

BEFOR THE SELWYN DISTRICT COUNCIL

RC225180

In the matter of the Resource Management Act 1991
Sections 88-120, Resource Management Act 1991

Between	Party	KeaX Limited
	Role	Applicant
And	Party	Robyn Casey, Clark and Elizabeth Casey and Dave and Donna Kewish ("Joint Submitters")
	Role	Submitter

EVIDENCE OF CLARK JAMES CASEY

Date 23 February 2023

J M van der Wal
Barrister
40 Walker Street Chambers
Christchurch
Also at 14 Queen Street
Blenheim

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- 1 My full name is Clark James Casey.
- 2 I provide this evidence on behalf of myself Clark Casey and Elizabeth Casey, Robyn Casey and David and Donna Kewish ("Joint Submitters"), who have made a joint submission and an individual submission in opposition to Application RC225180 ("the application").

FARMING ENTERPRISE BACKGROUND

- 3 I will give you a background into my farming enterprise, and then I will outline the impacts.
- 4 I am the owner and Managing Director of Clairmont Farm, trading as Casey & Sons. I am the third generation of our family to farm here at Brookside.
- 5 I currently reside at 198 Branch Drain Road (180 Grahams Road) with my wife Elizabeth and our 4 young children, James, Matthew, Jack and Hannah.
- 6 I started off by purchasing 25 acres in July 1995 at the age of 21, followed by 50 acres in June 1998 aged 24. Two years later in June 2000 I purchased the Homestead along with a further 70 acres at the age of 26. My final purchase of land at Clairmont was 54 acres in July 2004 at the age of 30. This was all achieved whilst still driving full time for local transport companies and Fonterra, up until 2005 when I decided to retire from Fonterra and instead work full time farming my 199 acres along with a further 133 acres that I lease. With every purchase of land, I had to borrow money and farm each block of land on my own right while driving full time, this certainly made me appreciate what I have. I have lived at Clairmont/Brookside my whole life and have now been farming for 28 years. My work involves growing very top end crops and a lamb fattening operation, this is all done on an intensive farming scheme. All the while having always followed council laws and regulations, along with following my Farm Environment Plan with the upmost respect and care with Environment Canterbury.

SITE SELECTION

- 7 Mr. McMath has said in his statement of a whole host of reasons why this is the only site he could find. I find that very hard to believe with the information provided by our planner regarding this area. In all our statements we will give you a whole host of reasons for it being a very poor choice to put in solar panels, batteries, invertors etc.

CONSULTATION WITH THE COMMUNITY

- 8 It is with the upmost importance and concern, that I will say in this statement that the first knowledge of the solar farm was through Angela Ward after she contacted me. She outlined in little detail about what was happening and asked me to meet with Campbell. Matthew Ward did not come around to see myself or my wife prior to this. We did not want to know more at that stage, nor did we ask to meet Campbell as stated in Mr. McMath's statement 6.9.

- 9 After Angela contacted me, we met with her and Campbell in July 2021 at their request. In the beginning I was being asked to approve their proposed development of a Solar Farm without receiving all the critical information to ensure they will:

9.1 Comply with all regulations under a resource consent which had not even been applied for.

9.2 Most importantly they will not create an effect on myself and my business which could cause a loss in land value or more importantly from income.

- 10 There was only one more meeting with Campbell (not more over the months or years as stated by Mr. McMath 6.10) where he came with baked goods on his own to visit with myself and my wife Elizabeth on February 10th, 2022. During this meeting Mr. McMath wanted me to provide him with written approval of his proposed solar farm. Thus, helping him to secure the necessary resource consent. A written approval in which I have never given. During this meeting Mr. McMath told us to keep it all quiet, that we weren't to discuss this with anyone. Up until this point, I was still the only neighbour

who had been notified. He told me the reason for this is because we had a 2-story house in which we could see the Solar Farm from our upstairs windows, that no one else was affected. We found this very hard to believe that no other neighbours needed to be notified, it raised red flags for us when we were told this, considering one of our neighbours homes was right on the boundary fence of Stage 1. Brookside is substantially built up for a rural location with many residents neighbouring this site. That was the main reason we did not sign the agreement, because we felt it was unfair to make this decision solely on the behalf of a community that had no idea what was going on in their own backyard. The other reasoning was the impact on our business. When Mr. McMath was questioned about what would happen if we didn't sign the agreement, he told us that the project would still go ahead, it just meant there would be more hoops to jump through.

