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Inquiry into the Social and Economic Impacts of Rural Wind Farms

Moonies Hill Energy Pty Ltd (MHE) is pleased to provide a submission to the Senate Inquiry into the Social and Economic Impact of Rural Wind Farms.

Overview

MHE is a locally owned renewable energy company based in the small rural town of Kojonup in the Great Southern Region of Western Australia. The company was formed in 2008 to investigate and develop the proposed 150MW Flat Rocks Wind Farm (FRWF) project. Since this time the project has progressed well in terms of commercial and environmental viability and is currently under consideration for developmental approval by the Shires of Kojonup and Broomehill/Tambellup.

Flat Rocks Wind Farm Project

- MHE is excited about the FRWF project as it will offer economic diversity to the Great Southern region of Western Australia currently dominated by broadacre agriculture.
- Over the life of the FRWF project we estimate an economic stimulus into the local economy of approximately \$130 million, with \$30 million during the construction stage, and \$5 million annually during operation. These figures are calculated using evidence from other wind farms operating and under construction in Australia¹.
- During construction the FRWF project is expected to generate 150 construction jobs and 7-12 permanent fulltime jobs in the operation and maintenance of the wind farm. These figures are based on the recent Sinclair Knight Mertz study examining the economic impact of the Hallett Wind Farms¹. As indicated in this report MHE envisages that many of these jobs will involve recruitment from the local region. MHE is pleased to note we have already had some expression of interest from local contractors regarding our project and employment opportunities.
- Annually the FRWF will produce electricity to power 100,000 homes.
- As a locally owned and run company, MHE is committed to establishing a Sustainable Community Fund with annual funding rounds. The fund is designed to support local community groups, organisations, schools and sporting clubs. MHE will provide a portion of earnings each year to the fund designed to encourage a sustainable and cohesive community.

- Wind farms are still a fascination to many people and we believe the FRWF will add to the tourism value of the Kojonup and Broomehill/Tambellup Region. MHE has been in discussions with a local collector about the possibility of combining our viewing, information and operations facility with a museum to house his extensive wool harvesting and memorabilia collection.
- The FRWF will provide additional income to those landowners who have agreed to host turbines on their land. This will greatly assist their ability to withstand seasonal variations and have minimal impact on their productivity after construction as the turbines will take up approximately 1% of their land.

I now refer to the terms of reference for this inquiry:

(a) Any adverse health effects for people living in close proximity to wind farms;

As a local company MHE has the well being and health of not only our participating landowners in the forefront of our planning, but also those of the neighbouring landowners and the broader community. Since the inception of the company we have devoted significant resources to examining the potential health impacts of wind farms. MHE has concluded from this research, as have other major reviews^{2,3,4,5} and submissions to this inquiry, that there is no direct causal link between wind turbine noise and adverse health effects in people living in close proximity to wind farms.

(b) Concerns over the excessive noise and vibrations emitted by wind farms, which are in close proximity to people's homes;

In our developmental planning process and community consultation, noise has been raised as a potential concern. MHE has undertaken a background noise monitoring campaign which is currently being incorporated into a noise impact study. In designing the FRWF MHE is bound by the Western Australian Planning Commissions Planning Bulletin Number 67: Guidelines for Wind Farm Development⁶ and the Environmental Protection Authority (EPA) with regards to environmental and noise impact standards. I also refer to the recent paper by Sonus Pty Ltd⁵ which states "the standards and guidelines used for the assessment of environmental noise from wind farms in Australia and New Zealand are amongst the most stringent and contemporary in the World". The paper also noted that rates of complaints relating to environmental noise emissions from residents living in the vicinity of operating wind farms is very low and these tend to relate to concerns regarding low frequency noise and health related impacts. It was concluded in this report that "there is detailed and extensive research and evidence that indicates that the noise from wind farms developed and operated in accordance with the current standards and guidelines will not have any direct adverse health effects."

MHE believes the current methodology used in Western Australia to assess noise impacts of wind farms which includes background monitoring and noise impact studies dependent on turbine models in conjunction with local topography, is the best way to establish set back limits from turbines rather than imposing unrelated mandatory set-back distances.

MHE is not aware of any complaints regarding vibrations from wind farms but notes a review by Colby et al⁷ which concluded that any ground-borne vibrations that may come from wind farms are too weak to be detected by (or affect) people.

