of Elmgrove?

**Mr PRELL:** Firstly, you need to understand that the development application for Crookwell 2 wind farm that I am proposing to build was lodged way before the development control plan was constructed, so it was not in existence. Secondly, there have been significant compromises made with both the Dooleys and the Carters in the removal of turbines at all stages of the proposal. Thirdly, as I have sort of intimated, I do not think the two-kilometre exclusion zone can be justified on a visual amenity basis.

**The Hon. RICK COLLESS:** Are you happy with the current planning and approval process in relation to wind farms? As you said a moment ago, yours was probably approved prior to the current process being in place.

Mr PRELL: It was. For your information, when a development application was lodged it was before the councils in this area were amalgamated. Our property straddled two council areas, which is why it was lodged directly with the Department of Planning. That was before the part 3A rule came in. The reason they went to the Department of Planning instead of two local councils was because it straddled two council areas. At that point the only council I recall that had any reference to wind farms in its DCP was the Wingecarribee shire in the Southern Highlands. There was no DCP in the Crookwell shire for wind farms. There were no DCPs in the Mulwaree shire. They were the two council areas that were involved.

**The Hon. RICK COLLESS:** With the part 3A process, do you feel that effectively sidelined any local government or community input into that approval process?

**Mr PRELL:** I know in our individual case, firstly, the EIS, the environmental impact statement, took about 18 months to prepare. Secondly, the development application processing took in the region of 12 months. Thirdly, there was intense consultation, I will call it. There were lots of public meetings and intense communication between the Department of Planning, the developers, including myself, and the local community. That contentious issue applies to all developments, not only wind farms.

**The Hon. RICK COLLESS:** It has been made even worse since this concept of energy precincts has been announced. The Premier has said there is now a four-month approval timeline for these developments. That will make this whole process far more short-term and it will have far less community input.

**The Hon. LYNDA VOLTZ:** Point of order: Mr Prell is here as a resident and developer. He is not here to give a view on a State Government announcement about precincts.

**Mr PRELL:** I was asked for my opinion, but I am happy not to. I personally think the critical infrastructure laws need to be in place because otherwise there would be no highways, there would be nothing anywhere because somebody would object. But the important thing is, and it has been mentioned time and time

again from this seat, the probity of that planning instrument. There needs to be an independent body, which is probably ICAC, overseeing the veracity of the Department of Planning to process these DAs that come in.

**The Hon. RICK COLLESS:** In relation to the concept of a development control plan, whoever prepares it—whether it is the local council or, as has been suggested to us earlier, a planning commission—do you believe that if it came into force that any development then should be approved only if it complies with those local control plans?

Mr PRELL: I am not a planning expert.

The Hon. RICK COLLESS: I understand that. I am asking for your opinion.

Mr PRELL: My opinion is that DCPs are guidelines. If a company, a developer, not only for wind farms but for anything else, cannot comply with the DCP—and it was suggested to your previous hearing, I read the transcript—they should be made to demonstrate why and secondly to demonstrate efforts they would make to ameliorate the non-compliance with the DCP. That is where I was coming from about people within that two kilometres should be compensated—not compensated as in land rights but compensated on an ongoing rental basis. There are two advantages to that. I will be very quick; I know we are short of time. It will take a lot of the contentious issues out of the argument. It would be difficult to prepare because of the lines. I was involved in the Johne's disease plan. I know all about lines. Secondly, if the land adjacent to the wind farm is receiving a passive income stream, surely that is going to increase the capital value of that land.

**The Hon. ROBERT BROWN:** Mr Prell, do you live on your property?

Mr PRELL: I certainly do, my father does and my mother used to.

**The Hon. ROBERT BROWN:** Will any of your family be living near any of these towers? If so, how far away will they be?

**Mr PRELL:** The closest towers to my house and my father's house would be approximately 500 metres, a bit over 500 metres.

**The Hon. ROBERT BROWN:** You are satisfied that with the changing technology they will not affect your amenity?

Mr PRELL: I am more than satisfied with that. I have investigated, I have visited every wind farm in Australia, except the one in Western Australia. I have visited every wind farm in eastern Australia. As I told you, I have been doing this for nine years. I am living on the property, and I am working outside. I want to know exactly what is coming to me, and I do. I can tell you there is a huge difference between Crookwell I technology, the Cullerin technology and the proposed Crookwell II technology in advancement. I am more than happy to accept that I will be able to live in my house, not only inside the house but also around the house, under the conditions that we have with 500 metres distance from the house to the turbines.