- 11 Mr. McMath also asked to have first option to buy our farm if we ever sold. I told him we weren't at that stage yet. There was a brief discussion on whether I would ever be interested in putting in solar panels on my farm if any of the neighbours pulled out. At the time I did not venture into detail with Mr. McMath about that.
- 12 Also stated in 6.10 of Mr. McMath's statement, I appeared to be enthusiastic. I would say I was more interested at the time of what they were doing. At this stage with no real knowledge of solar farms or how they worked. I did consider the prospect of grazing sheep under the panels, but we only had limited information being given to us which was from Mr. McMath who was only trying to sell the benefits. This was all well before we had any information or had done our own research into the negative effects of the solar farm and before we consulted with our solicitor and trustees.
- 13 Also stated in 6.10 of Mr. McMath's statement I asked if the existing trees on the boundary with the Prices (neighbour) could be removed. This is entirely true, simply because the trees that are there now will offer very little screening from a solar farm. Also, I quote I told Campbell another reason for this is that whatever you do you must make your boundary site look tidy and smart. I was weary of the Pine trees that are there now, as

they would be left to grow wild and cause me time and money to have to upkeep.

- 14 There was also a conversation with Mr. McMath about what would happen to the panels at the end of the 35-year lease, his answer to that was that the owner of the land would have a lot of solar panels and scrap metal to do with what they wanted. It was our understanding that this was not something he was responsible for.
- 15 We did have a meeting with Matthew and Pricilla Ward not long before we made the decision not to give our approval. This meeting was really a chance for them to help us with any questions that we may have had to encourage us to sign. Once again, we were told to keep this quiet and not to discuss the proposed solar farm with anyone.
- 16 Finally, coming to the decision after meetings and phone calls with our solicitor, I called Mr. McMath to tell him that I wouldn't be signing off on the agreement, because I felt it wasn't morally right as the sole authority on behalf of the Brookside community. Mr. McMath's response was that it was fine, the project would go ahead regardless and made comment that he would not remove the trees that we had asked him to remove. I felt immense pressure from Mr. McMath and his associates to sign, I have never in my working career felt as pressured into something as I did at this time. I was starting to feel anxious and annoyed. I was very pleased with the final decision we made, and glad it was over, or so I thought.
- Attached (appendix 1-2) letters from my solicitor and trustee confirming the above details.

IMPACTS

Effects on Business, Family, Wellbeing

- 17 Where do I start? Well firstly, I want to say all the evidence and information given here today by our specialists I truly stand by.

- 18 I need to however give you my honest opinions on such matters that affect Clairmont Farm and the day to day running of this business. This is not under minding the information of our specialists, but a true heart felt picture, this can only really be given by me, who farms the property with many years of experience.

Visual Effects

- 19 I can confirm that Mr Smith describes well the effects on us and shows a good understanding of visual effects as I would see them. Affecting me, from a personal note, I would add, that I'm extremely concerned with how long trees take to grow in this area of Selwyn due to the unforgiving structure of our Watertown Soils. Basically, very good fertile soil on top to grow good crops etc. but below this is very hard clay pan, which is hard to establish trees due to root penetration etc. this is especially hard in dry conditions.
- 20 I have planted many trees along road frontages around our farm boundary hesitantly because keeping in mind the impact birds would have on my crop situation. But unfortunately, there is a council drain that runs around the entire boundary of my road frontage which over the years with council cleaning of the drains, undermines the bank which holds our boundary fence up. We have already replaced three times the boundary fence along road frontage in 61 years. The only way to stop this is to plant trees between the drain and the fence to hold the bank and to stop erosion causing the fence to fall in again. I keep all these trees cut reasonably low to mitigate and reduce bird pollution. I have no other option due to the bank erosion. My point here is that trees I planted 5 years ago, along with fertiliser and irrigation, and maintenance of replacing dead trees, gorse and weed spraying they have only managed to grow up to 2 meters (appendix 3), many are even smaller. My concern is that the tree screening they promote is going to take a very long time to grow and to screen from the solar farm. I speak from experience. All the trees along the south/southwest border of Price and partly Wards which are there now are inadequate to screen any solar panel (appendix 4-5). This is of concern and is simply unfair.

