From: [redacted]
To: Cleve Hill Solar Park; Jones, Hefin
Cc: [redacted]
Subject: EN010085 - Cleve Hill Solar Park - The Applicant"s Deadline 3 Submission (email 6 of 7)
Date: 01 August 2019 23:20:11
Attachments: [redacted]

Dear Hefin,

EN010085 - Cleve Hill Solar Park - The Applicant's Deadline 3 Submission (email 6 of 7)

Please find attached the Applicant's Deadline 3 submission.

Please do not hesitate to get in touch if you have any queries.

Kind regards,

Mike

Michael Bird

Tel: 01904 715470
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CLEVE HILL SOLAR PARK

WRITTEN SUMMARIES OF ORAL SUBMISSIONS ISSUE SPECIFIC HEARING 1 ON NEED

August 2019
Revision A

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www.clevehillsolar.com

CLEVE HILL
SOLAR PARK

WRITTEN SUMMARY OF CLEVE HILL SOLAR PARK LIMITED'S ("THE APPLICANT") ORAL CASE PUT AT ISSUE SPECIFIC HEARING 1 ON 17 JULY 2019

1. **INTRODUCTORY REMARKS**

1.1 Issue Specific Hearing 1 ("**ISH**") was held at 10:00am on 17 July 2019 at Hempstead House Hotel, London Road, Bapchild, Sittingbourne, ME9 9PP.

1.2 The ISH took the form of running through items listed in the agenda published by the ExA on 8 July 2019 (the "**Agenda**"). The format of this note follows that of the Agenda. The Applicant's substantive oral submissions commenced at item 3 of the Agenda, therefore this note does not cover items 1 and 2 which were procedural and administrative in nature.

2. **AGENDA ITEM 2 – INTRODUCTION OF THE PARTICIPATING PARTIES**

2.1 The Examining Authority ("ExA"): - David Rose (Lead Panel Member), Andrew Mahon and Helen Cassini.

2.2 The Applicant:

2.2.1 **SPEAKING ON BEHALF OF THE APPLICANT: -** Gareth Phillips (Pinsent Masons LLP).

2.2.2 Present from the Applicant: - Hugh Brennan and Simon McCarthy.

2.2.3 The Applicant's legal advisers:- Claire Brodrick and Peter Cole (Pinsent Masons LLP).

2.2.4 The Applicant's consultants:

(a) Mike Bird and Clare Walters (Arcus Consultancy Services).

(b) Simon Gillett (New Stream Renewables).

2.3 GREAT – Dr Ralitsa Hiteva, Adam Oliver (Consultant), Lut Stewart.

2.4 Swale Borough Council – Graham Thomas, Anna Stonor.

2.5 Faversham Society – Harold Goodwin.

2.6 Stephen Ledger.

2.7 CPRE Kent – Richard Knox-Johnson.

3. **AGENDA ITEM 3 – THE POLICY FRAMEWORK**

3.1 **The Examining Authority's preliminary view on National Policy Statements;**

3.2 **The local planning authorities' and other Interested Parties' views on the relevance of the National Policy Statements (NPSs);**

3.3 The ExA stated that its preliminary view is that National Policy Statements ("NPS") EN-1 and EN-5 are potentially important and relevant matters for the examination under section 105 of the Planning Act 2008. Gareth Phillips agreed, and stated that the approach taken by the Examining Authority ("ExA") was correct and consistent with the 13 decisions on DCO applications made where no NPS was in force, and also consistent with the advice given to the Applicant by PINS since it first met regarding the application.

3.4 Mr Phillips advised that NPS EN3 is also relevant, advising that whilst EN3 is not technology specific to solar energy, it sets out important impacts and references the need that is relevant to all forms of renewable energy development. He highlighted that other policy in the NPPF and local plan were also relevant.