**The Hon. ROBERT BROWN:** In your submission you made some comments about the viability of agricultural enterprises. How big is your agricultural enterprise and that of your cousin?

**Mr PRELL:** I currently own 2,000 acres. I sold about 800 acres. When I say I, my family owned 2,000 acres. We sold 1,000 acres, about 800 acres, to a third party who is now a party to the wind farm. That was a complex legal negotiation, but it happened. Under the current dry environment we are living in, 2,000 acres in this area running grazing systems is not viable. We are talking about food production.

**The Hon. ROBERT BROWN:** I take it you did look at any other diversity options, otherwise you would have done so?

Mr PRELL: I am going to look into other options once we get this wind farm established. Without the prospect of the wind farm on my property I would have subdivided it, which is not great for food production, and sold it 5 to 10 years ago. I have been farming all my life. I believe not only the economics but the environmental sustainability of food production in this area, as it was demonstrated through the construction of our local environment plan. The Department of Primary Industry and the Department of Planning were not going to let us do any more subdivision because they want to maintain the food productive capacity of this area.

That is fine, and I agree with that. It is a laudable outcome. But that is a planning outcome. You have to work out the economic way to make that planning outcome happen.

The Hon. ROBERT BROWN: Your current enterprise is sheep and beef?

Mr PRELL: Sheep and cattle grazing.

**The Hon. HELEN WESTWOOD:** Mr Prell, do you have any concerns about the health issues we have heard about today in terms of the noise impact and the effect on residents of the visual impact? We also heard today about vibro acoustic disease, or wind turbine syndrome. Have you investigated that? Do you have any concerns?

Mr PRELL: I have spoken to lots of landholders underneath wind farms. I played rugby for years with the guy who lives under the Cullerin wind farm. I do not know whether you met him. I have concerns if there are demonstrable meaningful effects from wind farms, modern wind farms. As I said, Crookwell I is a bit like the original motor vehicle which had a bloke out the front with a red flag. We do not do that with automobiles anymore. We are in Model T territory now. Within 10 or 15 years wind farm technology—which is the only renewable energy system that really works, otherwise there would not be any wind farms—will advance further. I have investigated it thoroughly. I am convinced that there will be no adverse health effects to me or my family.

**The Hon. HELEN WESTWOOD:** Some of the comments we have heard today suggest that many in the community do not feel the process is democratic. They do not feel they have been heard. As a person who has been elected to local council, you would see that it is important that communities do believe that and there is the sense of being heard and receiving justice.

Mr PRELL: Yes.

**The Hon. HELEN WESTWOOD:** What is your view about the process? Do you think that it is at an optimum now or there are ways it can be improved? If so, how?

**Mr PRELL:** I think it is the way of the world. You people have been sitting here all day and I am the first person to speak to you in any way positive.

**CHAIR:** We have had previous hearings and we are seeking a balance.

Mr PRELL: I am pleased that is the case. Unfortunately, it is also the reality that the silent majority tend to be silent until something goes wrong. I do not pretend to represent the silent majority. But I know that the majority of people that I speak to in this area, which is still a rural area, would love to have a turbine on their property. They are mostly farmers, mostly family farmers and they are absolutely desperate about how they are going to survive into the next generation. I am 52. The average age of farmers in Australia is getting close to 60. There is nobody in my area my age that is still farming full time as a stand-alone operation. At some point in the future the Australian population will become hungry. Then food production will become important.

**CHAIR:** We are running out of time. The issue raised earlier about electro magnetic fields, the impact on neighbours and significant illnesses, do you have any comment on that at all? Is it a figment of imagination or coincidence? There have been assessments about powerlines and other places where electro magnetic fields have correlated with various cancers.

Mr PRELL: The turbines they are proposing to put on my property are two megawatt capacity, the same as the ones you saw at Cullerin. The lines they are putting in to transmit the electricity from the turbines to the substation are 32 kilovolt lines. I acknowledge that if you stand underneath a high voltage transmission line, a 330 kilovolt line, you could light up a fluorescent tube. I have investigated this, as I said, thoroughly. I have no intention of leaving my farm. I will be living there and hopefully my kids will be living there as well. I understand you can get anything you like off the internet to support whatever argument you may propose. Unfortunately, I think a lot of the information in relation to wind farms is mostly, I would suggest, not from Australia. A lot of it is dated. I am not saying all of it is. I have investigated this issue really thoroughly. I have spoken to most of the people in this room about it. I am comfortable that there will not be any adverse health effects not only to me but to my children and their successors.

