



Pre Application Community Consultation Phase 1 – Energy Storage Facility & Phase 2 – Solar Farm

Zoom meeting, 07th October 2021, 5pm – 7pm

Hosted by: Adele Ellis, AE Associates

Attendee's

Mrs Blythe

Terry Faulkener & Mrs Faulkener

Angela Fraser

Gail

Brian Waddell

David Foster

Stuart C

Jane Bell

Richard

Lindsey

John & Sheila Muir

Robin H

Craig

The meeting commenced with a request for a brief outline of the proposal and thereafter took the form of a question and answer session.

Æ ASSOCIATES
KAIMKNOWE FARM, GENDEVON, FK14 7JZ
ÆE.ASSOCIATES@BTINTERNET.COM

Q. A query over 'dumping' of electricity by the grid when there is an excess was raised.

A. If the grid has an excess of energy being produced and fed into the lines when there is a reduced demand there is a requirement for this load to be balanced. There are a number of different methods used to balance the grid but few have an immediate effect. The use of battery storage however does have an almost immediate response. The batteries can be used to take the excess from the grid and store it until such a time as there is a high demand for electricity, which the grid can't provide, allowing the electricity stored in the batteries to be fed back into the grid. The batteries will be on stand by to respond to demands. Other methods of balancing include shutting down energy generators if there is an excess but this can take time and in the interim the energy is still being fed onto the grid. There are users who have load sharing agreements throughout the infrastructure. This will mean that they will be called upon to either lower or stop their demand for energy and enter standby mode. Typically this will be big users who have the facilities and infrastructure to cut their demand without interfering with their daily working. Diesel generators can reduce their fuel injection and produce less. Gas turbine generators can reduce their power by reducing their fuel flow. Pumping stations may be engaged, using the excess energy, until the balance of flow is at acceptable levels.

Q. In relation to the solar farm, what happens with surface water? Does it run down the panels and flood the ground beneath causing a higher risk of flooding in the area?

A. A full infiltration, flood and surface water study will be undertaken in line with SEPA requirement. A Surface Water Drainage Strategy will take into account the existing drainage infrastructure and nearby watercourses, geological and infiltration potential as well as land usage effects on flood risk. In accordance with SEPA a Sustainable Drainage System (SUDS) will be implemented.

Q. The fields surrounding my property are prone to flooding will this solar farm development make matters even worse?

A. The studies being undertaken on the infrastructure of the current drainage systems will highlight if there requires to be additional drainage within the development sites. As with surface water, in accordance with SEPA, a SUDS will be implemented.

It should be noted that changing the sites primary function from agriculture or grazing to solar power generation can have several benefits with regards to run off rates. The absence of typical farming activities means that the fields will no longer be plowed or furrowed, heavy machinery will not be crossing the fields and there is less risk of the ground becoming poached by heavy animals. The fields will have cover throughout the winter months. Studies have shown that the aforementioned activities can considerably increase the rate of run off from a site.

Removing farming activity could reduce soil compaction allowing soils to become more naturally aeriated which in turn improves the soils water acceptance and run off rates.

Introducing hedging and planting along fencelines increases root systems and vegetation, which can provide high levels of natural attenuation, which will serve to limit flows across the site.

Q. The map is too small and difficult to read. Will this be updated?

A. An updated map has been uploaded to Facebook. The updated map shows areas, based on comments from the first Zoom meeting, that have been pushed back from residential areas. The updated map also shows an area for a proposed dog walking and childrens play area. The areas of pushback will be properly defined after site specific assessments but the areas highlighted are noted of particular concern by residents.

If any interested party requires a copy of the plan emailed then please contact ae.associates@btinternet.com

Q. What height are the solar panels and fence?

A. The solar panels will be approximately 2.4 – 2.8m in height, dependant on the angle of installation. The fence will be approximately 3m in height. Hedging and vegetation screening will be planted.

Q. The roads at the moment struggle with the current level of use by lorries, HGV's and farm traffic. How does the solar farm think that an increase in use will be acceptable?

A. There will be an initial increase of use in the initial stages of the development. A full road survey will be taken prior to commencement and after completion. The Roads department will require a full traffic and transport study to be undertaken inconjunction with Transport Scotland. Any ugrades and/or repairs will require to be undertaken at the Developers cost.

Q. What access is being used?

A. For Phase 1 the access is currently under review and will be updated in due course. It is envisaged that Phase 2 access areas will utilise existing field entrances. These may require upgrading but this will be agreed with Transport Scotland to meet industry standards.

Q. How will this development affect the value of my property?

A. A request has been subitted to The Royal Institute of Chartered Surveyors for information or comment on the potential impact to value of property caused by the development of the solar farm. Details of the response will be shared on receipt.

An attendee of the meeting commented that they thought the reduction in value would be between 2-7%.

Q. Would homeowners be compensated for any reduction in value?

A. It is not envisaged that compensation would be available.

Q. Concerns of the visual impact were raised from residential properties as well as from local beauty sites.

A. A full landscape and visual impact assessment will be undertaken. Visualisations will be produced from a number of key viewpoints. These visualisations will be made available to view once complete.

Q. Are the pylons and power lines not being moved? If so how does that affect the development? Have the developers actually applied for connection?

