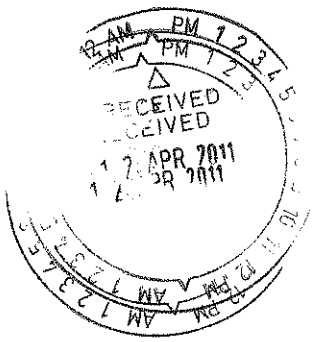

9 April, 2011

Committee Secretary
Senate Standing Committee on Community Affairs
P.O. Box 6100
Canberra
A.C.T. 2600

Dear Secretary,

Re: Submission to the Senate enquiry into the social and economic impact of rural wind farms.

Would you please place the enclosed Submission and its Addendum before the Senate Committee for its consideration.

I have referred therein to the Special Panel report of 2002 into the Portland Wind Energy Project and the Glenelg C2 Amendment. Should copies of this very extensive report be required by your Committee (as I believe is desirable) I advise that my copy was obtained from Planning Panels Victoria through the good offices of the Victorian Department of Planning and Community Development.

Yours faithfully,

Brendon W. Jarrett

A Submission
to the
Senate Enquiry
into the
Social and Economic Impact of Rural Wind farms.

Senators of the Committee:

My principal concerns here are with the treatment of landscape in the planning process, open and honest governance in the planning process, the issue of noise and in particular how these have applied to the Portland Wind Energy Project (PWEP) which is still under construction.

I note that the Committee is not scheduled to visit Portland to see for itself the effect the PWEP has had on the seascapes and coastal landscapes of the three capes comprising the Portland peninsula. This is unfortunate. These once contained some of the highest quality landscapes in the state of Victoria but two of them have been considerably degraded by the PWEP. Worst affected has been Cape Bridgewater, the views towards it from the vicinity of the Bridgewater Lakes and the presence of windmills on the boundary of the National Park fringing the cape.

Wind-powered generators on the cape have reduced its visual scale and now dominate the broad vista which was the second landscape in the state of Victoria to be 'classified' by the National Trust of Australia (Vic.). First was the Wandilogong Valley and ninth was the classification of the three contiguous Portland capes themselves, namely: Capes Grant, Nelson and Bridgewater. The sequence of these classifications may be taken as ranking their importance in the state's landscapes.

The planning process that lead to this debacle was a charade. I refer the committee to the Appendix accompanying this submission for background information. It is basically the submission I presented to the Special Panel set up in 2002 by the Victorian Civil and Administrative Tribunal for Planning Panels Victoria which was charged with making recommendations on the PWEP and Glenelg Ammendment C2 before a permit was issued by the Victorian Minister for Planning. It will be noted that a previous application for a permit to erect a (much smaller) wind farm on Cape Bridgewater had been refused by appeal to a V.C.& A. Tribunal as being an inappropriate development. Previous to this appeal a panel from the Minister's department had recommended to Glenelg Shire that Cape Bridgewater be provided with a Significant Landscape Overlay in the Glenelg Shire Planning Scheme which would give it permanent protection under state planning law. The recalcitrant Shire did nothing,

claiming it did not have the financial means, despite the fact that funding from sources other than rate revenue were not seriously pursued. Under the Shire's planning scheme this left the Trust-classified landscape of Cape Bridgewater unprotected against industrial or other inappropriate development, and sure enough another wind farm proposal for the cape surfaced. It is notable that the Shire's CEO at this time later resigned from that position and worked first as a consultant and then (after the Panel reported) full time for Pacific Hydro Limited (PHY), the new proponent of a wind farm for the cape, it now being one of four wind farms comprising the Portland Wind Energy Project. It is also unfortunate that the Shire's Planning Officer at this time, a protégé of the then CEO, was later subject of a scarifying report by the Victorian Auditor General over his planning practices in Glenelg Shire. The committee may wish to refer to the '*PWEP Panel Report*' Vols. 4.7, 4.14 1 (*et seq*), 4.16.2, 4.17 and '*Planning for Wind Energy: Glenelg Ammendment C2 Merits Consideration*' Vol. 3.

In the meantime, Pacific Hydro had built the Codrington wind farm between Portland and Port Fairy in the Moyne Shire. There was not one objection to this, and understandably so: the siting in the relatively benign landscape was reasonable, local landholders were enthusiastic, the infrastructure was supportive and the structures were insufficient in number (14 windmills and a sub-station) and size to visually subsume the slightly undulating landscape. PHY later admitted that it had constructed the Codrington project to sell the idea of wind farms in the Portland area and the ploy worked. The company conducted tours for state politicians who were duchessed but given little chance to cross the path of doubters. The Premier, Steve Bracks, was enchanted, and from that time forward the PWEP wind farms on Cape Bridgewater and Cape Nelson were effectively done deals although the Premier had never been near them. Neither, of course, had the chairman and managing director of PHY when he announced that the PWEP would incorporate them. (See the Appendix to this submission)

The Environment Effects Statement for the PWEP as a balanced document was not worth the paper it was written on. It came at the end of a public relations blitz of the Portland area by Pacific Hydro which produced shonky 'surveys' of 'public opinion' that relied on rubbish fed by the company to an unsuspecting and gullible public; the usual platitudes regarding 'nimbyism' were trotted out and the rubbery figures on power output ("equivalent to (X)00,000 homes") and CO_2 output reductions, the usual exaggerated claims, positively glowed in public perception. The EES was exhaustive but defective and it was heavily criticised before the Panel. Among other matters, its producers (EDAW / Sinclair Knight Merz) were required by the Panel to modify a number of their photomontages of windmills in the landscapes as being inaccurate in scale and misleading in effect. The Panel considered the proponent had taken insufficient notice of '*natural environment values, coastal values and policies, impacts or harm to landscapes of acknowledged significance, particularly at Cape Bridgewater*' and '*failure to site and design wind turbines in a way that sought to minimise the above*'. Similarly, the Panel believed there had been '*(f)ailings of consultation with the community leading to significant debate*' and division that would take some time to heal.

The Special Panel looking at the project sat for nearly six weeks (five in Portland and about a week in Melbourne). These were the longest hearings ever undertaken by a Victorian planning panel and it produced an extraordinarily comprehensive, thorough and minutely examined review from which the Panel argued well founded and rigorous conclusions that lead to its recommendations regarding the PWEP and the proposed 'Glenelg C2 Amendment' to the local planning scheme on which it also was required to report. In due course it presented its findings and recommendations to the Minister (Mary Delahunty) who made her decision although she too had never seen the capes and their beauty. In the interregnum of seven weeks between the report and the decision, PHY was lobbying the Victorian Government heavily and had access to at least one minister while opponents of the project or those seeking modification of it naively thought the process of assessment had finished with the Panel hearings. The state government had other ideas about that—as became obvious.

Even at best the Panel recognised that the 40 windmills proposed for Cape Bridgewater was excessive and recommended to the Minister that only 22 windmills located in the one cluster be installed on Cape Bridgewater, furthermore that the numbers on Cape Nelson also be reduced. These recommendations were predicated on the establishment of a '*significant*' local manufacture of components. The recommendations went some way towards addressing the concerns that were at the heart of opposition to the project although not nearly far enough, but even they were ignored by the Minister. She allowed the project to proceed with the exception of seven windmills on the tip of Cape Bridgewater; it is obvious that these seven were to PHY dispensable and a ploy—but worth a shot. As built, the wind farm on Cape Bridgewater not only dominates what were previously the outstanding, broad scale scenic views in the area of Bridgewater Lakes but it includes component windmills that are visually intrusive into the Discovery Bay Coastal Park, particularly in the area of 'The Blowholes' and the 'Petrified Forest' where the narrow park edging the Southern Ocean is typically less than 300 metres in width and windmills more than 100 metres in height have been placed less than 100 metres from the park boundary and its constant stream of daily visitors. Noise from these already-rusting windmills is clearly audible in the public car park at The Blowholes over which they loom. (From personal observation it appears that the windmills in this area are experiencing severe buffeting from the turbulent airflow induced by the nearby cliffs. What the ultimate effect of that will be is unknown.)

On Cape Nelson the historic Cape Nelson Lighthouse, formerly dominating in a dramatic landscape, is now overwhelmed by windmills in a landscape that has lost its former 'roaring forties' character and is now reduced to a theme park for windmills.

In South Portland there is a series of windmills in place with more to be erected at Cape Grant. Some of the windmills in these areas are sited considerably less than 2 kilometres from semi-suburban and suburban areas; some appear to be under 1 kilometre distant. I understand that to date there has been no comprehensive professional epidemiological study of people living in these areas to establish a base from which possible future effects—e.g., from noise—on public amenity, health and safety

may be measured; apart, that is, from any study undertaken using the New Zealand Standard 6808:1998 which is too narrow in scope and intent, and in light of current experience now appears outmoded. This has more than local relevance and could be an important case study with wide ramifications for future planning. The so-called 'scientific' investigation of sound emissions from wind-powered generators has not been thorough and comprehensive. Too much reliance has been placed on dB(A) readings while the effect of low frequency noise, its duration and intensity along with intermodulation and sound profiles ('bang, buzz or beat?') have not been properly investigated. Until these uncertain matters are given proper attention it is not possible to make rational decisions about the noise from wind-powered generators, let alone pontificate about it as so many have been doing. More needs to be known before definitive results are available on which proper standards can be based.

It is obvious that this work should be undertaken. By whom and under whose direction is somewhat less obvious; clearly it should *not* be done by the proponents of wind farms. The double standards surrounding the wind farm industry and its supporters are revealing and cause for concern. They have been quick to invoke the so-called 'precautionary principle' in relation to possible anthropomorphic climate change and its uncertainties, but when its comes to health concerns in the communities where their mega-erections operate they are equally quick to deny the possibility of any problems existing there.