**CHAIR:** Thank you, Mr Prell. We are running short of time. Thank you for your attendance and your considered submissions, both written and verbal. The Committee secretariat may forward you questions on notice for your response.

Mr PRELL: Thank you, Mr Chairman, for the opportunity to speak.

 $(The\ witness\ withdrew)$ 

# **CHRISTOPHER JOHN CROKER**, sworn and examined:

**CHAIR:** I understand you have not made a written submission. Would you like to make a statement to the committee before questioning?

Mr CROKER: I have a statement here that I would like to submit. I understand that the nature of this debate about wind farm developments in rural New South Wales is contentious and I appreciate the opportunity to be involved in this discussion today. I would like to start by introducing myself as someone who is heavily involved in community organisations in the Upper Lachlan Shire. I am a sheep and cattle grazier and my family has held land in the Golspie area since the 1830s. Throughout the generations our family has been innovative and adapted to change as the need has arisen while still maintaining our land for future generations. Over the past 20 years the cost of agriculture has been escalating at a rate that income has not been able to keep pace with. When an opportunity arises, such as the introduction of another industry using our core asset to provide a stable secondary source of income, government departments should encourage it.

The Golspie area is situated approximately 30 kilometres north east of Crookwell and approximately 20 kilometres north west of Taralga. A group of Golspie graziers have been approached by a wind development company to do wind testing with the prospect of a wind farm in our area. The company approached landholders in and around the proposed area of development and a series of consultations have been held at the local hall with no objections at this stage to the proposal for a wind farm. Some landholders have decided not to participate in the discussions, but they have no objection to the wind farm. We are all well aware of the animosity and divisions in communities due to wind farm proposals and projects. From the outset of this project we insisted on transparency within the group and the company. As far as I am aware, this community group approach is unique to Golspie.

Environmentally our area has had quite a strong past, completing a mass Landcare project with the graziers of Golspie planting more than 40,000 trees. With wind farms established in local areas, alternative management practices could be implemented to achieve sustainable agriculture and ecological benefits. Examples of this are maintaining groundcover, resting paddocks by removing stock and reducing invasive weeds such serrated tussock. Europe and the USA subsidise their farmers. In Australia at the moment, due to the last eight years of drought, we are looked on as Centrelink farmers. At the age of 45, I am the youngest full-time farmer in the Golspie area, with a number of years between me and the next youngest and no younger ones coming back. This is a result of the reduced income that farmers can expect to receive when farming full time and trying to maintain an average size debt.

Rural communities are struggling and the injection of income from new age industries such as renewable energy in the form of wind turbines could entice rural youth back to such areas. The last 25 years have seen a decline in rural and regional Australia. There is nothing to keep our youth because of the lack of opportunities in our communities. The reduced income of regional business due to the rural decline has further hampered youth employment opportunities.

I have listened to the points made by the anti-wind farm lobbyists and I note that a substantial number of them do not seem to rely on agriculture 100 per cent for their income. A lot of wind farm hosts are reliant on the agriculture sector and its uncertain future. The wind farms provide some certainty and flexibility for landholders who benefit from them. These lobbyists obviously have a lack of understanding of what is really happening in the rural sector. I have come forward today to express my opinion, as too often the negative side of the wind farm debate is all that is presented. I thank the committee for inviting me to speak today.

**CHAIR:** Thank you. This question has been asked of a number of people today. The majority of the submissions have communicated anti-wind farm sentiment. An Upper Lachlan Shire referendum indicated that about 70 per cent of residents support wind farms. Do you have any comment to make on this discrepancy?

Mr CROKER: I tend to think that people who are in favour of things are less likely to come forward to put their view to committees like this or to write letters to the paper because it is not their fight. I got involved in this today through discussions with a member of the Legislative Assembly. Our local member, Katrina Hodgkinson, did not return my phone calls, which I do not mind; that is fine. But I note that her submission seems to be based on information that has come from the landscape guardians or whatever you call them. She does not seem to have any opinions from people such as myself.