3.5 Responding to comments from Harold Goodwin and Stephen Ledger, Mr Phillips stated that EN-3 is the designated NPS for renewable energy. He explained that there are points within it relevant to all forms of renewable energy that weight can be placed on in relation to the overall need for renewable energy. Mr Phillips noted that there would be similar impacts from certain forms of technology in the NPS that would apply to other forms of technology. Therefore, the Applicant is of the view that it is relevant as up to date government policy on renewables generally. Mr Phillips noted that three energy related DCOs (Triton Knoll Electrical System Order 2016, The Swansea Bay Tidal Generating Station Order 2015 and the Glyn Rhonwy Pumped Storage Generating Station Order 2017) have been granted under section 105 of the Planning Act 2008, all absent an NPS for the relevant technology and none had to be in a particular location, with site selection undertaken.

3.6 In response to a request from the ExA, Simon Gillett provided updates on two recent developments since the Applicant's Needs Statement [APP-253] and the addendum of March 2019 [AS-008]. Mr Gillett stated that since these reports, the UK context around the need for greater capacities of low carbon UK generated energy had continued to develop:

3.6.1 first, on 2 May 2019 the Committee on Climate Change ("CCC") published a report entitled 'Net Zero: the UK's contribution to stopping Global Warming'. Mr Gillett summarised that the CCC had recommended to extend the ambition of the Climate Change Act 2008 past delivery of net greenhouse gas savings and reductions of 80% from 1990 levels by 2050, to net zero by 2050. Mr Gillett confirmed that the CCC believe this recommendation is necessary based on international studies on climate change and it is feasible as the technology to deliver this recommendation already exists. He added that the CCC think this is cost effective, as renewable energy is as cheap, or cheaper, than fossil fuels. Mr Gillett highlighted that the Need Statement shows carbon emissions from electricity generation fell since 2013, but CCC note that changes not just within electricity generation sector but also other energy uses including low carbon heating systems within the built environment and electrification of transport are expected to increase the requirement for a reduction in carbon emissions from electricity generation. Mr Gillett advised on 12 June 2019, the Government announced the latest statutory instrument which will amend the Climate Change Act 2008 to implement CCC's recommendations into law; and

3.6.2 second, Mr Gillett advised that on 10 July 2019, CCC issued a report stating that UK action to curb greenhouse gas emissions is lagging behind what is needed to meet to the nationally and legally binding emissions targets. Mr Gillett stated that the report is corroborated by National Grid's Future Energy Scenarios 2019 (FES 2019) edition that was published on 11 July 2019.

3.7 Mr Gillett advised that this CCC report states that GB electricity demand is expected to increase by up to 5% by 2030 due to electrification of transport and home heating, with demand growing between 30 and 50% by 2050 when the target bites. He added that the second headline from this report is that British installed electrical generation needs to increase from the 110GW level today to between 130 to 160GW by 2030 to meet that demand, this being a 35 to 55GW increase on existing generation capacity following decommissioning of around 8GW of nuclear and 8GW of coal generation before that date. Mr Gillett confirmed that 50 to 60% of that installed generation is expected to be low carbon generation.

3.8 Mr Gillett stated that both CCC and National Grid recognise that there are many ways that the 80% reduction in greenhouse gases by 2050 can be achieved, but that not all pathways can meet the target. He highlighted that two scenarios set out by National Grid in FES 2019 foresee a missing of the UK's legal target. However, he continued, National Grid make the point that to meet the new net zero target, a radical transformation of the national energy ecosystem is required so even more low carbon wind and solar generation capacity is needed even in the most ambitious scenarios. In that context, Mr Gillett stated that Cleve Hill Solar Park is a necessary part of the UK energy mix and makes a valuable contribution in the direction of adopted UK policy.