21 Along with inadequate screening for so long the solar panels pose a real hazard due to glint and glare. I have been told by Paul this will be particularly bad in the mornings when I'm on the west side of my farm (workplace) and in the afternoons on the east side of my workplace. I have some big machinery which I use to operate my business up to 4-4.5 meters in height, this is again a real concern for workplace health and safety. I'm also concerned with contractors, workers coming onto my workplace having to endure these risks while carrying out their daily work. Many contractors come onto my workplace such as plant protection applicators (appendix 6), area specialists, truck drivers, Wattie's harvesters, silage, hay, agricultural contractors, this list goes on.

Glint and Glare

22 Visually for a good part of the day in my workspace glint and glare is unfair and unsafe, I have added a photo (appendix 7) of the glare from a simple car window screen that I took from the inside of my harvester cab along with a photo (appendix 8) of the height of my harvester compared to the height of a 7-wire boundary fence. Lastly (appendix 9) the height of many of the machinery that I use every day compared to an everyday Ute.

Acoustics

23 Another concern is the sound effect. Again, I agree with our expert on acoustics.

24 However, from a personal note, with myself usually working 7 days a week on my farm, this is my workplace which is now all surrounded by this solar farm, I will therefore hear a commercialized sound that will be with me for the rest of my working life. The experts have measured the dB based on where our home is, this hasn't considered the fact that I'm working all over the farm and close to boundary fences, so the impact of sound would be even higher. Sitting on our verandah on a quiet Sunday afternoon we will hear a hum, a noise that is not good for our mental health. The report states that the operation noise will be 43dB at our property which would be comparable to a "typical office space or outdoor in a city at night", we live in the country where it is so quiet at night, we can hear even the quietest of sounds, we don't want it to sound

like living in the city. We love the peacefulness of the area we live in, our city dwelling friends always comment on just how quiet it is at our house, even during the day. This is so unfair, not only on myself, but my family, friends, contractors and even neighbouring properties. I honestly don't know how I could cope with this in my life. They say the sound is below safety guidelines but as I've mentioned my workplace is immediately next door to this and runs for a few kilometers, I am concerned I will not cope with this. I want to outline the psychological impacts this will have on me and my family. We enjoy the peace and tranquility of a country life. I have read about "rural anxiety" - it will impact my children's sleep and cognitive development. It has been mooted that the solar farm will operate at night. The noise will exceed the WHO guidelines for sleep of 40dB max.

Bees

- 25 I have read the report prepared for KeaX Ltd on electromagnetic radiation. However, what they overlook is the fact that they are generating 160MW of electricity that adds to the magnetic fields at the substation, we estimate they will be 35-60 microteslas of magnetic field which will affect Bee activity and rates of crop pollination. This will cause adverse effects on my farming operation and its profitability.

Bird damage/weed and seed contamination

- 26 This is also of major concern. With the added tree screening of the solar farm site this would without a doubt cause a bird problem causing significant damage to my crops. Basically, the birds will roost and nest in the trees planted by KeaX next to a good feed source (being my intensive cropping program).
- 27 I have had grain agents speaking to me about bird damage in my farming career of how to manage this problem. Many times, I have been told they have seen certain crops wiped out and lost because of bird damage. I have a photo of Barley that shows bird damage to the barley on the right of the photo (appendix 10).

