Objection to Biala Wind Farm proposal

Review of the NEM in 2014

There was a **dramatic drop in the level of renewable generation in 2014**, falling from 13.8 per cent share of the market to 11.8 per cent. This drop is due to a 25 per cent reduction in hydro generation levels and was only slightly offset by a 6.4 per cent increase in wind generation. Brown coal and gas-fired generation increased their output making up for the lower hydro generation. Brown coal-fired generation increased by 4 per cent and gas-fired generation increased by 11.5 per cent in 2014.

With the increase in fossil fuel generation, the emission intensity of generation increased by 2.1 per cent with the overall level of greenhouse emissions increasing by 1 per cent.

The above is despite three new wind farms started generating for the first time in 2014; Boco Rocks (NSW), Taralga (NSW) and Snowtown 2 North in South Australia & that five fossil fuel plants ceased generating in 2014.

- Lack of Effeciency
    - It is acknowledged by the wind industry that generation capacity averages only between 30-40% of nameplate capacity. Therefore, in the case of Biala having 41 turbines at a maximum 4MW nameplate rating, will in essence only supply approximately 65 MW (40%) to the power grid.
    - Wind is an intermittent force of which we have no control over, it blows when it chooses to, not in line with our demand requirements.
    - Currently no storage capacity is available for capturing wind energy at times of low demand.
    - A number of wind proponents reported declines in wind production over the 2014/15 financial year - TrustPower reported an 8% decrease on expectation for its Snowtown Windfarm.
    - Review of the NEM 2014
        - Wind generation increased by 6.4 per cent largely due the commencement of three new wind farms and a full year's output of several wind farms that commenced operating late in 2013. **Overall 2014 was less windy than 2013 with those wind farms that were fully operational on 1 January 2013 producing 11 per cent less in 2014 than in 2013. The average capacity factor for these wind farms dropped from 35.1 per cent in 2013 to 31.1 per cent in 2014.** Wind accounted for 34 per cent of South Australia's total generation in 2014, slightly higher than the 32 per cent achieved in 2013.

- Australia's energy demand has been on the decline for its 6th consecutive year. By default, our current supply of renewable feed in is automatically increasing as a percentage.
    - Extract from AEMO - Electricity Statement of Opportunities
        - "There is potentially between 7,650 megawatts and 8,950 megawatts of surplus capacity across the National Electricity Market in 2014–15. Approximately 90% of this is in New South Wales, Queensland, and Victoria."

        - For the first time in the history of the National Electricity Market, the modelling shows that no new capacity is required over the next ten years.

- ***Community divisive activity***
    - ***The greatest damage that industrial wind farms are inflicting is upon the cohesiveness of the rural communities living in the vicinity. This is an activity that is dividing families, friends, and communities like no other proposal I have ever encountered. People are no longer talking & will cross streets to avoid interactions, marriages are breaking up & people leave the region. In a setting where farmers already rate high amongst our suicide statistics, this alone should be just cause for a cease & desist in placing industrial wind turbines into a rural setting.***

- Visual Amenity – insensitive to rural setting
    - Industrial wind turbines dominate the landscape & cannot be screened or blended into the environment
    - Multiple substations & additional transmissions lines have to be built simply to accommodate the windfarms. They are changing a scenic rural residential landscape to an industrialised scarring of the land.

- Impact to wildlife
    - Birds & bats of any species that are killed by turbines upset the eco system – they are the natural enemies of insects & help to keep their numbers in balance

- Water usage
    - Concrete for turbine bases, substation, as well as dust suppression and other varied uses is significant in an area already light on for water levels in surrounding catchments. Will the proponent truck water in from vast distances to prevent locals from having to possibly face water restrictions?

- Roads
    - The Gullen Range wind farm is evidence of the detriment the multiple road trips associated with an industrial scale build of this size has on local roads. Although the proponent is responsible for maintaining roads to the standard prior to construction commencing, it is another matter entirely to get them to honour said responsibility after the fact.

- Rates
    - Councils acknowledge that where rates are reduced for properties that are impacted by the wind farm & it's associated infrastructure – powerlines do lower property values – that the overall budget cannot be diminished therefore other rate payers will cop a rate increase to balance the books.

- Property values
    - Windfarms do diminish property values, thereby having an impact on the broader region. As council has acknowledged, the Southern Tablelands is being heavily targeted for wind farm proposals & will result in a disproportionate saturation of the landscape with industrial scale wind turbines, substations, powerlines & any other affiliated infrastructure.

- Further clearing of land in an already heavily felled region.
    - Removing vegetation leads to fauna & flora loss as well as creating erosion issues once the soil is disturbed.

- Wind farms do not generate the "local" job numbers stated in their proposals.
    - Biala as a 41 turbine windfarm is stating it will create up to 7 permanent jobs.
    - Macarthur as the largest windfarm currently in Australia only employs 18 permanent staff & they are travelling distances over a 100 kms which indicate they are not locals. (Taken from previous proponent AGL's website).
    - These are specialised jobs. With Canberra & Sydney close by, it is highly unlikely they will go to locals.

- Infrasound & Low frequency noise (ILFN)
    - As every person is a unique biological entity, no two interactions with the environment will ever be exactly the same. Lack of evidence does not make for an absolute confirmation that it does not exist. The resounding position of bodies like NHMRC concludes the material on this subject is of poor quality & further research is required.
    - When it comes to human health & well being, mental health is now well understood to have significant bearing. It should therefore definitely not be excluded when people living within proximity of industrial windfarms are identifying as being affected.
    - Not everyone will be affected. **For those suffering effects already, they are the ones who need to have the follow up research & study conducted in their homes!** Laboratory experiments & computer modelling cannot replicate the actual topography, environmental factors are site specific. Home construction, turbine size, make, model, number of them & siting will all have a unique exclusiveness plus you add in the uniqueness of the individual & you cannot make any assumptions of a perceived affect. Everyday we are making new discoveries & finding new techniques to uncover new information. When dealing with human health & well being, the position taken should always be of a precautionary nature. George Burns was a prime example of someone who smoked like a chimney to the day he died, yet never contracted cancer as a result of smoking, yet that link has well been established.
    - Professor Geoffrey Leventhall (2003, DEFRA report) noted that chronic ongoing exposure when people become "sensitised" to ILFN means they get worse, not better, and over time they are impacted by lower doses.

- Noise
    - The New Zealand standard NZS 6808:2010 typically used for noise compliance does not take noise sampling from the narcelle height, it uses mathematical formula to arrive at a figure.
    - Further, the fact that the sound is averaged out, hides the breaches as they occur. When you take a car for a registration inspection, they measure the sound as it occurs when you rev the vehicle, not just idling & certainly not as an average of driving the car overall.