3.9 **The local planning authorities' and other Interested Parties' views on the relevance of the National Planning Policy framework (NPPF);**

3.10 Not discussed.

3.11 **The local planning authorities' and other Interested Parties' views on the relevance of the relevant local plans; and**

3.12 In response to comments from SBC on policy DM20 regarding renewable and low carbon energy and the ten criteria under it, Mr Phillips firstly addressed comments from GREAT and Faversham Society on consultation, under criteria 8 of that policy. He advised that there clearly has been community involvement, and in fact there has been widespread praise for approach to community consultation, as it has gone beyond what is required under the Planning Act 2008. Mr Phillips noted that all the local authorities have submitted adequacy of consultation reports, and there had also been encouraging sentiments about the lengths gone to including from Helen Whately MP. Mr Phillips stated that all promoters of DCO projects are required to follow a mechanical process under the Planning Act 2008, with a blank sheet of paper and an open mind. Promoters must consult early under the Planning Act 2008 so the applicant, Mr Phillips confirmed, did not come with pre-formed ideas and so it can sometimes appear that the applicant does not know all the answers to points raised during consultation. GREAT said that at some consultation events the Applicant had merely identified where in the application documents evidence could be found. Mr Phillips advised that during consultation there was often criticism directed at the project based on hearsay, so the Applicant would refer to a document to demonstrate where an answer was properly addressed. Mr Phillips summarised that it had been a fine balance between what is required by law and guidance on consultation, and doing the right thing, which is based on professional judgement.

3.13 Graham Thomas for SBC confirmed that criteria 8 of DM20 had been met.

3.14 Regarding criteria 1 of DM20, Mr Phillips noted that this was a factual question or whether or not an application included the relevant evidence required to determine it. As SBC had not raised any issues on methodology, Mr Phillips stated he assumed this had been met. Mr Thomas confirmed SBC had no issue on the methodology, that the process had been done thoroughly, and this criteria had been met.

3.15 Running through the ten DM20 criteria, Mr Phillips stated that:1. had been agreed as satisfied, 2. is not applicable as it relates to district heating systems, 3. is not complied with as this favours previously developed land, 4. is complied with as the scheme is on poorer quality agricultural land, 5. (opportunities to enhance biodiversity) 6. (landscape, visual, and heritage impacts, as well as geology, soils and flood risk are minimised) 7. (impacts on residential amenity and safety are minimised) and 9. (all relevant plans, policies etc are referenced to ensure appropriate scale) are matters of judgement, and 8. (local community involvement) and 10. (detailed restoration proposals for temporary permissions) are satisfied.

3.16 Mr Phillips agreed with the ExA that any of the four criteria decided by judgment could be determinative but noted that it was accepted planning law that it was not necessary to comply with all policies to be comply with a policy as a whole.

4. AGENDA ITEM 4 – 'NEED', THE LOCATION OF THE PROPOSED DEVELOPMENT AND THE RELEVANCE OF OTHER SITES OR SOLUTIONS

4.1 Mr Phillips responded to an ExA question to highlight important matters on need by setting the Applicant's approach in overview. He advised that when the Applicant set about producing the application, through discussion with other industry members and BEIS, it was observed that the NPS are nearly 10 years old, with their underlying evidence another 2 years older. Mr Phillips commented that the NPS remain the latest view of Government, but the Applicant felt that, due to age of NPS, and because EN3 is not specific to solar, it was appropriate to bring the need case up to date. Mr Phillips confirmed that in the Need Statement the starting point was as per the NPS, then the process was to update that in light of the successful deployment of renewable technology over the years since those NPS were adopted, and also to drill down into the mix of generation/supply, i.e. where the mix was at the time of the NPS, where it was expected to come from and how things have changed recently in terms of nuclear developments, the success of offshore wind, and onshore wind planning changes and so on. This was a macro update to the need case.