- 28 I have received 2 letters, the first (appendix 11) from the Foundation for Arable Research (FAR) on the effects of bird, weed & seed contamination and the second letter (appendix 12) from South Pacific Seeds (NZ) Ltd regarding bird damage and cross pollination with seed crops.
- 29 Also stated in these letters are weed and seed contamination that could arise from this solar farm if not managed correctly (appendix 11-12). I have had enough sleepless nights worrying about this. I could lose my business; I hope this is carefully investigated with a positive outcome.

CONCLUSION

- 30 It is with concern of the unprofessional approach by Campbell McMath to obtain consent. Followed up by the poor decision making by Selwyn District Council to allow such an action to take place.
- 31 As mentioned by our planner there are numerous sites that would be better suited for a solar farm. It beggars' belief to even suggest that a solar farm should go ahead here. My reasons are:
- 31.1 This is prime rural land for agricultural purposes.
- 31.2 In such a heavily populated rural setting with dozens of properties owned by people within such a short distance from the site. A simple example of this is in our petition of Brookside residents only, who signed to oppose this plan. This wasn't just one or two signatures but dozens and dozens. I hope the council and all parties involved listen to the rate paying people of Brookside. I've attached a letter (appendix 13) from a concerned resident of Buckleys Road whose property is on the boundary of the solar farm but wasn't included in the submission as an effected party.
- 31.3 With strong evidence to say that it will cost and affect income on neighbouring properties.
- 31.4 There was no public notification for council when all the effects of this action of a solar farm are major – not minor.

- 32 The list goes on.
- 33 I've attached a letter (appendix 14) I received from a long-established seed company expressing their concerns on this matter.
- 34 I am concerned for my family's well-being firstly, secondly the loss of potential income. All stated and explained above.
- 35 Like my grandfather and father who have worked so hard to farm where we are from and having a Corriedale sheep stud and sending sires all over the world to now, my sending seeds and Wattie's food products all over the world. Having been the top Wattie's Bean grower with a record crop in Canterbury this proves we are on top quality soil. Our specialist Ray Henderson will give a talk on proven effects the solar farm will have on our soils and neighbouring properties.
- 36 All my life I have been accepting of change whether it is laws from the council, farm environment plans (FEP) from Environment Canterbury etc. I am not against solar activities per se; however, I can honestly say that there are far more suitable sites that would have very few neighbouring properties in a more extensive farming area. The people proposing this solar farm have got it very wrong. Brookside is not suited nor do the people deserve to have a solar farm in their lives.

Clark Casey

Appendix 1

9th February 2023

Clarke Casey
Brookeside

CANTERBURY

Dear Clarke

10 Duchess Place

Maupuia
Wellington 6022

KeaX (Campbell McMath) Approach for New Solar Farm

I am writing to confirm my very strong opinion on the unprofessional approach by Campbell McBeth representing his need to gain your approval to establish an extensive solar farm next to your valuable farm property in Brookside.

Over a period of three months (February to April 2022) he approach you and place enormous pressure trying to get you to provide written approval of his proposed solar farm scheme thereby aiding him in securing the very necessary Resource Consent as this new scheme would/ should involve a major District Plan change to the current use of the surrounding farm land.

During this period, I was provided with a copy of KeaX letter dated February 2022 and a draft copy of Boffa Miskell's AEE. After reading this submission I provided you with some questions to ask them considering that the information provided was of such a low level that it totally lacked any critical professional engineering reports (sound, heat, visual etc) to support their claims that such a new solar farm would not cause any visual effect to the neighbouring properties let alone the surrounding farmland. Add to this is the obvious risk to devaluing your farm asset.

During this period there was continuous pressure being placed by Campbell demanding that you support his application. The pressure being placed upon you at this time with all the other critical matters you were dealing with was frankly unprofessional.

It is hard to believe that such a low level application would even be considered by your local Council when all the effects of such a change of use of such valuable high quality farm land. The critical independent engineering reports to confirm that there will be no visual/ financial effects by them accepting such an application is hard to fathom.

Yours sincerely

A handwritten signature in black ink, appearing to be 'Jim McArley', written in a cursive style.

Jim McArley



17 February 2023

TO WHOM IT MAY CONCERN

I Trevor Kinred Quirk confirm that I am the solicitor for Clark Casey and the Casey & Sons Farming Trust.

