

"Highfield"
21 Fell Timber Road
Carcoar New South Wales 2791

August 30th, 2018

Ms. Carolyn McNally,
Secretary,
NSW Planning & Environment,
GPO Box 39,
Sydney NSW 2001

Dear Secretary,

RE: MP08 0252 Flyers Creek Wind Farm (Modification 4)

I am opposed to the proposed Modification 4 of the Flyers Creek Wind Farm.

Introduction:

I point out that the time allowed for public comment about Modification 4 of the FCWF has been completely inadequate. The proponent has had many months to assemble the prodigious quantity of material in its application to NSW DoPE; as usual the public have had 2 weeks only to digest **941 pages** and contribute a coherent submission.

On many occasions I, and others, have complained about this patent unfairness; unfortunately to no effect.

I am on record as opposing this industrial wind turbine development from its inception have made submissions to this effect since the original EIS was put on public display.

My original objections remain and can be found in my submissions to the original application, the 2nd and 3rd modifications and my submission to the Planning and Assessment Commission.

My comments at the time included:

- The inappropriate siting of the FCWF in a closely settled rural area where there will be a significant impact on many people;
- The inadequacy of the setback conditions of wind turbines from nearby non-host residences;
- The inadequacies of noise modelling, for example using units of dB(A) instead of the more meaningful dB(C) or better still unweighted measurements;

- The construction of such large industrial complexes with significant health impacts on hosts and non-hosts alike from infrasound and low frequency sound. Not enough research has been done to discount the possibilities that harm will be done to the local population;
- The visual impact;
- The negative impact on real estate prices;
- The inadequate provisions for decommissioning;
- The disruption and fracturing of community.

Comments – Modification 4 of the FCWF:

The proposed modification involves:

- an increase to the wind turbine envelope (including a 10 m increase in tip height); and
- inclusion of a 132 kV transmission line and switching station to enable the Project to connect to the electrical grid.

Rather than re-iterate the information in my previous submissions I provide the following comments:

Justification of the benefits attributed to FCWF by the proponent, Infigen:

- (1) Infigen: In full operation, the Project would generate approximately 430 Gigawatt hours ("GWh) of electricity per year - sufficient for the average consumption of approximately 58,000 homes.

Comment: 58,000 homes will only get electricity from wind power when the wind is actually blowing. In the absence of any electricity storage these homes will be supplied power from a conventional source (coal, gas mainly). These base-load producers of electricity need to be on "stand by" at all times, at a significant cost.

- (2) Infigen: It would assist in replacing the 1,000 megawatt (MW) shortfall identified by the Australian Energy Market Operator as being required to supplement the lost generation capacity which will result from the planned closure of the Liddell Power Station in 2022.

Comment: In April 2018 the Liddell Power Station was estimated to have 1680 MW operating capacity (down from its original 2000). Modification 4 of the FCWF claims an operating capacity of 159.6MW (38x4.2) which is 9.5% of Liddell's current operating capacity. FCWF can only claim a very minor role in making up for Liddell's closure *particularly* as FCWF will be supplying intermittent wind power. Wind turbines, because of the vagaries of too much or too little wind, can only claim to operate at about 30% capacity (and sometimes much less).

To claim that a wind turbine generating intermittent electricity can compensate in any effective way for a power station producing base load electricity is a distortion of the reality of electricity production and distribution.

- (3) Infigen: It would contribute to the State and Federal Governments' target of providing 33,000 GWh from renewable sources by 2020.

Comment: FCWF is projected by Infigen to produce 430 GWh per year when operational. That is a miniscule 1.3% of the 33,000 GWh from renewable sources that the various State and Federal Governments are targeting; hardly a serious justification.

- (4) Infigen: It would contribute to the NSW Government's target of reducing greenhouse gas emissions by 60% by the year 2050.

Comment: The NSW target is not quantified; 60% of what level of greenhouse gas? But the same comment as above would apply. FCWF will be contributing a very small amount to the target whatever it is.

- (5) Infigen: It will contribute to inter-generational equity by reducing greenhouse gas emissions and reducing consumption of finite fossil fuel resources.