In its report on the PWEP the Panel noted problems with regard to the trade-off between likely job loss in the Portland and district tourism industry and possible gains due to construction and manufacture. It concluded that as long as the locally produced manufacture of wind farm components was 50% of the total capital cost, the nett result could be a gain in employment; if less than 50% there could be a nett loss in local employment. The complex generator, gearing and control mechanisms of the windmills comprise about half the total cost of all the components of the PWEP. This in effect means that the access and ground works, the concrete bases, the towers, the nacelles, the rotors and the blades would need to be manufactured in Portland or built on site for there to be any nett job gain in the local area. The project went ahead but the manufacturing has not been realised. The towers, costing about 9% of the total capital cost (according to the EES) have been manufactured in Portland, but blades, at about 12% of the total, although they were being manufactured in the town are now sourced outside Australia. (Because of outdated technology, the requirement for larger sizes and aluminium blades, Vestas is now sourcing its blades from China I believe; ironic really, as Portland hosts an aluminium smelter heavily subsidised by cheap Victorian power from brown coal.) Consequently, the increase in full time job numbers claimed for the PWEP (between 334 and 381 per year for a period of five years) is in reality I believe somewhat less than half the figure projected in the EES. In the case of Cape Bridgewater the Panel (in CB:02) says: '*If a significant inward investment does not appear likely to eventuate, the permit should be refused.*' Well, the significant investment has not appeared, only the towers are made in Portland, and a significant landscape has been sacrificed to the altar of ephemeral jobs.

PHY had claimed it was vital for the company to have windmills on Cape Bridgewater as part of the PWEP as other sites in the district were unsuitable because of poorer wind characteristics. However, it also said that its existing Codrington wind farm was operating as a financially viable entity. The wind regime on the Codrington site is not as dynamic as that at Cape Bridgewater so in fact PHY had alternatives to using the capes for its purpose. Indeed it built a wind farm as part of the PWEP at Yambuck adjoining the Codrington wind farm. Wind power is a cubic function of wind speed and consequently a doubling of wind speed provides a potential eightfold increase in power. The windmills on Cape Bridgewater are of a type that can operate only in wind speeds between 5 knots and 28 knots. Below 5 knots they produce no power but it is a paradox that above 28 knots these windmills have to be turned off, a common occurrence. In short, the output from Bridgewater could be matched or very nearly at other sites in the district and the cape did not need to be sacrificed for a wind farm. PHY was merely cherry picking among sites previously identified as having high energy wind regimes.

Commercial wind energy facilities are excluded from land reserved under the Victorian National Parks Act. This land comprises about 43% of the length of Victoria's coastline and approximately 32% of the area within one kilometre of the coast. Denmark, as the Committee will be aware, has the longest experience of wind farming of any nation. Its planning process for wind farms reflects this. Denmark's land area is very similar to Victoria's and so is its population. But because of its many islands, Denmark's coastline is several times longer than Victoria's: in other words it has more kilometres of coastline per person and more coastline per hectare of land area. But the Danes value their coastal verges far more highly than Australians: despite their proclivity for wind power they value their coasts to the extent that they are not prepared to allow wind-powered generators to sully them. The effect of their planning is to prevent the erection of wind-powered generators anywhere within 3 (three!) kilometres of their coastal waterline: off the coast maybe, but not on it. I visit Denmark often and have conferred personally with members of the Danish Government's national planning department in Copenhagen over wind farm planning policy and know this to be correct—with the one proviso, which I believe is a small wind farm recently erected by the Danish Government for experimental purposes on an island. (See Appendix.)

The findings of the Special Panel on the PWEP have particular relevance to your Committee's proceedings. One aspect of the Panel's task in consideration of the PWEP was that it formed part of an accredited State environmental assessment process, providing the information necessary for the Commonwealth Environment Minister to make an assessment in relation to questions of national environmental significance; this has direct relevance to the Committee's terms of reference. I urge the Committee to give careful consideration to the PWEP Panel's comprehensive and detailed report and findings before arriving at your own conclusions.

In my opinion this Senate Committee should not hesitate to recommend that the Commonwealth regulate planning for wind farms. The two are already inseparably linked; it is, after all,

Commonwealth legislation in the form of Commonwealth Mandatory Renewable Energy Targets (MRERT) that allows wind farm companies to exist through the subsidies paid nation-wide by all Australian electricity users for the 'green energy' mandated to be purchased by power distributors. The introduction of nation-wide planning standards for wind farms would have the effect of limiting the opportunity of local and state governments to politicise the planning process towards their own interests at the expense of the local community's and the wider public's amenity. When open honest governance of planning statutes lapses or becomes of increasingly secondary importance, it then becomes exposed to short cuts and unprincipled compromise and eventually to failure of the system and even the division of families. This happened needlessly at Portland where the public planning process was trashed by government at the expense of community cohesion and, in addition, with the loss of extremely high value landscape for an outcome that could have been achieved on alternative sites of lesser landscape value.

There has to be a better way.

I state that neither I nor any member of my family has any pecuniary interest in supporting or opposing the PWEP in whole or in part. Neither have we received financial support from PHY. This is in contradistinction to numerous submissions made to your Committee, apparently as a result of PHY calling in its IOUs.

In conclusion Senators, I recommend Moyne Shire's submission to the Committee. Moyne Shire now has extensive experience with wind farms and I suggest the thrust of the shire's argument is cogent, accurate and enlightening.

Brendon W. Jarrett
Heathmere.

8 April, 2011.

ADDENDUM TO A SUBMISSION TO THE SENATE ENQUIRY

2011

BY B W JARRETT

A SUBMISSION TO THE PANEL ENQUIRY INTO THE PROPOSED PORTLAND WIND ENERGY PROJECT

Brendon W. Jarrett
Jarrett Road

14 March, 2002

Mr Chairman, Lady and Gentleman of the Panel,

I have previously identified myself as a resident of the Glenelg Shire. However, I believe it may be helpful at this time to try to establish some measure of credibilty before this Panel. I ask you to bear with me while at the very real risk of appearing grossly self-centred I sketch some information regarding my antecededents. A number of my forebears were early residents of Cape Bridgewater and are buried there. Both my wife and I were born in Portland and we operate a farming and forestry operation in this shire but we are also property owners in the Moyne Shire and operate a business there. Apart from working in the UK for a few years I have spent most of my life here. I studied architecture at the University of Melbourne for two years, starting in 1951 having just turned seventeen, where my lecturer and tutor in Second Year Design was the late Sir Roy Grounds and where I was awarded second class honours in History of Architecture and achieved a dismal record in Pure Mathematics. Since that time I have been principally engaged in farming sheep and beef although I have retained a lifelong interest in architecture and its practice, occasionally and for the fun of it designing for friends and others. I was a foundation member of the Portland Branch of the National Trust when it was established in the early 1970s and served for some time as branch chairman in the late 1970s and early 1980s. In 1975 I wrote a monograph titled *The Steam Packet Hotel Project, Portland* which was published by the City of Portland Council. I wrote the chapter on Portland for the National Trust's publication *Historic Places of Australia* which was published in two volumes in 1978 and 1979. Around this time I was one of the three members of the branch who were principally involved in producing the citation for the Three Capes Landscape Classification (Capes Grant, Nelson and Bridgewater) for the Trust. I understand that another of the three branch members, Chris Smyth, who no longer lives in Portland, is to appear at these hearings. I believe the Bridgewater Lakes landscape was only the second landscape to be classified in Victoria by the Trust and the Three Capes Classification was the ninth. Later I acted as project manager for the honorary National Trust architects involved in the re-roofing and restoration of the old Steam Packet Inn in Bentinck Street, and again for the National Trust in the restoration of the old St. Peters Church at Lower Cape Bridgewater and its adaptation as holiday accomodation, this last in a very much 'hands-on' capacity. I have been and remain a member of Glenelg Shire Council's Heritage Advisory Committee since its inception in the 1980s. The report I prepared and presented to Council in 1986 on the deteriorating condition of Portland's 1858 lifeboat resulted in the establishment of Council's Maritime Heritage Advisory Committee of which I am also a foundation member. This led eventually to the building of the Portland Maritime Information Centre on the foreshore which was opened in 1998. I was closely involved with this project in an advisory capacity from its inception and wrote most of the architectural brief for it. None of this activity has been for financial return. For my sins I was honoured in 1999 by the presentation of Citizen of the Year Award by Glenelg Shire Council—possibly to its subsequent regret. I have been vice-Chairman of the Maritime Museum of Victoria for the past three years. In 1984 in celebration of Portland's bi-centenary I co-authored a book on colonial recipes and Portland history which was favourably reviewed in the Melbourne press. Recently I have been writing a monograph on the so-called 'petrified forest' at Cape Bridgewater in consultation with Dr Henry Hudson of Queenscliffe, Dr Eric Bird of Melbourne University and Professor John Sherwood of Deakin University. I have visited Denmark, where my son is an architect, five times—three times in the last six years—and am familiar with what the Danes refer to as "wind parks". I have travelled extensively in the United Kingdom and continental Europe. I have also visited Sri Lanka, Egypt (twice), the Canary islands and South Africa.
And that, I think, is quite enough of that. I happily turn to other matters.

The objectivity of Environment Effects Statements.

The Environment EffectsStatement produced by the proponent of a commercial scheme will not be the unbiased document that others might wish it to be. By the time the EES is produced, somewhat late in the planning process, the proponent of the project (whatever it may be) has made substantial investment into the scheme and for the proponent the EES is merely another bureaucratic impediment that must be overcome before the scheme can be realised. Under these circumstances, where capital, profits and

careers are on the line, it may very well be expected that the EES will reflect the goals of the proponent by emphasising benefit to the community and minimising disadvantage. Consultants engaged in preparing an EES are themselves vulnerable and under great pressure. They are dependent on the perception of clients as to whether they have delivered the client's required outcome. Those who do not do so put their possibilities of future work at risk. The saying that "he who pays the piper calls the tune" comes readily to mind in this regard.

