

Questions received from 1st Virtual Consultation Event
Thursday 24th March 2022 @ 7pm

1. Are there any ties between the Killoch Energy from Waste (EfW) incinerator proposal progressed by Barr Ltd and Brockwell Energy?

Brockwell Energy have confirmed that they have no links to Barr Ltd in a commercial sense or otherwise at Killoch. The proposed battery storage facility is a wholly separate scheme to the proposed EfW facility.

2. Reason for the location of the BSF in close proximity to the proposed EfW, and the distance from Coylton substation:

Brockwell have a close working relationship with Hargreaves, who own the Killoch Colliery site and are still using parts of it for operational purposes. Hargreaves do not own the site of the proposed EfW – this is outside of the colliery boundary. The site of the BSF was chosen as it was located within Hargreaves ownership but outside of the operational area (i.e. largely cleared of coal stockpiles), and close to the U717 which would provide adequate construction and operational access into the site from the A70 (noting that there would be very limited vehicle movements during the operational phase).

The proposed BSF would connect to the Coylton substation, and whilst Brockwell would have preferred a site closer to the Coylton substation to the west of the colliery this is not feasible due to the ongoing operations on Hargreaves' site. The connection to Coylton substation is being prepared and is currently proposed to follow the U717 onto the A70 highways verge and onto the Coylton substation. This is similar to the route of the existing connection between the substation and the Coylton substation. Delivery of the connection would be achieved under the powers conferred to the Distribution Network Operator (DNO). This is separate to the planning process.

3. Grid connection between the EfW facility and the proposed BSF – can the EfW facility benefit from the BSF development?

The grid connection is fixed on the BSF site via the proposed transformer location. This cannot be changed or moved once it is agreed / tied in with the DNO (i.e. Scottish Power). The grid connection to the BSF also has a fixed capacity of 49.9MW. This means that the BSF cannot exceed this in terms of storage / export to the grid.

By the nature of a battery storage scheme, the batteries will import and store electricity during certain times of the day and export electricity during peak times. This is not compatible with an EfW scheme as an EfW developments export electricity into the grid as it is generated (c. 13 MW at full capacity c. 95% of the year), with a minimal import from the grid. Therefore, an EfW facility would provide a continuous feed of electricity into the grid. Consequently, the BSF grid connection would be fundamentally unsuitable for an EfW facility. In this regard it is also relevant to note that Brockwell's agreement regarding supply to the grid can't be transferred to the EfW plant.

In short and in simple terms, the BSF is not compatible with the EfW facility and there is no opportunity for its capacity to be transferred to Barr.

4. Formal agreement stating a commitment to prevent Barr using the proposed BSF's grid connection:

See the response to point 3 above. The grid connection is fundamentally unsuitable for the EfW proposal to use, and Barr would need to source their own grid connection through discussions with the DNO (Scottish Power).

*Two further queries were sent into the consultation email address following the consultation event.
A response to each has been outlined below by the project team.*

5. ‘What are the benefits for the local communities?’

Unlike wind farms, and common to most development projects, there is no formal mechanism for community benefits for this type of development. Noting that if any benefits are proposed they should only be necessary to make the development acceptable. The main benefit arising for this type of development is its contribution towards energy security and supply.

In terms of other benefits, further planting is proposed along the northern boundary of the site and species diverse meadow planting is proposed for remaining land within the planning application boundary. This will provide biodiversity enhancements and enhance the appearance of this part of the former colliery.

6. ‘As we have done a lot of research on the Killoch depo, due to objecting to the Energy from waste plant. We are aware that the area you are looking to develop has the highest levels of methane escaping from the former mine workings. You described the fire prevention systems in the presentation will this mitigate any risks that may arise from the methane on the site if there was to be a fire? Also will you be using any ground working to mitigate the methane which is leaking through the ground already as a precaution?’

A Stage 1 Contamination Assessment report has been produced which will be submitted with the planning application. This assessment identifies that the two off-site mine shafts and deep workings to the north of the site could serve as sources / migration pathways for mine gas. However, this is assessed further within the report which takes into account the design of the proposed development / structures. As there are to be no permanent structures only modular units, i.e. containers to house the batteries, these modular units would reside on legs or frames, raising them off the ground. This design results in a natural ventilation void meaning that if ground gas (methane or carbon dioxide) was being generated it would rapidly dilute / disperse into the atmosphere.

Our contaminated land consultant has reviewed the Wardell Armstrong site investigation report for the Barr application. The development is different to that from our site and includes several permanent industrial buildings i.e. permanent structures where there is potential for the accumulation of mine gas. The site is located to the southwest of our site and to the immediate south of the two former mine shafts. Barr identified the shafts as being potential sources of mine gas and carried out a gas monitoring programme with monitoring locations adjacent to the shafts (BH01, BH02 and BH03B) and across their wider site. Elevated gas readings were limited to BH03B (located to the south of shaft 1) approximately 320m to the southwest of our site. Elevated concentrations were not repeated within any of the other boreholes including BH01 and BH02 which are located 200m to the southwest of our site. The results would suggest that Shaft 1 is the result of the elevated gas readings with concentrations appearing to reduce away from the shaft. The Barr scheme will therefore have to include gas protection in their permanent built structures.

In summary, due to the design of the battery storage facility, any ground gases would not be able to build up on our site. As ground gas would not accumulate within our site, there would be no greater risk of fire. Therefore, no ground working is proposed to mitigate against any ground gases as a precaution. Barr identified high levels of methane gas from a shaft in closer proximity to their site and as a result of their proposed permanent structures, they would need to include gas protection measures in their proposals.

Questions received from 2nd Virtual Consultation Event
Tuesday 26th April 2022 @ 7pm

1. Will the stored energy be generated from North Kyle wind farm project, i.e. will there be a direct connection?

The BSF project is not directly connected to the North Kyle Wind Farm project, but the proposed BSF will help to support and level out renewable energy generation in East Ayrshire's regional grid system.

2. Where are you taking energy from? The grid?

Yes, energy is imported directly from the grid into the BSF.

3. How does it work in a commercial sense, are Brockwell paid to store the energy?

The BSF will import electricity from the grid when demand for electricity is low and therefore the price of electricity is low. The electricity is then stored and sold back to the grid during peak times and therefore when the price of electricity is higher than non-peak times. The BSF operator is not paid whilst the electricity is in storage, i.e. on standby to export electricity back into the grid.

4. How much would 49.9MW supply energy for?

Approximately 10,000 homes.

5. Do you have grid connection in place?

Yes, a grid connection is agreed with Scottish Power. This is not a planning issue and therefore dealt with separately to the planning application.

6. If there is a tender already in place (i.e. the BSF project already approved at the Coylton substation) would this stop the Killoch BSF getting a connection?

No, this would not affect other grid connection offers around the substation.

7. Do the cables connecting the new BSF to Coylton substation need to be upgraded?

Yes, a new minor cable would need to be routed along the A70 connecting the BSF to Coylton substation.

8. Why is the route into the Coylton substation not part of the planning application?

The cable would be installed by Scottish Power using their 'permitted development rights' as a 'Statutory Undertaker' i.e. they do not need planning permission to carry out these works. It should also be noted that as an EIA is not required in support of the BSF application it is not necessary for the planning application to assess the environmental effects of installing the grid route.