We have endeavoured to do some wind farm testing in our area as a group. That is what I wanted to put forward to our local member. I am yet to hear back from her. I am sure I will talk to her one day. Ours is done as a group. This is what I believe is unique to our area. We have sat down with Wind Prospect, the prospective company, to endeavour to do testing in the Golspie area, and we have done it as a group. We have said that we would like to keep the fabric of our community together. It was very important to one and all of us in our community that we maintain that. There have been family break-ups and disputes between long-term friends. I have had the same neighbours for generations, and I wish to maintain that relationship. That is why our approach has been put forward as a group. Wind Prospect said that it has never done that way before, but it was happy to work with us. It seems to think it is quite a good way of doing things.

**CHAIR:** When you say a "group", how many farmers are part of the consortium? How big an area of rural properties are we talking about?

Mr CROKER: About 40 farmers.

**CHAIR:** Over what area?

**Mr CROKER:** Approximately 10 square kilometres. Wind Prospect has been clear at all times that even though it is doing the testing in the area not everyone will get wind turbines. That is straight out; some will get them and some will not.

**CHAIR:** Will those who do not have any turbines get any economic benefit?

**Mr CROKER:** We will work that out if the tests prove that wind towers are viable.

**CHAIR:** Are there any landowners in the area or contiguous to it who are strongly against the project?

**Mr CROKER:** No. I have one neighbour on the eastern side of me who said that he did not want to be involved. However, he was quite comfortable for it to go ahead.

The Hon. LYNDA VOLTZ: Are you in the Upper Lachlan Shire?

Mr CROKER: Yes.

**The Hon. RICK COLLESS:** Have you had any discussions with the proponent about the number of turbines that might be put in the area?

Mr CROKER: No.

**The Hon. RICK COLLESS:** Have there been any discussions about setbacks, tower heights and the visual amenity?

**Mr CROKER:** No. At this stage we have an anemometer set up on our farm. The results from that will determine what might happen in the future. We might not have enough wind or we might have too much et cetera.

The Hon. RICK COLLESS: You might have heard my question to another witness about having a site-specific development control plan. Your model would be ideally suited for that type of setup. As a group you would all agree to a setback of such and such, a maximum tower height and so on and you would put that to the developer as the guidelines and that it should work within. If it does not, there would be no approval.

**Mr CROKER:** That is to be decided by our group.

The Hon. RICK COLLESS: Absolutely.

**Mr CROKER:** I do not understand the setback business. I am waiting for our results. However, if I want to have one in my backyard, next to my house, I cannot see why the Government should say no. There might be an abandoned house or something like that—they are becoming more and more popular in rural areas. However, people should consider this carefully.

**The Hon. RICK COLLESS:** You just made the statement that you are happy to have a tower on your back fence or next to your house.

**Mr CROKER:** No, I did not. I said that if I so desired I cannot see why I should be stopped. I probably would not want one 50 yards from my backdoor. But it is my prerogative to have it there.

The Hon. RICK COLLESS: You might desire that, but your neighbours might not. Do you believe that it should be done on an individual property basis, or should there be more comprehensive guidelines for the whole area? As you correctly pointed out, this has not been done before and it has the potential to overcome the social cohesion problems that have been raised today. You would need to get your facts and figures sorted out and agreed to before the first tower went up.

**Mr CROKER:** That is true. I think I am lucky where I live because we have had the same neighbours for so long. We have communicated well for a long time and we all respect each other's opinions. If we can continue to do that, that will make our project so much easier. A lot of communities do not have that luxury. However, that is what we are endeavouring to do.

The Hon. RICK COLLESS: Good luck with it.

The Hon. ROBERT BROWN: I do not know how long you have been in the room, but there was discussion by some of the witnesses that changes should be made to the way assessment is done of all the environmental impacts of wind farms. One suggestion was that because the farmers themselves either do not have the background or knowledge or time to be trying to make these determinations themselves, some sort of commission or independent expert body should be set up so that adequate time and adequate consideration of the technical issues could be put forward to whatever groups there are, whether it be the farming group or the 80 people who live around them. Do you think that would be helpful to your group when you have to make some of these hard decisions?

Mr CROKER: I think there is not enough information out there for people to make reliable business decisions all the time. It is a new development. As time goes on there will be more and more information coming forward, but I honestly believe we need to embrace the technology to learn from it and, unfortunately, some of the bugs that may occur, whether it be noise or whatever, will have to be resolved through using the technology. I believe if something is not done to reduce our greenhouse gases then eventually we will not have to worry about eagles flying into them—they could just be falling out of the sky anyway. Something has to be done and, in saying that, it is a great opportunity for the leaders of our parliaments to come in and help to alleviate the hardship that is happening in rural communities throughout our State. Through drought and economic adversity, our rural communities are dying and I believe this is something that is going to be possibly a help—not the saviour, but a help.