It is unlikely that consultants would risk their professional reputations knowingly by producing an EES that could not be defended. Nevertheless, the assumptions, analyses and judgements made by those preparing the EES will inevitably support the favourable end of the defensible range and so spin the result towards the desired outcome. In an EES sins of omission are rather less visible than those of comission but they may play an important part in obtaining the proponent's desired end result.

It might be argued that an EES is unlikely to be biased because of the public scrutiny and government assessment it will be exposed to, but the process of preparation of an EES is in the hands and timing of the proponent who is able to control much of the input to it and to present a solid and well-organised defensive front. This generally is in contradistinction to the critic who in contention of the EES, indeed in opposition to the project, has less time and fewer resources to draw upon and is usually obliged to act as an individual who is necessarily limited to one or at most a small range of matters.

Beder[1], an Associate Professor and Head of Science and Technology Studies at the University of Woolongong, has argued that the production of EESs would be more transparent if consultants were more independent and suggests that this could be achieved if they were not hired by the proponents but were chosen, after community consultation and tender, by an independent panel. Proponents would still pay the consultants but if the EES resulted in the abandonment of a project the consultants would not stand to lose the opportunity for further work. It is further argued that consultants under such circumstances would be more inclined to discuss uncertainties and unknowns. "Nevertheless," says Beder, "I have found both developers and EIS consultants opposed to such a scheme because it suits them and the cosy relationship they have with each other."

I append the article and a list of Beder's extensive published material. (Appendix A.) [Not included 8.4.2011]

Flaws in the Portland Wind Energy EES.

I shall argue before this panel that the community consultation undertaken as part of the EES process was limited and closely directed towards a preconceived outcome, that the EES prepared for the Portland Wind Energy Project is far from being a transparent document, that it is blatantly biased towards the outcome desired by Pacific Hydro Limited (PHY), that it fails to properly address some key issues and that it neglects others completely.

The EES for the Portland Wind Energy Project is a curiously iterative document. Since the day it announced the project, Pacific Hydro Ltd has been at pains to promote it by all availabe means and it is difficult to determine where the public relations material stops and the EES starts. REHAME, or an organisation with similar purpose, has monitored media outlets for the company and it has not been possible for opinion alternative to that of the company to be expressed even on free-to-air radio without a company spokesperson demanding the opportunity to respond. This happened in regard to the equivalent power output the company claimed for its Codrington project and the matter is relevant to the PWEP. It is also part of a combative pattern. The company mailed its pamphlet "Wind Energy Blue", a somewhat prophetic name, to all households in the Portland/Port Fairy region in December, 2001 and it is from this pamphlet that most people in the region would have obtained their information on the project. (A copy is tabled.) [Not included 8.4.2011] Unfortunately much of the information in it is misleading and provides an inaccurate basis on which to form an opinion. The pamphlet is heavily loaded and makes some remarkable claims that cannot

[1] Beder, Sharon. "Bias and Credibility in Environmental Impact Assessment." *Chain Reaction,* No. 68, February 1993, pp 28-20.

be sustained. For instance, it claims that "global warming has made ten of the last twelve years the hottest on record", that the project will avoid 900,000 tons of greenhouse gasses a year and supply the annual energy needs of 113,000 homes which is "broadly equivalent to a city the size of Geelong". These are all demonstrably inaccurate statements. Furthermore, the so called photomontage printed in the pamphlet of windmills on Cape Nelson shows a mere two windmills (out of a total of thirty-nine according to the EES) and the photomontage of Cape Bridgewater shows not forty windmills but none at all. Pacific Hydro, its consultants and apologists have endeavoured to bolster their position by claiming public support for the project but such support as exists is given simplisticly, being generally founded on highly inaccurate material such as this being cranked out by the firm's publicity machine. I shall return to this a little later but ill-feeling and unpleasantness has been engendered towards the so-called "*chronic objectors and whingers in this town*" (Portland *Observer.* 3 November, 2000. Letter to the Editor from Danny Halstead, Halstead Management Services. Copy appended B) [Not included 8.4.2011] Another letter, one of the most recent, begins:

"*Well think about all the crap that the stupid people who object to wind farms have come up with to try and stop the wind farms. Have a good hard think about what they have said and half of it isn't even true and the rest wouldn't have a clue what they're on about, they have only seen them from a distance or newspaper articles, not close up so they wouldn't have a clue and who are they to make comments like they do. Danger to birds - Only a bird as dumb as the people trying to stop them (the wind farms) would fly into a wind tower.*" (*Observer.* 13 February, 2002. Letter to the Editor from Rene Kohlman. Copy appended C.) [Not inc. 8.4.2011]

And so it goes on for another half a column; you get the idea and cannot take it seriously, but it doesn't help feelings in the communal climate.

Putting aside the mass of material like this, launched onto the unsuspecting public in an attempt to woo opinion in favour of the project regardless of its impact, the EES as produced is also likely to engender unbalanced assessments of the project by unwary readers. I said a few moments ago that it was an iterative document. This is because it is comprised of so many parts that might ostensibly have been expected to be consistent with one another and sequential but which on reading are found to be inconsistent and disjointed. The parts vary substantially between them in their detail. It is probably unnecessary to state that few people have been able to read the whole document including the Supplements. For a start, the cost of the document ($142 including the CD) was a disincentive but the time required to read it, cross reference its parts and refer to sources is perhaps the greater disincentive to achieving a thorough appreciation of the document's standing. It is highly likely that most people who were interested to read the EES were happy enough to read only the Foreword, Preface and perhaps the Summary. Unhappily, that is not enough to give an accurate picture, to reveal the discrepancies that exist between the various parts of the document—the biases it consolidates from the appendices and supplements which are sharpened in the main document, are further skewed in the summary and grossly distorted in the foreword. Nor do the questionable assumptions made in the first place in various of the supplements help. These are not minor matters but substantial flaws.

Significant events prior to the start of the Pacific Hydro EES process.

Following the company's annual meeting on 13 November, 2000, Pacific Hydro Ltd officially announced its intention of establishing four "windfarms" at Yambuk and Capes Grant, Nelson and Bridgewater. PHY's managing director, Jeff Harding, said there would be four sets of 25 turbines which would have a total generating capacity of between 140 and 150 megawatts and supply sufficient energy to power over 100,000 Victorian homes.[2] I shall return to these figures later on.

Some years previously, in October, 1997, a Western Australian company, Energy Equity Corporation, lodged with Glenelg Shire Council three applications for permits to build windfarms at Cape Nelson, Cape Bridgewater and Bridgewater Lakes. In November of that year the Glenelg Shire Council approved all but the Bridgewater Lakes site and issued a determination to grant planning permits for the remainder. As a

[2] Portland *Observer.* 13 November, 2000. (p. 1.)

result numerous objections were received. In the meantime all nine shire councillors personally corresponded with the Minister for Planning and Local Government requesting that no Environment Effects Statement be required for the windfarm permits. In February, 1998, some four weeks after those letters were received, Minister McClellan duly announced that no EES would be produced. The applications for Cape Nelson and Bridgewater Lakes were withdrawn by Energy Equity Corp. in August, 1998, prior to Victorian Civil and Administrative Appeals Tribunal hearings which were held at Portland in September. In January, 1999, the VCAT determined that a permit would not be issued for the remaining project on Cape Bridgewater. It should be noted that the 33 generators proposed were to be between 60 and 72 metres in height. For a comprehensive refereed survey of this matter may I suggest the Panel refers to the paper *"The Answer My Friend is Blowin' in the Wind"...Or is It?* by Louise Hislop, David Mercer and Geoff Westcott, which was published in the*Australian Journal of Environmental Management*, Vol. 7, June 2000. (This paper is attached as Appendix B.) [Not inc. 8.4.2011]

Soon after Energy Equity Corporation (referred to hereafter as EEC) announced their interest in Cape Bridgewater I contacted the company's officer in charge of the project, Mathew Rosser. This is what I had to say about that at the VCAT hearing in October, 1998 and I believe it has relevance today. It starts:

> *I made an appointment and subsequently had a discussion with Mr Mathew Rosser at the Municipal Offices in Portland during the period his firm had made available for public consultation approximately twelve months ago.* [That would have been in late 1997.]
> *During this discussion I told Mr Rosser of my belief that the choice of sites Energy Equity Corporation had selected for a wind farm was unfortunate because of the outstanding landscape values of the three sites and their consequent classification by the National Trust, and that I was sure the establishment of wind farms on them would cause widespread public resistance and ill-feeling. His response was that the generator towers and associated equipment were minimally intrusive and would, in fact, enhance tourist numbers because of their interest to the public. We agreed to differ.*

(I might add here that once again the old, hackneyed, denigrating shibboleth of NYMBYism was rolled out by Mr Rosser on this occasion.) My VCAT submission continued:

> *I am of the opinion that Mr Rosser had been wrongly informed by a member of council staff of my perceived antecedents before this meeting, as his initial reaction to my remarks was distinctly hostile. He told me I was opposing the reduction of greenhouse emissions and inferred I was a luddite. I informed him that this was not so, that arguing against alternative power sources was very difficult as it was like arguing against motherhood, but that in my opinion it was not necessary to destroy the visual appeal of outstanding landscape in order to use wind power, and that alternatives may be available which would allow for both wind-powered generators and retention of the Bridgewater landscape.*
>
> *I asked Mr Rosser on what basis the wind regime figures he had quoted in published material for the three proposed sites was founded and was told that for Cape Nelson and the Bridgewater Lakes sites the figures had been extrapolated from data collected on the one site at Cape Bridgewater some years previously. I also asked him if any other sites in the Portland area had been considered for power generation. He told me that coastal sites east of Portland did not experience winds of a comparably high energy standard for power generation, a circumstance with which I was well acquainted. He did not mention the coastal areas west of Bridgewater Lakes and when I mentioned them seemed unaware of the high land forming the scarp which runs north-west from the Bridgewater Lakes to Hedditch's Lookout, a distance of some 20 kilometres. This scarp, which exceeds 150 metres height above sea level in numerous places, backs the coastline at a distance of between 2.5 kilometres at Bridgewater Lakes and 4 kilometres at the lookout. Mr Rosser and I arranged to visit sites in the Kentbruck area which were on this escarpment and the meeting took place within the next few days.*
>
> *I showed Mr Rosser land which at that time my family owned, and also indicated the land on adjoining properties owned respectively by CSR and the Johnstone family of Mount Richmond. As I had anticipated, he was non-committal about the suitability of any of the sites for wind-generated power, although he expressed the firm opinion that the lease for a wind-powered generator site would give a considerably better return than that from an equivalent area of pine tree plantation on one of the*

adjoining properties. With regard to establishing wind-powered generators at Kentbruck, Mr Rosser said that due to the longer lead the cost of conducting generated power from Kentbruck to the electricity transformer sub-station sited on the ring road at Portland would be higher than that from Bridgewater, even though the existing power poles were to be used for the purpose. I was not in a position to debate this as costs for transmission were not forthcoming but I believe it could reasonably be argued that the additional costs due to distance from the sub-station are minuscule compared to the capital cost of the generators themselves.
In addition to the comparable wind regime in the area, I believe Kentbruck has a number of advantages for the siting of wind-powered generators. These are:

- *The area available for further development of wind power in the Kentbruck coastal region mentioned above could lead to reduced transmission costs in comparison with the limited opportunities for any further development at Cape Bridgewater. In other words, there would be economies of scale.*
- *Farms in the area are broad scale (as compared with most of the Bridgewater area) and houses at Kentbruck which are close to suitable sites are rare, if not entirely absent.*
- *Wind-powered generators could readily be sited so they would not intrude into areas with high landscape values when viewed from public roads and highways.*
- *Maintainance of power generating structures would be reduced due to less salt damage.*
- *Optimal use could be made of the summer wind regime which comprises a high proportion of south-easterlies from which generators sited on the west coast of Cape Bridgewater are comparitively sheltered.*

During the course of my discussions with Mr Rosser I pointed out the difficulty I faced while opposing the sites EEC had proposed at Bridgewater and suggesting the Kentbruck sites as an alternative, when in fact I was doing so as a landholder in the Kentbruck area. By advancing such an argument I was left open to the accusation, however untrue, of proposing an alternative because of pecuniary self-interest. However, this can no longer be the case as the property recently has been leased for long term timber production, and legal opinion suggests I would not benefit from a sub-lease for power production.

In conclusion, I note that EEC is a commercial organisation which is driven by profit. There is, of course, nothing wrong with this. Indeed it is vital to the success of the company. But it dresses its commercial argument in green while at the same time being prepared to sacrifice public amenity and significant landscape to its own business success. I believe it has neglected a proper and thoroughgoing investigation of alternative solutions. To issue a planning permit under these circumstances is, I suggest, contrary to good planning principles and not in the best public interest

Brendon W. Jarrett
Heathmere
11 October, 1998

Over the period of these same EEC hearings I spoke to Mr Paul Garnet Hutchinson who was an expert witness for the objectors. He told me he recently had arranged leases with landowners for a wind farm at Lake Bonney in South Australia but in getting the project up was having difficulty with South Australian energy distributors who were loath to enter into a buying arrangement for power for a term longer than two years, whereas financiers required some surety of energy sales over a longer period. He was, however, confident that the project would go ahead. (I understand that in fact this was the case and the Lake Bonney project is now proceeding.) He also told me that he had had sophisticated wind monitoring equipment on site for three months near the Swan Lake road at Mount Richmond (Kentbruck) and believed from his experience that the wind regime and its profile there would be better than that on Cape Bridgewater. I asked him why this would be so and he gave two reasons: first, that any generators on Cape Bridgewater would be in a wind profile that was exposed to severe turbulence caused by the high and almost vertical profile of the cliffs of the cape whereas the land around the Swan Lake site area he had tested was exposed but comparitively smooth in form and as a result produced a smoother wind profile; second, that a wind farm on the west side of Cape Bridgewater, such as EEC proposed, would be comparatively ineffective in the predominantly south-easterly winds of summer because the generators would be in the wind shadow of the turbulence from the east side of the cape, whereas the Swan Lake site which was on a relatively smooth

land profile was well exposed to winds from the south-east. He said he had no doubt that there was a considerable expanse of country west of the Bridgewater Lakes that would be highly suitable for wind powered generators. Unfortunately, he was not prepared to give all this information to the tribunal as he considered some of it to be "commercial in confidence" at that time.

Some weeks later he wrote to see if I would enter into a leasing agreement with him involving land which my family owns at Kentbruck, a few kilometres to the west of the site he had been monitoring. I was unable to accomodate him as the land had already been leased long term and the lessee, who has the right to sub-lease, was not interested. I speak of this now as I believe circumstances have altered since that time and Mr Hutchinson now would not be unduly concerned about my comments. I hope the Panel has had the experience of seeing this land area and its form from the vantage point of the lookout on Mount Richmond as I suggested in my letter to DoI of 13 January, 2002.

In January, 1999, when the VCAT decision on the EEC project was announced there was, as might be imagined, considerable relief among the nineteen objectors and the thousands of others in the community who supported their belief that Cape Bridgewater should be out of bounds to so-called "wind farms". There was a general feeling among them that sanity had prevailed, that a lot of very hard work had proved worthwhile and would not need to be duplicated as the matter was now cut and dried and would not need to be revisited.

Some hope!

Some twelve months later the *Portland Observer* newspaper (25 February, 2000) carried an article with Alison Sandy's byline headed *Cape windfarm still possibility.* It reported that Pacific Hydro Ltd (I shall refer to the company hereafter by its short stock exchange designation: PHY), which was the proponent of the then currently proposed 14-turbine wind farm at Codrington, was "reopening the case for a wind farm at Cape Bridgewater and is planning to develop a revised design of the Energy Equity plan". PHY's managing director, Jeff Harding, was quoted as saying that the revised design would probably consist of a smaller number of windmills than the Energy Equity proposal. "*It's early days,*" he said, "*But we're having a look at the existing design and having a look at the objections raised about it (and) remembering that it was a small amount of objections... We'll look at making changes that don't affect the economics of the site... The company is confident of getting approval for the Energy Equity wind farm sites following its successful town planning application for the Codrington wind farm.*" There was no mention made on this occasion of wind-powered generators being placed at Yambuk, Cape Grant or Cape Nelson as part of a 'Portland Wind Energy Project.'

I experienced a strong sense of *deja vu* about this whole matter and I'm sure I was not alone in that. It was difficult to understand how anyone could again propose placing generators on Cape Bridgewater when a permit already had been refused by the VCAT for the same sort of development for the same site. I phoned Mr Harding at his office that day to try and find out why this was so and to voice my concern. I asked him why his company was so intent on dissipating the good will it would otherwise have won for its project and who was providing it with such poor advice. (Incidentally, I later found this came, at least in part, from Energy Equity Corporation (EEC) which apparently had learned nothing from its previous experience.) When asked if he had actually seen Cape Bridgewater before his firm announced the Portland Energy Project he replied, "*No.*" When I expressed surprise at this and suggested that it would be reasonable to expect that he at least visit the site prior to an announcement he admitted that I "*might have a point*". I was left with the impression that Mr Harding at that time had an indifferent understanding of planning requirements in the State of Victoria, that someone had seen him coming and, to use a country term, he had been sold a pup.

A couple of days later I met Grant Flynn of PHY by arrangement at Kentbruck to show him, as I had shown EEC some years earlier, some of the areas that Mr Hutchinson had considered of interest and to suggest sites nearby as an alternative to Cape Bridgewater. During this meeting, which took place on 27 February, 2000, Mr Flynn told me that PHY was also looking at sites on Cape Nelson. Curiously, two days later the Portland *Observer* (29 February, 2000) reported that the Cape Nelson location was the subject of interest by

a group known as Primergy. Later, Melbourne's *The Age* (5 April, 2000) reported that detailed studies were under way for that development.

One of the associated matters that came out of PHY's initial February announcement but was not widely recognised was that PHY had bought the Victorian assets of EEC—presumably those assets included its site leasing agreements with landowners at Cape Bridgewater and the wind monitoring data relating to them. Even less widely understood was the fact too that the purchase agreement allows EEC to become an equity holder in PHY if the project goes ahead. This means that EEC, having been denied a permit to erect generators on Cape Bridgewater under its own name in early 1999, is now in 2002, seeking to achieve its aims under the auspices of another company, namely PHY. This agreement was reported through numerous outlets including the *Age* and *Observer* newspapers and Shaw Stockbroking Ltd who quoted the release from PHY which said, "The agreement allows EEC to become an equity participant for those projects that proceed to commercialisation *including the Cape Bridgewater site*." (My italics.) Twelve months after this initial announcement of the revamped Cape Bridgewater proposal, Mr Harding was quoted in the Portland *Observer* (2 February, 2001) denying that EEC had share ownership in Pacific Hydro. "Complete and utter nonsense" were the terms he used. This was disingenuous and he was being too clever by half. Of course EEC had no equity interest in PHY at that time, but nobody had said they did. Under the terms of the agreement EEC will continue to have no equity in PHY until such time as the Portland Wind Energy Project is up and running. Only then will EEC become an equity participant in PHY. And at that time EEC by means of its agreement with PHY will have achieved via the back door what it was denied by the front door in 1999 with the VCAT decision.