4.2 Mr Phillips advised that the Applicant also drilled down into early consultation responses from GREAT and the councils asking why for the project was proposed in this location, and why it needed to be so large. He stated that the Need Statement should be read in conjunction with chapters 4 (Site Selection, Development Design and Consideration of Alternatives) [APP-034] and 5 (Development Description) [APP-035] of the Environmental Statement to understand these questions. Mr Phillips advised that it was not the Applicant's case that the proposed location for the scheme was the only site that can deliver a solar and energy storage site of this scale. However, the site is an appropriate, suitable and very good site for this scale of technology due to a number of factors, including, in headline, the available grid capacity, which is the starting point for any large scale power project, the degree of irradiation, and the quality of land in terms of the sequential test. Mr Phillips stated that once a search is undertaken and these necessary criteria applied, the number of suitable sites reduces, as, for example, a site may have low quality land and high irradiation but no feasible way to connect to the grid, or the costs of upgrade make the project unviable. In terms of scale, Mr Phillips advised that the Applicant had answered questions arising from consultation on the size of the project and why more smaller projects had not been built - different scenarios were assessed in the Need Statement. He confirmed that this analysis shows there would be a need to find multiple sites, and even if this was achieved, there would be greater costs, which ultimately the consumer has to bear in terms of the cost of energy.

4.3 Clare Walters advised that the detail on planning policy is set out in the Planning Statement [APP-254]. Ms Walters advised that paragraphs 59 to 98 go over the NPS, which set out at a high level the need for renewable energy and the need to address and develop more renewable energy infrastructure. Pulling out the key points, Ms Walters confirmed that the Government is focussing on supporting renewable technology and a move to carbon neutrality. She highlighted that legally binding targets must be met to cut greenhouse gasses and emissions and transition to a decarbonised renewables sector. Ms Walters highlighted other considerations alongside this, referring to paragraph 64 of the Planning Statement, which notes EN-1 paragraph 2.2.2, which specifies the importance in times of severe economic constraint of the private sector in the delivery of renewable energy schemes. Ms Walters noted that as this is the first unsubsidised solar development the project complies with this EN-1 paragraph. Turning to other policies, Ms Walters noted EN3 on renewable energy, and the NPPF, which provides a presumption in favour of sustainable development and no onus for the applicant to prove need. In regards to local plan policy, Ms Walters noted that both SBC and Canterbury City Council have polices promoting renewable energy but these do not address need due to the NPPF presumption in favour of development, so these polices are more aimed at how to control and assess such applications.

4.4 Regarding the evidence of GREAT stating that demand growth is simply rhetoric in the energy industry, and that there will be a decline in need for energy, Mr Gillett advised that there were two accepted and acknowledged reasons for a decline in energy generation. The first, he stated, was due to global macro economic slow down and the move offshore or closure of particular types heavy (energy intensive) industry. This meant, Mr Gillett explained, that as these industries move out of the country, energy demand reduces, however, UK Inc is not on the decline, as a number of industry growths have occurred in service technology type industries, which are less energy intensive than those which have closed down. Mr Gillett gave the example of the recent announcement of receivership of British Steel as an example of this trend. Mr Gillett stated that the second reason for the drop in demand is due to technological advances in energy efficiency, in very simple terms, and gave an example of the change to energy efficient light bulbs throughout industrial, commercial and domestic properties. Mr Gillett noted that when such measures are implemented, the resulting step change reduction in demand cannot be repeated. Mr Gillett stated that a large number of low hanging fruit in demand reduction have already been captured, and therefore that further demand reduction will come only from even greater technological advance.

4.5 Regarding the difference between demand reduction and need, and how that differs from appetite for developing projects, Mr Gillett advised that the need for energy generation is informed by demand requirements, e.g. when people want to put lights on. He stated that the need from a capacity perspective is the need to provide sufficient power generation facilities to the grid in order to meet that demand. Mr Gillett stated that for example, presently the economics of coal plant are poor, so the appetite to invest in them is low, but there may be times when their generation is needed on the grid, and it may be necessary to turn coal plants on to meet demand. He provided as a point of reference, in June 2019, when 17 continuous days of power was generated without coal: the first time since the industrial revolution.

4.6 Summarising Mr Phillips noted that need is the ability to respond to demand fluctuation, whereas demand is what the country requires at any particular time.