During the months of February, March and April 2022 Mr Casey expressed his concerns with the pressure being put on him by Campbell McMath to sign off the Resource Consent Application for the proposed Brookside Solar Farm.

Mr Casey met with me on several occasions concerned with the proposed application and the serious impact it may have had on his own farm. On each occasion he was concerned by Mr McMath's questions on whether he had signed off his consent.

Yours faithfully
LAYBURN HODGINS LIMITED

A handwritten signature in blue ink, appearing to be 'T. Quirk', written over a light blue circular stamp.

TK QUIRK
Director
Email: trevor@layburn.co.nz









**McFadden Ag
Limited**

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Southbridge

Phone: 021474604
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mcfaddenag@xtra.co.nz

20 February 2023

To whom it may concern,

It has been brought to our attention that there is a proposed installation of an extensive solar farm bordering Clark and Liz Casey's farm in Brookside.

We are involved with the application of plant protection products to their crops and have discussed the potential impact a solar farm next door will have on McFadden Ag's work, and the overall production of the farming system.

In my opinion the solar panels will create a significant health and safety hazard due to the glare created by them. The most important factor in the precise application of all plant protection products is visibility and our machines and technology are very carefully selected to ensure visibility is maintained to our required standard at all times. My big concern is that glare from solar panels can blind drivers which can potentially have serious consequences to people, equipment and crops.

Secondly it raises a significant concern around the timing of plant protection products. Timing of application can be everything, and can mean the difference between a crop being a success or a failure. My concern is that if products cannot be applied safely due to visibility issues, at the correct time this can potentially have a significant financial impact on both the Casey's Farming system, and McFadden Ag.

Yours sincerely,

Colin McFadden

Director
McFadden Ag limited









To The Selwyn District Council.

28/11/2022

Dear Sirs,

We write to you in support of our very good hybrid seed farmer, Mr Clarke Casey.

The subject is:- Concern about the planned significant planting of trees around perimeter of a new solar panel farm next to Mr Casey's property, and the consequent effect of increased bird attack on high value seed crops.

Mr Casey has significant and legitimate concerns about this large planting trees around the perimeter of the Solar Farm. There are two main areas of concern:-

Firstly:- It is the likely large increase in the bird population, right next to the valuable seed productions Mr Casey farms. As evidenced by FAR (Foundation for Arable Research) trials, high bird populations can eat 39% of brassica seed crops. This is a legitimate concern which could result in the non-viability of a valuable seed growing future for Mr Casey. We believe this is an absolutely unintended consequence of the tree plantings, but one that must be considered please.

Secondly:- and likely more lethal to any neighboring seed growing operation, is an enclosed area of land behind trees that could grow volunteers (ie brassica plants of the same species as the crop being produced). Such a situation would cause out-cross pollination, with the valuable seed crop, rendering the seed unsalable.

South Pacific Seeds and Mr Casey would like reassurance that:-

- 1) The area of land under and around the panels would be kept closely grazed or otherwise managed in such a way that wild and volunteer plants were simply not allowed to flower at any time in Spring and summer.
- 2) There would be some kind of mitigation of, or compensation for, the increased bird damage to Mr Caseys seed crops, from the new bird populations right next to his property.

Personally, I have seen several Solar farms in different parts of the world and I don't recall any that were surrounded by trees. Rather an open, obvious site of a neat and tidy solar farm was apparent. We note the same situation at our

local new Opuke Hot Pools in Methven where the Solar farm is part of the theme and the attraction.

We hope that these matters can be considered and a solution to Mr Casey's concerns will be implemented.

Kind regards,

John McKay

Managing Director,

South Pacific Seeds (NZ) Ltd.



Appendix 12

To the Selwyn District Council.

9 February 2023

Re: Solar panel development at Brookside, near Leeston.

The Foundation for Arable Research (FAR) has been approached for a technical opinion on the proposed development of a utility scale solar power facility at Brookside near Leeston and its potential impacts on neighbouring arable production.