Such a result would have a devastating effect on the credibility and future standing of the Panels system as it operates in Victoria and VCAT's Planning Division. So much too for Mr Harding's statement that "the [Cape Bridgewater] project would probably comprise a smaller number of turbines". The outcome would be unfortunate enough even if the schemes proposed by PHY and EEC were of a similar size, but more so because the PHY proposal is from 3.3 to 4.7 times the size of the disallowed EEC proposal of 1998. The current proposal by PHY according to the EES is for 40 Vestas V66 windmills, 100 metres in height and providing 70 Mw of generating capacity as against the very much smaller proposal of EEC for between 25 and 35 windmills, 70 metres in height and providing a mere 15 to 21 Mw of generating capacity.

Glenleg Shire's Mr Wilder was quoted in the Portland *Observer*, 22 November, 2000, as saying in reference to the VCAT decision on EEC,

> "*I don't believe that decision would stand* (now)*...provided* (the PHY proposal) *was significantly different, that proposal wouldn't have any standing.*" [The article went on:] "*Mr Wilder said the planning scheme had changed since the first proposal was made, and the way Pacific Hydro is doing things is much more thorough* (than Energy Equity Corporation)."

Curiously, he said he "*had not seen any plans yet from Pacific Hydro, so could not say how much they differed from the previous proposal.*" (End of quote.)

In the same article PHY's Mr Flynn is quoted as saying that "*specific locations for the wind farms had not yet been chosen, and would be considered in the light of the EES*", which sounds remarkably like putting the cart before the horse. The *Observer* on 24 January, 2001, quoted Mr Flynn as saying that the proposed project was "*very different*" to the project put up by Energy Equity at Cape Bridgewater. "*It's a very different approach*", he said. The article went on: "*He said stakeholders were keen to know exact sizes, amounts and locations of the wind generators, but this could not be decided until community consultation had taken place. He said making those decisions at this point* 'defeats the purpose of community consultation'."

Well, we have had the community consultation, such as it was, and we now know how the PHY proposal for the cape varies from the EEC proposal. Mr Flynn got it right. It is, as he said, "*very different*". It is three to five times bigger and three to five times more intrusive.

In both the case of the PHY and the EEC proposal the generating capacity is, of course, the maximum nominal or rated output of the generator at a given moment. It is not the amount of energy expected to be produced over a year, a month or even a minute, as that will depend on constantly changing wind

conditions. I will return to this a little later. However, it should be well recognised that the visibility of windmills is tied directly to their generating capacity. This is so, of course, because the basic generating capacity of a windmill is directly related to the swept area of its rotor. And the swept area and its height above ground level determine the proportions and size of the windmill structure as a whole, including the length of the rotor blades and the size of the nacelle as well as the height of the tower and its diameter. In the case of wind-powered generators: *Visibility is a function of capacity.*

As a result of a call from Mr Danny Halstead's organisation, which had been instructed by PHY, I met Mr Harding in Portland around the middle of last year. We were able to talk privately over a coffee for about forty-five minutes. As previously, I argued at this meeting to uphold the classified landscape quality of Cape Bridgewater against visual degradation by industrial structures such as windmills. There was a number of matters to emerge from this meeting that to my mind were particularly interesting:

1. Mr Harding said that the existing Codrington project was only marginally economic due to the wind regime there, but it had been set up also to sell the idea of wind power to the community, and so in its relationship to the PWEP it was worthwhile for his company. I must admit here that the grocery retailing idea of "loss leaders" as applied to windfarms is novel in my experience. I was very interested to hear PHY's Mr Roy Adair in his opening address to this hearing on 19 February say that Codrington, on the contrary, was very efficient; more so than Toora. It was not then stated by Mr Harding but it is noteworthy here that the number of windmills at Codrington is 14, compared with the Portland Wind Energy Project's proposal for 100 (40 for Cape Bridgewater alone), and that the nominal capacity of each generator at Codrington is 1.3 Mw compared to 1.75 Mw for the PWEP, an increase in size of more than a third.
2. With regard to landscape Mr Harding said he believed it a better proposition to accept windmills rather than to have the sea level around Cape Bridgewater rise by six feet because of green house gasses. Of course, such a simplistic argument cannot be sustained and it seemed to reveal either a lack of knowledge, the lack of a logical argument, a preparedness to bluster or the belief that others are stupid. I shall return to the subject of atmospheric warming later.
3. Another argument put up by Mr Harding for windmills at Cape Bridgewater concerned the requirement for a minimum number of them to be incorporated in the PWEP in order to ensure that a local manufacturing industry based on windmills could be sustained. He said that PHY needed to be able to see 300 generators in prospect of construction before it would be attractive for a manufacturing industry to establish. Since then PHY's Mr Adair (at the Ammendment C2 hearing) has provided the panel with a more refined estimate of numbers but the EES, Supplemental Volume C, *Socio-Economics and Tourism* states (p. 23) that PHY has a "commitment to continue with a minimum of 100 wind energy sets per annum for five years..." and (p. 25), "Pacific Hydro anticipates that there is scope for a minimum export industry based on their projection of some 50 wind generators per annum for five years", which suggests that an export market of 50% is required for production to proceed. There is considerable disparity between all these figures and the EES is not able to make a convincing case for reliance on and the critical presence of the windmills at Cape Bridgewater to a production industry in Portland. The nub of the matter here is that the EES is limited in its outlook, considering only those windmills proposed by PHY without giving adequate attention to alternative siting of windmills in the Portland area or to those proposed for parts of this state like Toora and Ararat, nor to other places such as the SE of South Australia where, for one instance among numerous others, at Lake Bonney it is proposed to erect 60 windmills. The establishment of a windmill manufacturing industry in Portland cannot with reason be predicated on Cape Bridgewater. It appears obvious that to ensure economies of scale a more widely based demand than that of the PWEP will be required, as shown by the figures quoted above and from the EES, and any manufacturing industry must incorporate projects from outside those limits if it is to succeed. As I understand the situation a representative of Keppel Prince Engineering is to appear before the Panel during these hearings. No doubt the Panel will pursue the matter of industry sustainability at that time. Could I suggest that the matter of sourcing work outside the PWEP might be followed up on that occasion?

My discussion with Mr Harding was wide ranging and entirely amicable. Although we disagreed about certain portions of his project there was agreement on some other matters. I was able to assure him before leaving that from my point of view our time together had not been wasted as it is always useful to know who you are up against. In this he agreed so, at the very least, we had that it common.

(At the Panel hearing into the Glenelg Planning Scheme Ammendment C2 in September, 2001, the Shire through its Planning Officer, Mr Wilder [later subject of an scarifying report from the Victorian Auditor General on his planning practices. 8.4.2011] said that the EES for the PWEP was not instigated by Council. Technically and in a formal sense this might have been so, but in effect it was instigated by Council when Council requested the minister to call the matter in knowing full well that an EES would be required in that case. In November, 2000, Glenelg Shire Council agreed *in camera* to make this request to the minister but not to make it public. A few weeks later Moyne Shire also decided to ask the minister to call in the Yambuk proposal and, to its credit, it made the decision in open council. It was only when journalists from the Warrnambool *Standard* picked up the matter from Moyne Shire's minutes of meeting and queried their confreres at the Portland *Observer* about the position of the permits for Capes Grant, Nelson and Bridgewater that the ploy by Glenelg was uncovered. The specious explanation later given by the Shire for keeping the matter secret was that Moyne Shire Council had not yet made its decision and, "*We didn't want to preempt what Moyne had decided, which they hadn't decided at the time.*" (*Sic.*) (*Observer.* 15 December, 2000.) Interest in this matter remains in Portland and debate continues about the source for and promotion of the idea of asking the minister to call in the PWEP permits and by this means to circumvent any possibility of the matter being referred to a VCAT. Was it Glenelg Shire Council, its officers or PHY? In the matter of the EEC, Glenelg Shire Council in 1998 asked the Minister *not to require an EES* for the project. This was agreed and the matter ultimately went to a VCAT hearing at which Council's decision to issue a permit was disallowed. In the case of PHY, Council in 2001 changed tack and tried another ploy; this time asking the Minister to call the matter in and circumvent the VCAT. The Minister has again complied with Council's request but this time Council has been required to be involved with an EES and Special Panel hearings before the Minister makes his assessment.

There are few areas of outstanding landscape quality in Glenelg Shire and there are excellent opportunities for windfarms outside them: look at Codrington. It seems to me that Glenelg Shire Council's difficulties with establishing windfarms in the shire could have been relieved quite readily a long time ago by recognising, delineating and protecting its areas of outstanding landscape quality through the application of proper and effective planning precepts; precepts that are widely understood, have been practised for years elsewhere and of which there are many examples. The late great landscape architect and environmental planner Professor Ian L. McHarg, of whom the Panel will be aware, was propounding suitable methodologies by the early 1960s.[3] Glenelg Shire Council, however, seems determined to place windmills on any site of the industry's choice but, as a consequence, creates unnecessary difficulties for people like PHY who find themselves in an expensive and time consuming planning morass that could have been avoided by the provision in the first place of adequate planning directions companies could rely upon. This is done elsewhere: for example, in Denmark.

In my opinion there were some inadequacies in the preliminary steps to the production of the EES for the PWEP. Most were of a relatively minor nature, such as the short time available for comment on the Draft Assesment Guidelines. But there were other more important matters which, I believe, had a bearing on the attitude those undertaking the EES were to take. I table letters I wrote at the time to Sinclair Knight Merz and DoI about my reservations and I thank Bridget Cramphorn of SKM and particularly Mandy Elliot, of Planning Heritage and Building, for her detailed response to my queries and doubts. I table her very helpful letter. [Not inc. 8.4.2011] The thrust of my letter had been with regard to:

- the apparently limited spread of interests reflected by those appointed by DoI to the Stakeholder Reference Group, and similarly
- the lack of expertise in landscape architecture and environmental planning as compared to the weighting towards industrial development in the Agency Contact Group.