4.7 Mr Gillett discussed the critical contributors to National Grid's energy demand increase forecast over the period to 2050. He stated that electrification of transport and home heating, either directly or due to the sources of energy being electrified, is a new phenomenon for the UK. Mr Gillett stated that in order to meet the CCC targets, there is an established view that we need to go a lot further as country than previously envisaged to decarbonise sectors that are traditionally high carbon, for example cars and the fuel used, and gas used in homes and offices for heating. Mr Gillett outlined that the way to decarbonise these sectors is to transfer the primary fuel source from a high carbon source to a low carbon source by medium of electricity generation. He stated that this is where low carbon forms of power generation will be required, this feeds through to a draw on national electricity systems when consumers require the power to charge cars and heat homes.

4.8 Mr Phillips confirmed that it is not just rhetoric, and that there will be a demand growth, as set out in the opinion of leading experts, including those who advise the Government on projections as evidenced in the statements of National Grid, predicting a 5% growth to 2030 and in excess of 30% to 2050. Mr Phillips highlighted that the appetite to bring forward renewable energy projects is not just demand led. He set out that there are a number of factors that the regulatory regime can impose which causes a difference, citing the example of the steady growth in solar energy infrastructure before the Government suddenly ended Renewable Obligation Certificates. This had a dramatic impact on financial modelling, as proposed solar parks lost a contracted income that could be taken to a bank as a guaranteed income, so overnight developers had to re-evaluate financial models and viability to make it work, particularly those who lacked a power purchase agreement and Renewable Obligations. Mr Phillips stated that this gave the solar developers a merchant risk of the cost of the project against the wholesale energy prices, which can go up or down.

Summarising, Mr Phillips confirmed that it was not a shift in demand for energy projects, but actually changes to the regulatory regime that had a dramatic effect on income, which made industry pause for thought and now developers look at projects more widely and scrutinise financials to make them viable. Mr Phillips stated that there had been a dramatic reduction in cost over the last two years of around 30%, which helps projects become viable in a no subsidy world. These are dynamics on whether projects are promoted rather than on need to meet demand and demand itself.

4.9 Responding to points made on behalf of GREAT, Mr Phillips summarised that large scale solar has a part to play in the energy mix, and there is a difference in radiation in different locations in the UK, for example it is stronger in the south than the north. The crux of the GREAT's case, Mr Phillips stated, was not a statement against large scale solar or the part is has to play in the energy mix, but rather concerns focussed on this particular site.

4.10 Responding to points made on behalf of GREAT, Mr Phillips disputed that there is a drop in demand, stating that the drop was in appetite. He advised that it was about how the regulatory markets are stimulated, as if subsidies are removed from any technology, it will cause a pause for thought. Mr Phillips stated that adjustments required do not translate to a drop in demand, highlighting that many solar businesses are thriving globally not stopping. He set out that the point is diversity is required to secure supply of power. Whilst the Applicant agrees that it is necessary to look at the energy system as a whole, Mr Phillips noted that there is a part to play for large scale solar, alongside the growth of the offshore wind sector. Mr Phillips noted that offshore wind is a growth sector, but this is due to subsidy support through Contracts for Difference ("CfD"), the fact that it is a global market so developers can procure worldwide, and also the scale of projects coming forward, which have a huge investment potential.

4.11 Mr Phillips stated that the CfD mechanisms place a cap on how much total generation can be captured in a particular auction round and how much can apply to each technology, with the cap lower than what is coming through consenting process. To illustrate, Mr Phillips noted that the CfD auction round in 2021 will see Norfolk Vanguard, Hornsea Project Three, Norfolk Boreas and others competing for a subsidy, meaning that a huge capacity may not be delivered due to decisions on competitive pricing. This means that it is better not to put all our eggs in one basket of offshore wind just because it is a successful market, and similarly, Mr Phillips stated, we cannot say that power will come from nuclear given that one project has been withdrawn and another paused. Mr Phillips advised that the key is diversity of mix, and solar, offshore wind or nuclear are not each the answer, and a balance is needed.