A. It is confirmed that the development has applied and secured the connection at the site.

Q. Does that mean it's a done deal?

A. No. The development requires to follow the full planning application process and apply to The Consents Unit for permission to carry out the development. The planning process will allow for any interested party to submit their comment on the application, whether it be an objection or in support.

Q. Will the panels cause glare?

A. It is intended for bi-facial panels to be utilised in the development. Bi-facial panels allow for internal reflection of light which decreases any risk of glare as light is absorbed through the panel. Bifacial solar panels are almost the same as normal panels used in solar farms, except for significant structural differences. Unlike normal panels where the light will be absorbed by one side, with the underside having a dark or opaque covering, bifacial solar panels have their backs covered with either a transparent sheet or a have a double glass panel. This makes reflection possible and there is energy production from both sides, increasing the total power output. Bifacial panels also don't contain the metal which holds PV cells together and they don't need frames to hold the structure.

A full glint and glare report study will be undertaken to ensure that the panels comply with all regulations.

Q. Why chose this area to have the development and not a browfield site?

A. There are a limited number of areas that have the capacity and infrastructure to facilitate such a development. Brownfield sites tend not to be of a size and scale that could accommodate such a development and when they are there is rarely a suitable grid infrastructure available.

Q. Is the layout, spread across different areas, not against planning advice? Why isn't it all in one big block as the solar farms normally are?

A. The layout over different areas is intended so that smaller blocks of development will not change the character of the landscape and will, from long views have less impact. The landscape will remain predominately agricultural with areas of solar development, rather than one large block dominating the landscape.

Q. How do the developers get the 100Mw? There is a planning application at the moment which has a similar land take but is for much less.

A. Using Bifacial panels means that they will have a greater capacity. Approximately 3.5 acres are required for 1MW using bifacial panels whereby normal PV panels can require up to 5 acres per Mw. The layout, irradiance level and topography all affect solar output.

Q. Who will maintain the site and how often will it be required?

A. A maintenance contract will be in place for the cleaning of the panels and maintenance of hedgerows and planting of the site. This will be on average every three to six months dependant on seasons.

Q. Having sheep graze the land isn't that good an idea as they contribute to the methane gas emissions. We are all being told to eat less meat.

A. Grazing sheep on the land to maintain the grass levels is only a suggestion. Wild flower planting is also an option. Grass maintenance would be undertaken seasonally.

Q. Will having to cut the grass not involve more traffic movements and then more noise?

A. Grass would be maintained seasonally and envisage to be undertaken on a two to three month basis. Cutting of the grass would be by ride on mowers, much smaller and quieter machinery than harvesters and tractors used in farming.

Q. The area can get very windy at times. What issues will there be with noise from wind hitting panels or funnelling through the site?

A. A full noise survey will be undertaken with background noise levels determined for a number of areas. The acoustic engineers will provide a report using octave frequency spectrum analysis to illustrate what potential noise impacts may occur from the development. The development must comply with the regulations set by Environmental Health.

Q. What affect to health is there from panels close to residential property? What about electromagnetic radiation?

A. No details of the condition are available from AE Associates at the time of the meeting. A search of the condition will be undertaken and commented on in due course.

Q. What about mental health concerns due to having a fence outside property, loss of open countryside views and potential problems selling property?

A. The boundary layout is an ongoing process and every effort will be made to ensure a setback from residential properties that will be most affected. Visualisations of the development will be made by a

landscape architect in order to illustrate what the development will look like from the most sensitive viewpoints. Engagement and discussions with local residents will be an ongoing process and every effort will be made to ensure up to date information is available on demand. An open event will be organised after all surveys have been undertaken where all residents and interested parties can attend and discuss the development and also look at the visualisations.

Q. What happens if the developer goes bankrupt or disappears in 5 -10 years time or the solar farm stops producing?

A. An insurance policy or bond is agreed and in place prior to the development commencing. This policy cannot be cancelled or changed and has sufficient funds to enable the complete reinstatement of the site. It is not in the interest of developers to abandon a site as whilst it is producing energy it is producing an income. The policy is not tied to the developer therefore if they did go into liquidation the policy still stands and the developer cannot take back the funds in place to restore the site. It is practice for a condition to be applied to planning consent that if the development ceased to produce any electricity over a six month period, that the reinstatement of the site should be commenced.

Q. Will there be any access right to the site? Angus Council are updating and introducing new core paths for walkers and cyclists but there appears not to be anything for bridle paths. Maybe you could work with Angus Council to impliment this?

A. AE Associates agreed to contact Angus Council and discuss the possibility.

It may be a possibility that wildlife corridors are implimented in the design which could be wide enough to allow equestrian/ walker or cyclist use around the boundary of the solar farm. This would have the security fencing on one side and the hedging and planting on the other offering safe and secure use.

Q. What are the timescale for the development?

A. For Phase 1 studies are currently underway and access is under review. A formal application will be dependant on these outcomes.

For Phase 2 it is envisaged that studies and reporting will be undertaken in the next 6-12 months.

Full connection of the development is currently anticipated in 2026.

A further update to the plan showing the solar farm development was made and posted to Facebook incorporating a further setback from residential property.

Further Zoom meetings and Community Hall meetings will be undertaken. It was noted that the timing of the Zoom meetings held was not ideal and therefore any future meeting will take place from 7-9pm.