In response to her letter I wrote to Ms Elliot again on 23 January, 2001, to express my doubts about establishing a balance between the interests of landscape and industry through the consultative and EES processes. I also asked for elucidation of the situation that was likely to pertain (and I quote from the letter) "*if and when Pacific Hydro threatens government that it cannot / will not proceed with the project because it is 'uneconomic' without generators at Cape Bridgewater. (This has already been stated by the company.)*

[3] McHarg, Ian L. *Design With Nature.* The Natural History Press. New York. (1969.)

My reading of the first paragraph on page nine of the 'Notes' on EES that you forwarded...suggests that this will be very difficult to rebut without access to the detailed costing of the proposal from the proponent's submission, but that, almost certainly, will be claimed by the company as commercial in confidence. I note ... that alternative proposals are required of the proponent and this presumably would have a bearing on the above."

These are difficult questions and in hindsight I realise that Ms Elliot could hardly be expected to answer them in detail. The reply I received from her was that the EES process could be expected to address those questions and I trust she is right. The questions remain pertinent: I believe that the pre-consultative stage of the process was biased towards an industrial outcome due to the lack of balance in the representation of competing views on key groups and that this was exacerbated by the windmill support-at-all-costs attitude taken by Glenelg Shire Council which was itself part of the process.

The consultative process undertaken by Sinclair Knight Merz was little more than a public relations exercise. It was certainly designed to provide a required outcome. SKM attended the Portland Alternative Energy Expo in March, 2001. I would like to table and quote from a letter I wrote to Ms Elliot on 29 March, 2001 about this. (*See section: "First the expo."*) [Not inc. 8.4.2011] The whole exercise was directed towards drumming up support for the project and was heavily subsidised by the Shire and, if not directly, in effect by PHY. Among some other questionable information SKM displayed photo montages of the PWEP that varied, and not just in my opinion, from unrealistic to highly misleading. For instance the photomontage of Cape Bridgewater was a view towards the cape from the beach below the Surf Lifesaving Club building at Bridgewater Bay. Little wonder most of the generators were obscured from that low vantage point. SKM also conducted what they claim was a survey of opinion towards the PWEP and the key issues involved. If it was a survey it was of a self-selected sample and cannot be considered seriously. The questionaires are almost classic examples of how to ask questions in order to get the answer you want. I table them. [Not inc. 4.8.2011]

It will be seen from the first (white) comment sheet that the questions are predicated towards answers that rely on the skewed information presented by SKM and PHY at the exposition. There is no opportunity for the commentator to distinguish support for one aspect of the project but not for another. It is a matter of all or nothing with no room for anything in between; one must be either for the project or against it *in toto*. I suggest here is no possibility of such a weighted survey providing any meaningful or useful conclusion.

The questionnaire that was available to those attending was nearly as poor. Respondents were asked to make choices on the basis of the evidence presented in the displays and to provide answers on the basis of the whole project or nothing. Question 1: "Are you familiar with the PWEP proposal?" is followed with the direction, "If 'No' direct respondent to the display panels and defer questioning." Question 9 is a key question leading to Questions 10, 11, 12 and 13. To answer them requires a reasonably sophisticated knowledge of the basics of landscape design and the concept of proportion and scale, a fairly detailed knowledge of local land forms and sites, and something of the physics of colour. Question 9 however, asks "Have you ever seen a wind turbine in reality?" and then, "If 'No', please have a look at the diagram." Skewed information can hardly be used as the basis for balanced, informed and realistic comment and no conclusions can be seriously drawn from a questionnaire that relies on such flimsy evidence.

The Auspoll survey is also flawed but rather more subtly skewed in that respondees are referred in early questions to the Codrington project as if it were the standard for windfarms and a benchmark for assesment of the PWEP, although there is no indication to them of differences in the scale of the windmills or quality of landscape. The major flaw, however, is once again the PWEP has to be regarded as an indissoluble whole rather than the sum of four separate parts to which varying responses could be made.

The community workshop that I attended in Portland was not much better. I quote from the same letter of March last year to DoI. (Refer to section: *"Secondly, the workshop."*) [Not inc. 8.4.2011] SKM provided much the same information at the workshops as was available at the expo and in my opinion endeavoured to drive attendees down the same path. A significant number, probably a majority, of those present resisted this and voiced opposition to those parts of the project that involved Capes Nelson and Bridgewater. I note in passing that there was a particular reluctance on behalf of SKM to accept that the upland of Cape

Bridgewater had landscape importance in its own right. Although the EES summary of results from the worshop in Portland is probably fair enough in the main, what remains at question is to what degree the negative aspects of the PWEP as expressed by attendees at workshops were taken into consideration by the proponents. The answer to that question is, "*Marginally, at best.*" The ineffectual efforts made to accomodate individual windmills on the capes while maintaining landscape quality have been somewhat akin to fiddling with the placement of deck chairs while ignoring the iceberg.

In summary it can only be said that the overwhelming public support PHY claims for the PWEP as a whole is a chimera; it is just not there. There is little doubt that there is strong support for the concept of wind farms in the shire but that is by no means to say that there is the same depth of support for the erection of windfarms on Capes Nelson and Bridgewater.

I would like now to refer directly to the EES and there is no better place to start than at the begining. Let us refer to Mr Harding's Foreword and how it relates to other parts of the EES. It is an interesting statement that reveals a propensity for gilding the lily that has been evident throughout the press releases and public statements issued by PHY on its wind projects in Victoria. There are no shades of grey to be found here: the first sentence with its claim for "overwhelming community support" is indicative of what is to follow.

To expand on the second paragraph: Mr Adair on the first day of these hearings gave us a breakdown of PHY in which he showed that the American Electric Power Company had an ownership interest in PHY of just under 20% and board representation of one director. Now there are a few things he did not tell us. AEP's interest was through a new shares issue of $[US]10 million in March 1998. At the same time Mark A. Snape, managing director representing AEP Resources Inc.was appointed to the board of PHY and so was a second director, Donald E. Boyd, who was a senior vice-president responsible for Asia-Pacific development in AEP Resources Inc. and who was also a director of CitiPower, the central Melbourne power distributor that AEP acquired in the same year and which has entered into an agreement to purchase all the power produced by the Toora wind powered project. Both men were still directors in the 2000 financial year. AEP is a power generating and distributing company in the United States. It has coal, hydro, gas and wind powered generating plants as well as a 7.1% nuclear capacity. The wind powered generators it owns have been sourced from ENRON and following the collapse of that infamous balloon there is speculation that AEP may be considering the purchase of ENRON's wind generator manufacturing capacity. The largest shareholder in PHY is AMP Nominees Pty Ltd with a nearly 33% holding. AMP Custodial Services Pty Ltd holds over 4.25 million convertible notes in PHY on behalf of the Development Australia Fund so there is a significant public interest outside that of the shareholders. Just how "green" investors may regard a company that is willing to visually contaminate some of the state's best land and seascapes for commercial gain remains to be seen but it must give the so-called "ethical investment" funds cause for reflection.

Mr Harding says that PHY "*remains cognisant of the social and environmental impact of our activities*". Really? I don't think so. The company waves the flag of environmental concern but each side of the flag shows a different colour: on one side green with regard to global warming, on the other black with regard to landscape quality and what McHarg has referred to as the *genius loci* of place, the inventory of values.

Others will speak for Cape Nelson, no doubt, but let me tell you a few things about Cape Bridgewater that you will not find in the EES. When James Grant in the *Lady Nelson*, only 16 metres or 52 feet 6 inches long on the gun deck and with a crew of 11, was about to make the first west to east passage of Bass Strait in late 1800 he made his Australian landfall on the coast south of Mt Gambier. The first significant features he saw were Cape Northumberland followed by the volcanic cones of Mt Gambier and Mt Schanck. As it happened, the next coastal feature was also volcanic: it was Cape Bridgewater. He became embayed on its west side in very light south-easterly weather and had trouble weathering it, but after doing so he could see into Bridgewater Bay. So he put a boat over the side and in company with a couple of crew men and a musket he rowed into the western corner of the bay, near to where thesurf club is today. But he did not land. I think this was for two reasons: first that there were numerous fires along the whole coast which seemed to indicate the presence of people and he wanted to keep clear of any incident that might blot his copy book, and secondly, that there were indications that the weather was about to change in which case he may have had trouble in rejoining the ship. Whatever the reason he must haver been sorely tempted to land because he knew he would be the first European to do so on this unknown stretch of coast. Later he missed the fine

anchorage at Portland and the entrance to Port Phillip too, but then Governor King, himself a sailor, always did say that Grant was a good seaman "*but no navigator beyond the odd trot*". The second person after Grant to take a vessel through Bass Strait was Jonathon Black who, having obtained a sniff of information while in Cape Town, was hot on Grant's heels only three weeks later. In January a Captain Byers, also from Cape Town was himself caught behind Bridgewater in similar fashion to Grant before bouncing around inside the confines of Bass Strait to finally emerge via Banks Strait into the Tasman Sea like a fly from a bottle. Cape Bridgewater is redolent of early Victorian history. Having arrived in Portland in 1834 the Henty brothers had an outstation at Bridgewater Lakes by 1835. Now the EES would have you believe that the pastoral areas on Cape Bridgewater are "highly" or "heavily modified cultural landscape". (pp. 6-9, 6-16.) It describes it as "generally cleared for agricultural purposes" and a "cleared pastoral landscape". Here is what Edward Henty wrote in his dairy on Saturday the 14th of November:

> *Started at sunrise for Cape Bridgewater and Discovery Bay, reached it about 12 a.m.*
> *Wet morning. Land generally very good. 3000 acres of very fine sheep land can be fenced in by running a fence from the bight of Bridgewater bay to the south end of Henty freshwater water Lake which is scarcely a mile to fence and beautiful clear sheep hills very lightly timbered and well covered with Kangaroo grass.*

Anyone knowing anything about sheep would know they dislike and cannot thrive on timbered country. Edward Henty knew sheep and he knew good sheep country when he saw it: after all, he had chased it around the world. And how did he describe the land on Cape Bridgewater in 1835? As "*beautiful clear sheep hills*", that's how, and I emphasis the word "clear". Henty himself underlined beautiful. So Cape Bridgewater has always had a visual openness to its landscape quality and it retains it today: modified, yes, but intrinsically the same. It is an area in which one is always aware of the sea. If you cannot see it you can hear it; if you cannot hear it you can smell it. Indeed, in a heavy SW gale you can almost feel the strength of the sea around.

