

Speaking Notes – Catherine Boulton

My name is Catherine Boulton, I am the consultant planner who prepared the application for Energy Bay Limited.

I have read through all submissions and now all pieces of evidence and note that there is general agreement between Council's and Energy Bay's experts and Mr Bashford and myself. Mr Bashford and myself both reach an opinion that it is appropriate for consent to be granted, although I note that Mr Bashford wanted further information on reverse sensitivity and glare to confirm his recommendation. As we are to assume our evidence as being read, at this hearing I will briefly:

- touch on the actual and potential effects of the proposal providing some further detail on reverse sensitivity and glare
- set out how the proposal aligns with the relevant objectives and policies of the Tararua District Plan and
- Discuss my recommended changes to the conditions of consent.

Effects

In reading through Mr Bashford's evidence, I can see that we largely agree on the actual and potential environmental effects of the Proposal. To summarise the matters on which we agree upon I note:

- There will be a less than minor noise effect as operational noise will be compliant with District Plan provisions and the applicant has committed to meeting construction noise requirements;
- There will be a less than minor effect on the surrounding road network due to the condition of the road which is straight, sealed and has good visibility in either direction. It is also located within a low traffic environment and draft conditions of consent can further mitigate potential effects;
- There will be less than minor natural hazard effects, as the proposal is located outside of a flooding area and it will not cause or exacerbate any flooding, earthquake or liquefaction risk.
- There will be less than minor cultural effects and the Proposal is consistent with the ethic of kaitiakitanga based on my assessment of tangata whenua values. The recommended Condition 28 sets out the process to be followed in the event of an archaeological site, waahi tapu or koiwi being discovered or disturbed during activities authorised by the consent. This Condition was included by Mr Bashford on the recommendation of Rangitane o Tamaki nui a Rua.
- There will be a more than minor effect on landscape and visual amenity reducing to minor with the establishment of shelterbelt planting.
- The effects on existing electricity infrastructure can be mitigated through the volunteered conditions which have been agreed upon with Transpower.
- The proposal will result in significant positive effects at a local, regional and national level associated with adding to electricity generation capacity, diversifying supply and assisting New Zealand meeting climate change targets.

Reverse Sensitivity

HiRock Quarries operate a gravel quarry from 391 Mangamaire Road and the bed of the Mangatainoka River, they submitted on the Proposal with concerns relating to reverse sensitivity particularly from the dust generated from their operation. As I set out in my evidence, I consider there to be specific characteristics of the Proposal which mitigate against the potential for dust resulting in less than minor adverse effects being:

1. The consent holder will undertake a programme of monitoring, cleaning and maintenance of panels. This is necessary not only because of locating within a rural environment where activities such as cultivation and spray drift could occur as well as dust from quarrying activities but importantly it is required because of the rural production activities that are to continue at the site, for example sheep could rub against the panels transferring dust and dirt onto them.
2. The establishment of shelterbelts which will aid in trapping moving dust particles and mitigate against windblown dust.
3. Lastly, Energy Bay are offering up a 'no-complaints' land covenant to be registered against the Records of Title to avoid the potential for reverse sensitivity on HiRock.

Glare

Following the close of submissions, the Council requested a further assessment of glare on the submitters properties. The challenge for Energy Bay's experts was then deciding how to do such an assessment on the submitters properties where there is no existing or consented development, that was particularly so for the large landholdings where there could be numerous locations in which a house could be built. Several potential or speculative locations were chosen to be reference points but these were not based on known consents or established building platforms. They were simply a way of providing a focus point for modelling.

Potential Locations

The results of the glare modelling show that at some of these 'potential' receiver locations there would be higher levels of glare received very close to sunrise or sunset. I note that the modelled results represent a worst case scenario with established shelterbelts – they do not take into account the local recorded weather, which is often cloudy or overcast or topography. The modelled results also don't take into account the angle difference between incoming direct solar rays and reflections. In Mr Hayman's evidence he sets out that the potential for glare at these potential locations can be mitigated through vegetative screening or at elevated sites using software adjustments to control the rest angle of the tracking system of the solar tables.

While higher levels of glare were found at these potential locations, I have reached an opinion that it is not appropriate to require Energy Bay to mitigate against these potential effects of glare. This is because the locations chosen for modelling are not supported by evidence that they will be or are likely to be developed with a dwelling in the future. If they are, then the dwelling could be designed and landscaped to effectively mitigate against glare.

Existing dwellings

At the existing dwellings, the modelling shows that established shelterbelts will effectively mitigate against glare. This mitigation measure is an appropriate response but I do not consider, taking Mr Hayman's evidence into account that it is necessary, rather it is disproportionate to require the planting to be established before the solar farm is installed. I also note Mr Maassen's legal submission

which sets out what a delay could mean for the consent holder and the benefits received, locally, regionally and nationally from electricity generation.