**The Hon. ROBERT BROWN:** As a point of reference for my own information, I take it yours is a mixed grazing operation?

Mr CROKER: Sheep and cattle.

The Hon. ROBERT BROWN: And what size is your enterprise?

Mr CROKER: I have 1,200 acres of my own and another 1,000 acres of my brother's which I manage and lease.

**The Hon. ROBERT BROWN:** Given the current climatic problems, market conditions and cost of input, you believe it is just going to get harder to keep it viable at that size?

Mr CROKER: Absolutely, and at the same time people—I know myself I am guilty of it—tend to run their properties to the max, so you try to eat as much grass as you can possibly get down the animal's throat to increase your production and hope that it rains, and then if you get caught, well, you can have dust going everywhere and your topsoil blowing off and that sort of thing. As I said in my opening statement, with a secondary source of income available, you could be a lot more user friendly on your country.

**The Hon. HELEN WESTWOOD:** Thank you for coming forward today. I found it really interesting to hear your proposal. It is not something that we have heard in any of the evidence we have received to date. It

is wonderful to see communities working together to try to resolve some of the issues that they face. Are you receiving any expert advice in your negotiations with the power company that you are dealing with?

**Mr CROKER:** Not at this stage. At the moment the testing is taking place. Prior to that, with the setting up of licences for testing the wind, we received legal advice on that. That was paid for by the wind company. We nominated our legal advice and they paid the bill.

The Hon. HELEN WESTWOOD: One of the other things we heard today, and other members have referred to it, is the issue of social cohesion and goodwill. Obviously you have that within your group, but other evidence we have heard is that individual property owners are picked up by wind farm companies as they come in. What are you doing to prevent that from happening? Are you confident that you are so united as a local community that no-one will be negotiating individually with the wind farm companies?

Mr CROKER: We are hoping that everyone will stay together as a group. There is no actual formal structure in our group. It was decided by the group that they would like me to be like the liaison between the group and the wind company, so that if there were any messages or questions, for me to email it or whatever because some of the older people did not have access to those sort of things. I accepted that as long as there was another guy that did it with me so that everything remained transparent. It is working quite well at this stage. We just hope to be able to maintain that. There is a certain amount of trust. It is like any sort of business I think, you have to have a certain amount of trust as to who you are dealing with.

**The Hon. HELEN WESTWOOD:** Has the wind farm company said that they will respect the group's wishes? Have they given you a commitment that they are not going to negotiate with individual property owners?

Mr CROKER: Verbally they have, but not in writing.

**CHAIR:** It is continuing a different approach, which is interesting. So you are comfortable in saying there is no commercial-in-confidence negotiation being undertaken individually with any member of the group or any separation or control of communication, it is all going through you to the overall group?

**Mr CROKER:** That is generally the way. There has not been a lot to report. When the anemometer was set up and that sort of thing, people were invited to come and have a look at it being erected. If people wanted to go and have a look at it tomorrow or whatever, I would take them over and show them.

The Hon. RICK COLLESS: How long has it been going?

**Mr CROKER:** The group has been going for approximately two and a half years and the anemometer was set up on 1 May this year.

**CHAIR:** Thank you very much for your attendance. We have your written submission. There may be some further written questions sent your way if anything comes up.

**Mr CROKER:** Thank you very much to the Committee for allowing me to speak.

(The witness withdrew)

**CHAIR:** At the conclusion of today's hearings the Committee is still in evidence-gathering phase. Further hearings will be held in Tamworth on 16 October and in Sydney on 9 November. The preparation of the report will take several months. It is not getting any simpler as we go along with our inquiry. We are hoping that there will be publication by the end of the year. That is our aim, but of course that is a significant task, particularly on our committee staff. When the report is published it will be tabled in the Parliament, and if the Parliament has recessed for the year we have a method of tabling it with the Clerk so that it is then a public document, and all participants will be sent a copy and it will be placed on the web. The Government has to respond in approximately six months' time to that. That is the process of the inquiry. I thank everyone for their participation and attendance here today.

**Dr FORMBY:** Mr Chairman, could I thank you and all the other members of the Committee on behalf of everyone who is here and those who are no longer here for your attention during a very long day.

(The Committee adjourned at 5.40 p.m.)