The proponents put the argument that the Bridgewater upland landform is visually unimportant because it has been modified by road building and the farming practices of 150 years, and that because of this the imposition of a wind farm on it is of little consequence. The argument fails because the landforms, which are the area's attraction, are still intrinsically similar to those of 1835. Even if one accepted the proponent's assessment of "heavy cultural modification", and I do not, the assumption by the proponent is that modified cultural landscapes cannot retain high landscape values. This is manifestly incorrect. It would exclude, for instance, some of Europe's finest views. However, if in those landscapes you place buildings or structures that are out of scale, context and character with them, that is another matter entirely.

The EES refers time after time to "remnant" vegetation when referring to coastal and agricultural landscape and even refers to "landscape predominantly cleared of remnant vegetation" although how that can be is not explained. "Remnant", according to the OED, means "surviving scrap" or "the little that remains". In the context of this EES it is a weasel word. It suggests that the coastal vegetation is nothing more than a clapped out mess, but that too is wrong. Fragile: yes. Remnant: no. The coastal vegetation here has always been sited in a geographical area that has selected the species and modified the profiles and heights of the vegetation growing there to accomodate the vicissitudes of a difficult climate and place. These are not remnants at all, but the great survivors of natural selection which have developed over thousands of years, not just since human occupation, black or white. School children and students from tertiary institutions now come to the cape to see them, to learn and to marvel.

EDAW, in Supplemental Volume B, *Landscape and Visual*, 3.7.5.(a) (p. 44), records, "Along the coast near the Bridgewater Lakes remnant coastal vegetation holds the dune system together." In fact the vegetation along this section of coastline, rather than being "a small remaining quantity" (OED), is now more vigorous than it has ever been and that is probably true of the cliff-top areas of the cape as well. In the late 1800s and early 1900s the land between the lakes and the sea was mostly bare sand[4] and the lakes were threatened with inundation by it until an extensive marram grass planting program was carried out. This

[4] Personal comment made circa 1950 by the late Vic Lightbody who, like his father and grandfather before him, farmed at Bridgewater Lakes.

denudation usually is ascribed to rabbits. Undoubtedly they played a part and so did stock, but one of the earliest travellers along the coast, Surveyor C. J. Tyers, in 1840 described "*sand hills*" that were "*daily encroaching...and increasing in height...many of the trees showing just above the surface.*" We would now ascribe this to the mosaic burning practices of Aborigines which had been established for millenia. It appears that some time after the Aborigines desisted with their fire sticks rabbits and stock took over. Today, firing is not permitted and stock are not run in the coastal park, neither are rabbits the menace they once were. As a result the vegetation along the coast has responded and in many places it is now rampant. (Incidentally, the EES confuses and fails to recognise the difference between a windrow and a windbreak. Some of the "windrows", it says, are "rectilinear"!)

The EES refers to different light conditions as they affect windmill visibility. It is generally agreed that the human eye is unable to distinguish differences between the wavelength or chroma of an object at distances greater than about two kilometres. All colours tend towards blue with distance. So it matters little whether the mill is white or pale blue or, indeed, polka dot. At that distance the eye distinguishes only differences between brightness or luminence and we are all in effect 'colour blind'. It is notable, although the EES signally fails to mention it, that those same changes in light conditions are among the factors that create changes in the way landscape is perceived and consequently to the comprehension and enjoyment of it. The appearance of Cape Bridgewater's upland, a hilly, undulating and broad-acre landscape, a "heavily modified cultural landscape" according to its misdescription in the EES, that landscape is particularly strongly influenced by light and atmospheric conditions. The cape's landscape is strongly idiosyncratic at all times. At evening when the haze of sea mist over the land is back lit by the sun, the paps and dells, ridges and hollows of its landform are distilled to their essence like a Sung dynasty watercolour. When gales create huge seas that storm the cliffs and foam drifts high overhead, the land then takes on another character and the moonah trees and casuarinas are seen to turn their backs on the weather, their leafy umbrellas turned inside out. Varying with the day, the light and the weather, this country has a thousand characters. None of those characters will be unaffected by the imposition of numerous windmills on it, engineered structures that are dreadfully out of scale with the natural surroundings, that introduce strange new elements to the landscape and change perceptions of landform, its size and its content.

I have not spoken of the sea cliffs, of that lifesized geological section through a volcano that is so readily seen on the eastern facade of the cape, complete with tuffs and plug, and the walk-through cave at sea level; of the seal colony that is believed to be the only breeding colony of fur seals on mainland Victoria; of the reason for the Henty's intention to include the south lake inside their Bridgewater fence; why the early settlers constructed the ramps from the cliff tops of the west coast to the basalt platforms below; why one of the paddocks on the south side of the cape is called "The Goldmine"; how one of the seal caves had davits with a boat slung in them; what the iron stakes to be seen in the rocks at the neck of Bridgewater Bay and along its north shore are for; of the wrecks on the west coast, the lives lost and the people buried there; of how the Portland harbour master went to a shipwreck with rockets and breeches bouy in a dray; of how Cape Nelson rather than Cape Bridgewater became the site for a light house; how the wombat was exterminated and what the rabbit did; of a gaol escape by sailing ship; how the present settlement took its form and, had it not been for the National Trust, why it would have extended onto the cape uplands; of the fact that the petrified forest isn't; of early guests and others at the cape's holiday accomodation; of the close settlement of Bridgewater in the 1800s and the ways in which the settlers coped with the problems of farming, with building and with communication; of education, commerce, butter factories and religion; but life is too short and so is the time I have available to me today.

As all of these matters are associated in the mind with the cape and cannot be divorced from considerations of it, so with its landforms: one experiences them as a whole, thinks of them as a whole, recalls them as a whole, as an entity. The EES on the other hand attempts to dissociate the northern portion of the cape from the southern: quite an artificial distinction because the two are indissolubly part of the one locality and what affects the one affects the other. Again, the Main Document of the EES tries to arrive at a quality rating for Cape Bridgewater by dissecting and then evaluating its parts. The attempt is bound to fail because the whole is greater than the sum of its parts and the parts cannot be considered realistically in isolation from one another. Nevertheless, EDAW (Supplemental Vol. B. *Landscape and Visual.* Phase 1. p.10.)recognises that:

"A high degree of visual modification will result if the major components of the development contrast strongly with the existing landscape. In such a situation there is little or no natural screening or integration created by vegetation or topography such as an open plain."

Yet this is precisely the case on much of the upland areas of the cape. If windmills are erected on the cape PHY says it will screen them with vegetation and proposes, moreover, that in conjunction with landowners it will "revegatate" the cape. The proponent has not just one dilemma here but two. First, if it "revegetates" the cape it will profoundly change the character of the landscape by creating a treed environment in what was essentially an open one, and that is additional to the affect of the windmills it installs. And second, although it claims that windmills are debarred by trees elsewhere because of their deleterious affect on wind profile, it nevertheless proposes broadscale planting on the cape. Which is to be believed?

Even when evaluating the parts EDAW gets it wrong. The table in 3.7.3 (p. 43.) labels the Bridgewater uplands area "Broad Agricultural / Pastoral" and rates its scenic quality as "Low". However, it is only able to rate it as low by describing its characteristics and use as "Predominantly cleared landscape" and "Highly altered cultural landscape". Both assessments of the character of the upland areas of the cape are patently incorrect and so is the consequent rating. This has occured either as a result of the consultants trying to shoehorn a unique area into a more common frame or by a misreading of the landscape quality. It should be noted that by denigrating the visual appeal of the landscape on the upland of Cape Bridgewater it then becomes possible for the EES to totally neglect the important viewlines to windmills from the main tourist road to the Blowholes and the Petrified Forest. This, in effect is a major excision of significant landscape.

Table 6-2 on p. 6-9 of Vol.1 of the Main Document is an unrealistic attempt to establish a measure of visual impact. The distorted ratings it provides may be instanced in the case of 'high viewer sensitivity' to 'high visual modification' which produces a rating of 'high' while the rating of that same 'high viewer sensitivity' to 'medium visual modification' is also 'high'. This suggests that a high viewer sensitivity cannot discriminate between high and low visual modification, which is obviously nonsensical. Similarly with the low end of the scales. But the flaw is compounded by the divisions that are applied towards establishing artificial sectors in the population, the so-called Visual Sensitivity User Groups. Assessments based on this methodology which is applied thoughout the *Landscape and Visual, Phase 1 and 2 Reports* must be flawed. Even so, Table 6-3 in the *Summary, Main Document, Vol. 1,* applies this rating system.

In this regard I could not help but be amused by the unfounded, uneducated and discriminatory put-down by EDAW on p. 11 where the consultants say:

"Perception is often the less tangible dimension of visual impact assessment studies. As we know, perceptions vary between user groups and often change over time. For example, individuals on holiday who are using the surrounding landscape as part of the holiday experience will generally view changes to the landscape more critically than agricultural or industrial workers in the same setting."