We will not make any comment on the overall cost-benefit of this proposed land use change, but focus on the impact of an increase in native and other tree plantings at the boundaries of the property and the grazing of pasture species surrounding the solar panels.

In our capacity as a research organization, we have accumulated substantial evidence of bird behavior and management, and in particular the impacts of tree plantings at the boundaries of arable crops on bird populations and crop damage. This evidence includes:

- Introduced farmland birds can reach very high densities in New Zealand.
- Habitat characteristics associated with bird presence on farms are boundary habitat (hedgerows and shelterbelts) and the area of woody vegetation present.
- Bird feeding in wheat can lead to crop losses of 6- 8t/ha in paddock boundaries close to shelterbelts.
- Removal of shelter belts and hedgerows in key areas where birds cause damage to crops reduces perch sites for birds and potentially encourages them to find other places to feed.

International data on other arable crops such as sunflower, an important crop in the local arable rotation, confirm the significant role of trees in increasing crop seed predation by birds in an agricultural landscape. As introduced farmland birds frequently move at a scale beyond individual farm boundaries to access resources, FAR believe it important to consider the probable detrimental impacts of plantings on or at the boundaries of this solar farm on neighbouring arable enterprises.

In addition, international observations from initiatives to increase vegetation plantings and the planting of pasture species for grazing on solar panel farms also suggest a likely increase in weed ingress into surrounding production systems, with movement of pollen increasing as a result of less managed landscapes. FAR believe that considering appropriate management of the pasture species used for grazing is critical to mitigate potential yield loss from increased weed pressure as a result of this development.

In summary, FAR believe a robust review of the unintended consequences outlined above is necessary as part of the consenting process for the utility scale solar power facility at Brookside.

Yours faithfully,

Andrew Pitman
General Manager Research & Development

Appendix 13

Anneka and Michael Dalley – 56 Buckleys Road, Brookside Leeston.

Health, power costs going up , environment, impacting our business directly with less reliable power, fire risks to our farm, impacting the mental health and wellbeing of our community. The solar farm has imploded the wellbeing of our farming community.

As a family we have enough health concerns and we are concerned about the magnitude of the scale of solar farm and cancer risks with electromagnetic field. We live and work right next to the farm. Our children too.

Our concerns as a family are the costs Orion will pass onto everyone in the Ellesmere community for upgrading the infrastructure at Brookside Substation.

The current Brookside substation is unable to take the power capacity that will be generated by the solar farm.

Orion will have to upgrade the infrastructure which is tricky as currently the technology hasn't kept pace with the solar farms springing up around the country.

This will create safety issues at the substation and also decrease power reliability to the Ellesmere communities. There will be more power outages.

The cost to Orion to upgrade the Brookside Substation will directly be passed onto all the rate payers in the Ellesmere district.

Has the council done their due diligence in regards to sharing this information to their rate payers with making their decision?

We are dairy farmers. We rely on consistent power for our farming business.

The solar farm will diminish this and will have huge ramifications to our business and our financial security.

Currently if a line goes down due to a pole snapping or if a transformer catches on fire, the line is able to be isolated. Line F loses power. Some houses and business will be without power for a short time while power is reinstated.

17 February 2023

To whom it may concern

Re: The proposed solar energy farm at Brookside.

Luisetti Seeds is a long-established seed production company based in Rangiora and Ashburton.

We have been growing seed and retailing seed throughout Canterbury, New Zealand, and the world for 90 years.

We wish to oppose the establishment of the proposed solar energy farm at Brookside.

The continual use of productive agricultural land for uses other than agricultural production is not in the best interests of our country as a whole.

The government has recently come to this conclusion and are now looking to protect productive soils for the sole purpose of agricultural production.

The recent flooding in the North Island will soon act as an illustration as to what happens when agricultural land is taken out of production, there will be food shortages and food price inflation.

The protection of productive soils is in the best interests of all New Zealanders, for generations to come.

I do not have particular concern with solar energy farms per se, in fact on an individual farm basis they work very well, but large solar farms such as what is proposed at Brookside should only be allowed on poor and unproductive soils.

Yours sincerely



Edward Luisetti
Managing Director



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