Tararua District Plan

The Tararua District Plan contains a strong policy direction for renewable electricity generation and given that the District is mostly Rural it is recognised that demand for REG activities will emerge within the Rural Management Area in response to regional and national trends. Consent is required under the Tararua District Plan for a discretionary activity rather than a non-complying activity where a protection ethic would prevail and the policy direction aligns with this. I outline my consideration of objectives and policies within my AEE and Statement of Evidence but at the hearing I want to focus my comments on the 'container' of objectives and policies on electricity generation from renewable sources which seek to govern and recognise the benefits of renewable electricity generation while also recognising that actual and potential environmental effects are to be managed where possible.

Objective 2.8.4.1 is to recognise (or acknowledge as Mr Maassen sets out in his legal submission) the potential for REG activities in the Rural Management Area.

For utility scale solar farms, the Rural Management Area can provide the space needed to establish and operate the farm. In this particular location, there is also an absence of built form and vegetation, that would result in shading effects to the extent that they would limit the effectiveness of the panels. There is also suitable sunshine hours. Importantly, the Rural Management Area is where all existing, designated electricity substations (listed within the Tararua District Plan) are located, this is a key consideration for site selection. Therefore, I consider that the Rural Resource Management Area can be recognised as an appropriate place for a solar farm to establish.

Policy 2.8.4.2(a) seeks to recognise the local, regional and national benefits to be derived from the development of renewable energy resources. I have set these out in my evidence but emphasise the following:

- it will increase electricity generation capacity assisting in achieving the national targets for electricity generation from renewable energy sources; and it will
- the diversification of electricity generation within the District will increase electricity generation capacity and increase the security of electricity supply at local, regional and national levels (wherever the electricity is most needed at any one time).

Policy 2.8.4.2(b) seeks to remedy, mitigate or avoid (only when possible) the actual and potential adverse effects on the environment. This policy recognises that renewable electricity generation facilities have the potential to cause significant adverse effects on the environment, particularly in respect of amenity values, landscape ecology, noise and traffic but as set out by Mr Maassen, they are only inappropriate when the effects are so significant that they make the activity inappropriate.

In terms of the actual and potential effects I believe that the actual and potential effects of the proposal will be suitably managed as I have just discussed and overall I believe that the Site is an appropriate location for the Proposal to establish.

Conditions of Consent:

I am generally in agreement with the conditions of consent that were recommended by Mr Bashford, some of these were volunteered by Energy Bay to mitigate potential effects of the proposal.

There are some changes to conditions that I suggest are appropriate. These revisions are included in detail in Mr Maassen's legal submission (in strikethrough or underlined).

Condition 6: Firstly, I have added to Condition 6 which relates to the pre-construction attenuation design for inverters. This is on the recommendation of Ms Hamilton and only adds further clarity to the requirements and expectations of attenuation design and does not take away any requirement suggested by Mr Chiles.

Condition 8: A change to the proposed shelterbelt planting was made in response to the submissions which identified the flax planting could be a pest breeding ground. Also, given the planting setback from transmission lines now proposed there is less need for flax. Now, plant species which can reach greater heights can be planted although they will need to be maintained by the consent holder to a height which does not cause adverse shading upon the panels. The recommended change to Condition 8 is to include the new plant species and delete the requirement that flax is to be planted.

Condition 17 and 34: These conditions relates to a Pest Control Plan being prepared and submitted to TDC for certification before landscaping is completed. With the change is planting proposed, recognising the submitters concerns relating to pest control and flax, I consider that this condition is likely no longer needed. **However, it is beyond my knowledge whether the type of planting will result in a significant difference to pest management. If the Commissioner considers this condition need remain then I am indifferent on this matter.**

Condition 18: This Condition relates to compliance of construction noise and vibration, with the recommended addition of Ms Hamilton to include the vibration standards in.

Condition 29: This operational noise condition is recommended to be amended to include a map to show the location of existing dwellings where noise levels are not to be exceeded at notional boundaries. This is to ensure clarity so that reverse sensitivity effects upon the solar farm once established do not result.

Condition 31: This operational noise condition was recommended to be amended by Ms Hamilton so that monitoring noise emissions from the site to confirm attenuation of the inverters is undertaken within he first daylight savings period of any stage of the solar farm becoming operational.

Condition 32: This operational noise condition is recommended to be amended so that it is clear to the consent holder what is required if the noise monitoring show compliance is not met with Condition 31.

New Condition 35: This condition is being volunteered by Energy Bay and relates to a no-complaints covenant being registered against the Record of Titles for the Site. This is to address HiRock's concerns raised in their submission in relation to reverse sensitivity effects.