As an agriculturalist and onetime industrial worker I have one word to decribe such a statement: "Bullshit".

Furthermore the *Landscape and Visual, Phase 1 and 2 Reports* lack rigour and contain numerous instances of gobbledegook and confused thinking that give cause to seriously question the conclusions based on it in the *Main Document.* Examples of this start on the first page of the *Phase 1 Report* which states *inter alia* that:

"*The report will:*

- *define the viewshed of the development and define viewing locations* [and]
- *define community perceptions to wind farms that may influence the sensitivity level of viewers...*"

On the first point, if you limit by definition viewsheds and viewing locations, you then control the agenda and will have no trouble reaching your predetermined outcome. It seems to me that this has indeed been the case here. The second point is a classic *non sequitur.* It could equally read, "*The report will: define the sensitivity level of viewers to wind farms that may influence community perceptions.*" Do community perceptions influence the sensitivity levels of individuals? Well, perhaps they do if the individual is swayed

by popular opinion. Or do the sensitivity levels of individuals influence community perceptions? Again, perhaps they do if community perceptions have been influenced by sensitive individuals! The argument is truly circular and in reality that stated objective of the report is meaningless. Here again, it seems, there has been an attempt to set a definition to control an outcome.

For an example of gobbledegook have a look at 2.1 in *Phase 1 Report, Approach to Assessment Methodology* which is turgid and confusing. I would guess that "outset" (OED: *start or commencement*) has been used when instead "outcome" or "result" has been meant.

The *Phase 1 Report*, Para. 1.3.7, attempt to summarise will not bear scrutiny: *"Generally people who favour renewable energy are more likely to find the impacts of windpower acceptable and those who are neutral to the idea will accept wind turbines on the landscape if they know they are beneficial."* Come again? In other words, "The disadvantages of a Good Thing are acceptable to those who believe in Good Things, but if those who favour neither Good Things or Bad Things know that Good Things are good they will favour Good Things despite the disadvantages of the Good Things." I guess the subtext is, *"Opinions may be changed to favour windmills"*. This convoluted and clouded sentence is followed by this: *"A person's perception of noise and visual impact on the landscape will depend on how the wind farm and turbines appear."* The appearance of noise? And the argument is circular as well. It continues: *"People hear and percieve things differently, which makes designing a wind farm that will have widespread support a difficult task."* Sorry, but that will not wash either. It is not at all a difficult task if the wind farm is appropriately sited, and in this context I would point to the Codrington windfarm project which was planned *without one objection being received by the responsible authority.*

Para. 1.3.4 in part states *"...that people who live around or are familiar with the area* [Altamont Pass, California] *had less positive views than those who lived outside or are unfamiliar with the area. Females, older people and those with less education showed more positive attitudes towards wind farms".* Whether these views were positively for or positively against we are not told (although we may guess) but, from the context, perhaps it is important to know.

I concede that such criticisms may seem trivial and could be regarded as nit picking but the *Landscape and Visual* reports are replete with loose statements and skewed thinking which in my opinion are symptomatic of the whole approach to landscape in the EES.

The approach provides results that reach their nadir in the *Phase 2 Report*, 4.9.2, the assessment of views of Cape Bridgewater in sub-regional settings. The first to be considered were "Views from Bridgewater Lakes Road". These views are critically important as they engage extremely high value land and seascape, but Figure 4.26, a computer generated simulation titled 'View from Bridgewater Lakes Road' has no discernible relationship to reality. A careful survey from the Lake Road between Kennedy's Road and the lowest point of the Lake Road near the lakes themselves showed that at no point was this simulation even vaguely applicable. If the dark area shown was meant to be sea it could not possibly be seen as depicted, and if it was lake the same applies. The colour photo montage 'Photo Montage 4 - View from Bridgewater Lakes Road, north of Bridgewater Lakes (2.0)' is highly misleading if it was provided to give a realistic impression of the affect windmills will have on the view of the western side of the cape from the Lake Road. The view point chosen for this montage is only 150 metres from the lowest section of the road and as a result it has closed out any view of the sea on the west side of the cape despite the fact that the *Phase 2 Report* (p. 85) recognises that the seascapes around the cape that include the interface of cliffs and sea are among the cape's most scenic attractions. From the road the most engaging and enlightening view point is more than 60 metres higher and more than half a kilometre further up the hill. One thing the montages demonstrate very effectively is that static survey of landscape is a very deficient means of demonstrating the quality of landscape when really the quality of that landscape can only be assessed and appreciated adequately by physically moving through it—and the slower the better! The 'Visual Sensitivity and Visual Impact' assessment made for this "sub-regional setting" is in my opinion hopelessly inaccurate and reflects the flaws in the methodology used which I have already referred to.

The statements in *Phase 1 Report*, para 1.3 do need to be closely scrutinised. It will be seen that most of the surveys referred to in 1.3 were made in Wales, Scotland or England. The studies quoted from the U.K.

need to be questioned because they were mostly produced by apologists for wind energy. Paul B. Gipe, who is quoted as source for much of the information is not a primary source but he is an advocate for the American Wind Energy Association. I hope the quality of these surveys will be addressed by others. Suffice it to say that most of the surveys are not recent, that in general the windmills involved were small in size and numbers compared to the PWEP, and that it is usually difficult to determine who selected the survey sample and who asked precisely what questions.

Surprisingly, Denmark, the home of the wind energy industry, appears to have been ignored and so have Germany and Norway. German experience does not bear out the rosy picture of happy acceptance of windmills that is painted in the EES. XX[I table a copy of *The Leipzig Declaration on Global Climate Change* signed in 1995 and 1997 by 80 emminent scientists who attended the International Symposium on the Greenhouse Controversy held in Germany. Similarly, *The Oregon Institute Petition*, organised in 1997 by the Oregon Institute of Science and Medicine which is an independent research organisation that receives no industry funding, has been signed by 17,000 scientists, 2,100 of them being physicists, geophysicists, climatologists, meteorologists or environmental scientists.]XX [Not inc. 8.4.2011] The country now has concluded that, due to the proliferation of windmills cluttering its countryside, future windfarms must be located in the North Sea or the Baltic. Similarly in Denmark where planning statute requirements now make it difficult for windfarms to be erected in the countryside and virtually impossible in practice on any land within three kilometres of the sea.[5] The Danish government's *Planning Guide for Land Zone Permission and the Placement of Windmills* ('Vejledning om planlaegning for og landzonetilladelse til opstilling af vindmoller') issued by the Minister for Energy, Sven Auken, on 7 March, 2001, is consistent throughout in its over-riding emphasis on the recognition and protection of landscape. I table a translation of this document in Appendix D. [Not inc. 8.4.2011] The Circular's Chapter 2, Section 1 is headed "Landscape considerations" and it puts the Danish attitude succinctly but positively when it says (my emphasis):

> ***"Consideration of the landscape must receive a high priority in the planning for windmills. This consideration is primarily to be implemented by keeping special landscape areas and valuable landscapes clear of windmills. But within the rest of the open landscape special consideration is also to be given to avoiding those landscapes containing windmills from being seen as 'windmill landscapes' in which the single windmill or group of mills forms a dominating entity."***

[Note: 8.4.2011. In my opinion this is a precept that should be at the forefront of every government planning department's thinking and in the mind of every politician and minister of government worldwide, not in Denmark alone.]

A footnote to that paragraph refers to a 1996 publication from the Danish Ministry of the Environment that provides examples of the methodology that should be used in considering landscape when planning for windmills. On an earlier occasion I have referred to a more recent publication that also provides advice. It is titled *Visualisation and V.V.M.*[6] (Visualiseringer og V.V.M.), issued by the Danish Ministry for Energy in December, 2000, a copy of which the Panel holds from the C2 hearing. May I suggest this publication to the Panel as a useful and practical bench mark in assessing the standard of geographical information systems (GIS) and visualisations provided in the PWEP EES.

Five wind farms planned for the North Sea by the former Danish government have been reduced to two by the country's new government which was elected last year and had as an election policy plank a significant reduction in the rate of growth of wind energy. Reuters News Service on 24 January this year [2002] reported (Appendix E) [Not inc. 8.4.2001] that Denmark's new Economy Minister, Bendt Bendtsen, was dropping plans to install three offshore wind power farms with a generating capacity of 450 Mw by 2008. "We are very concerned about the costs for society and for Denmark's competitiveness if we continue to expand the use of green energy," the minister said. Shares in the Danish windmill manufacturers NEG Micon and Vestas fell about four per cent on the day. Community opposition to wind farms has been exacerbated recently by legislation that allows people living outside the area of windfarms to own or have shares in windmills, whereas this had previously been an option only available to people living in the area.

---

[5] Personal comm.: Annette Gimsbark, Danish Ministry of Planning and Energy. (August, 2001.)
[6] VVM: Assessment, Affect, Environment

The Norwegian government has recently decided not to promote a wind energy development policy. This was largely due to Norway's access to North Sea petroleum and gas resources but was also influenced by widespread opposition to the erection of wind farms along the country's heavily indented coastline.
In Britain coastal features and high value coastal landscapes remain unsullied. It seems that wind farm developers have been forced by experience to realise that they would create massive public resistance and incur uneconomic planning delays for themselves if they endeavoured to do so.

Or perhaps it is just that they are environmentally sensitive.

[Panel Submission ends.]

[Note: 2011. But the evidence points the other way. It suggests that almost universally one should never stand between a wind farm proponent and a site of high landscape value because, in an unholy alliance with federal and state governments wishing to appear 'green', local government's forced reliant on rates, industry geared to the manufacture of wind farm components, and individual landowners grasping at a return from farm land, the juggernaut proponent wins every time and the defender of landscape character is trampled. But it is at the expense of the broader community's landscape assett and amenity.]