Comment: This is a fatuous generalisation which is doubtless meant to give us feelings of virtuous self-congratulation, but in fact is a complete lie. The arguments for or against the possibility of reducing greenhouse gas emissions, or whether it is even desirable, continue to be publicly debated. The spectre of "global warming" and "climate change" is produced to ensure the knee-jerk reaction that any project (such as wind power) purporting to reduce these global phenomena must be supported at all costs. This is not the platform to argue the risibility of the current climate change debate but given that any climate change is unlikely to be affected by FCWF Modification 4, the claim regarding inter-generational equity is clutching at straws and cannot be taken seriously.

The claim that FCWF Mod 4 will reduce the consumption of finite fossil fuel resources is also laughable. There has been well documented research following the life cycle of wind turbines, their construction, establishment, operation and eventual decommissioning (if decommissioning ever occurs -abandonment would be more apt). It is generally concluded that more greenhouse gases are emitted (and more fossil fuel resources used) over the lifetime of the WT than is "saved" by the production of electricity from "free wind".

- (6) Infigen: It will provide full time employment for a peak of 140 people during construction and up to 6 to 10 ongoing regional jobs during its operational life.

Comment: This is hardly a justification for a modification to the FCWF. Experience has shown that many of the people employed during construction are contractors who do not live in the district and who do not particularly contribute to the district economy. 6-10 employees during the operational phase (often also contractors from outside) have in the past been quoted as less. In any case on a region-wide basis they are not a significant percentage of the district work force.

- (7) Infigen: It will result in a direct injection of approximately \$1 million per annum to the local community through payments to landholders, permanent staff and community fund contributions.

Comment: From the sale of electricity and the receipt of subsidies (via the LRECs at least) Infigen will be receiving the better part of \$1,000,000 per turbine per year. The direct injection described above into the community is a mere 2.6% of estimated income which, even making allowances for operational expenses and return on investment, is paltry.

Additional Comments:

- (1) The original proposal for the FCWF indicated significant impacts on the local community. The initial EIS noise modelling used a GE 2.5MW turbine. The current proposal intends to use 4.2MW turbines. This is a 68% increase in turbine size. Despite all the modelling done there is no obscuring the fact that there will be a great deal more noise, vibration, bird and bat destruction, health effects, visual pollution and general disruption to community welfare.

Infigen argues that, because several wind turbines have been removed from the wind farm (46 to 28) overall, there will be no consequences to enlarging the individual wind turbine size. This is a self-serving argument. If, for instance, a non-host is living adjacent a 4.2MW turbine he is individually going to be more affected than if he was living next to a 2.5MW turbine.

- (2) Cumulative effects have been consistently neglected but are increasingly important as mining and other developments come into play. Newcrest's Cadia East mine is close by and it already impacts residents, particularly the blasting (and seismic activity). A major gas pipeline runs through many of the wind turbine effected properties – noise and vibrations have a history of effecting these adversely. Larger wind turbines will exacerbate this situation.

Has anyone addressed these issues?

- (3) Infigen seeks to enlarge the wind turbine size to increase the profitability of the FCWF. No doubt the argument will be proffered that it is good business to do so. This will

increase its sale of LRECs (the cost to the energy retailers being passed onto the electricity consumers) and consequently its income.

Is it the role of Government (here the NSW DoPE) to facilitate the profitability of a private energy company at the expense of the Australian citizens it so adversely effects?

It is not the role of NSW Planning & Environment to rubber-stamp any application for development that is submitted to it. Surely its (your) primary function is to work for the benefit of the people whose lives will be affected adversely by such developments as the Flyers Creek Wind Farm.

I therefore urge you to carefully consider the submissions that will come to you in opposition to this current Infigen proposal. There is a reason that many people have energetically opposed the FCWF and dedicated many years (now) of their lives to putting their arguments forward. It is regrettable that so little notice has been taken of their situation. They deserve better.

It would be a validation of your role and your influence if you were to refuse to approve Modification 4 of the FCWF. I commend this action to you in the strongest terms.

Yours faithfully,

A handwritten signature in dark ink, appearing to read 'C. Watts', with a long horizontal flourish extending to the right.

Dr. Colleen J Watts OAM