(c) The impact of rural wind farms on property values, employment opportunities and farm income;

The impact of the proposed FRWF on the value of properties in the area has been raised with MHE by community members and in planning submissions to the local shires. Several research studies have been conducted in Australia^{8,9} with the most recent being that commissioned by the

NSW Valuer General. This study considered previous studies and examined 45 property sales within a 10km radius of 8 Australian wind farms. The main findings of the study were that;

- the majority of wind farms erected in Australia appear to have had no quantifiable effect on land values.
- A property's underlying land use may affect the property's sensitivity to price impacts.
- No reductions in sale price were evident for rural properties or residential properties in nearby townships with views of the wind farm.
- A relatively small number of "lifestyle" properties located very close to the wind farm, within 500m, were found to have a lower than expected sale price, and it is possible that audio and visual aspects of the wind farm could be responsible.

In the case of the FRWF project, the site is located in well develop broadacre farm land unlikely to be rezoned for lifestyle blocks. To this we add that there are many factors which can influence the perceived value of a rural property such as prevailing and permitted land use or zoning, access to markets, services and amenities, economic conditions and in the case of broadacre agricultural land, percentage of arable land, seasonal outlooks and commodity prices, in addition to lifestyle considerations. In the Flat Rocks area for example a property sold last season for \$1680/acre, yet current valuations of neighbouring properties have been reduced to \$1200-\$1400/acre due to a poor season and numerous properties on the market.

Furthermore the Henderson and Horning Property Consultants⁹ report "Land Value Impact of Wind Farm Development, Crookwell New South Wales (2006)" concluded:

- That agricultural productive capacity of the land subject to the wind farm and the surrounding property is not in any measured way affected by the wind farm;
- The associated property has additional revenue and benefits from the lease agreement, improved roads, erosion control and passive wind protection for stock from the substation and turbine towers;
- The future development of the land under existing planning controls would continue as zoned 1(a) Rural Zone;
- The wind farm development has the potential to slow down the shift of productive agricultural land to rural residential use in the short to medium term;
- There was no measurable reduction in values of properties that have a line of sight to the Crookwell 1 wind farm.; and
- Soils, improvements and access to services are more important drivers of property values than visual impacts

MHE has a "shop local" policy in terms of mainstream construction staff and the purchase of services and supplies. I have outlined previously the employment opportunities expected with the development of the FRWF and the predicted economic inputs to the local economy. During construction MHE will be requiring experienced plant operators, truck drivers, mechanics, welders, fencers, electricians, labourers and other individuals typically used in civil construction. Opportunities will exist for local accommodation, commercial and private, food services and supply businesses to get involved.

Landowners who have agreed to host turbines on their land will benefit from an ongoing income stream for the duration of the project, expected to be 20-30 years.

(d) The interface between Commonwealth, state and local planning laws as they pertain to wind farms; and

Western Australia has a clear framework under which wind farm applications are assessed. In developing the FRWF project MHE has operated in accordance with relevant state⁶ and local Council planning guidelines. MHE is committed to ongoing consultation with the local community, local Councils and the State Government and its relevant departments.

(e) Any other relevant matters.

MHE would like to add some comments to how the proposed FRWF project has impacted on the social fabric of the local community.

In general the FRWF project has good general community support. Since the projects inception MHE has had regular briefings with the CEOs of the Kojonup and Broomehill/Tambellup Shires and more recently discussions with their planning officers. We have held two local neighbourhood meetings to discuss the proposed project and asked for feedback especially in regards to planned impact assessments. Although some issues and concerns were raised at our most recent meeting MHE staff has had little inquiry from the community regarding the finer details of the project and its design. As our final impact studies are nearing completion we will hold community open days.

As a company committed to local involvement and openness, MHE has contacted immediate neighbours and offered to meet with them to discuss the proposal. Very few have accepted this offer. What has been incredible to observe in the face of our efforts, is a targeted smear and fear campaign run in the local newspapers, via email and telephone.

I acknowledge that we live in a democratic society and everyone has the right to an opinion but when people are deliberately being fed misleading information and forming their opinions based on this information, things have gone too far. As a consequence of this targeted campaign many submissions received by the councils are filled with undue concerns regarding residential buffer zones and possible health impacts, which are linked to projects not related to the FRWF. Interestingly a smaller community based wind farm project located some 100km to the south of the FRWF project in Mt Barker has been embraced by the community.

Many others in the community have had their mailboxes filled with propaganda from the Oil Mallee Association who want our project stopped as they fear it will have future impacts on their ability to develop a biomass industry fuelled by Oil Mallee products. As an intermittent generator, MHE would welcome the addition of local electricity generation utilising a renewable and locally produced product. MHE has been astounded by their targeted, misinformed attack on our project and the wind industry in general.

MHE believes the wind industry is a vital part of Australia's energy future and is committed to the successful development of the Flat Rocks Wind Farm project as it has enormous economic, environmental and social benefits to the Great Southern Region of Western Australia.

If you have any questions regarding this submission please contact me on 0419 846 493, or at sarah@mhenergy.com.au

Yours sincerely

Dr Sarah Rankin
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