4.12 Mr Gillett added to back up the diversity point that in June 2018, despite the significant capacities of offshore wind farms, wind didn't blow hard for over 72 continuous hours, so the generated energy load factor was below 10% over that period. He emphasised that this should not be taken as a recommendation not to invest in wind farms, but more that there should be diversity overall.

4.13 On the chapter in GREAT's report on energy infrastructure pipelines, Mr Gillett noted that the fact that the project is viable without subsidy is a good thing for the energy consumer in reducing the cost of energy for the UK as a whole, versus a technology that requires a subsidy.

4.14 Responding to an ExA question on the reason for removal of the subsidy, Mr Gillett suggested that this was due to the technological advancement in solar causing costs to reduce, and also the significant capacities of solar generation installed in UK in distribution networks particularly behind the meter in homes.

4.15 Mr Phillips supported this, stating that the removal of subsidy was born out of Energy Market Reform. He advised that the Government had looked at which technologies needed support as a cost benefit analysis and reached the view ahead of the market

that solar technology was at or close to grid parity in terms of cost, so therefore it did not need the support that had gone on before. Mr Phillips advised that there was concern of over the level of subsidisation prior to that and of the taxpayer footing the bill. He added that the Government had seen this as an opportunity for growing marketplaces from an economic perspective and delivering power and growing green credentials. In contrast to offshore wind, which is still considered to be an emerging technology, but going on for some years, solar had reached maturity. The removal of subsidy was not, Mr Philips advised, a statement of government intent that solar should not feature in the overall diversity mix, but that this was an economic decision that solar should stand on its own two feet.

4.16 Responding to comments from GREAT on the commercial viability of the project due to energy prices, Mr Phillips stated that this point applies to all projects. He noted that that no one would assume that offshore wind farm developers would take lightly the decision to invest money to bring to a DCO application nor would they be criticised for bringing in economic partners prior to construction. Mr Phillips advised that it was not a key point to say viability is not proven, but people could have faith in the fact the Applicant had invested considerable sums of money to get the project to this point, as it is confident of the direction of travel of power prices and the attractiveness of the development to bringing in further funding if needed. Mr Phillips advised that the Funding Statement [APP-020] is clear on funding and alternative sources.

4.17 Responding to a question from CPRE Kent, Mr Phillips confirmed that the project was proceeding on the basis of no government support.

4.18 Replying to a point made by GREAT on the use of the Capacity Market as a subsidy, Mr Gillett advised that the Capacity Market is not a subsidy but a redistribution of income, adding that it is a mechanism by which new capacity is encouraged to come to market, and one that encourages, through revenue certainty, existing generating assets to stay on the market. Mr Gillett agreed that there is a “minded to” statement issued by government that solar will be eligible to participate in the capacity markets. He also advised that one of the fundamental elements of the State aid approval for the Capacity Market is that it is a mechanism available to all eligible technologies, including wind, solar, batteries, coal, gas, nuclear and demand reduction, so the Capacity Market could apply to all.

4.19 In reply to points by GREAT, Mr Phillips highlighted that large scale solar projects are still being developed, noting the Little Crow solar NSIP with a proposed generating capacity of circa 200MW, the Sunnica Energy Farm solar NSIP with circa 500mw proposed output, and three or four others not currently in the public domain. He stated that the Cleve Hill Solar Park is the first, but not the only large solar scheme to come through the NSIP process and others will come, if this application is successful. Mr Phillips emphasised that the Applicant was not pioneering this scheme on its own, as these other independent developers were working on those other large-scale schemes. He stated that the theory in the Need Statement is reflected in the market, so if there were concern over the market, there would be no applications. Mr Phillips noted that a DCO application costs millions of pounds to bring forward, in contrast to an application under the Town and Country Planning Act 1990, which may cost only tens of thousands, meaning that developers do not commit lightly, and undertake lots of research first.

4.20 Responding to points made by a representative of GREAT on this project effectively blocking other projects from access to the grid, Mr Phillips stated that it is the role of National Grid to assess alternative projects and offer grid connection as it sees fit. He mentioned that one of the exercises when a developer applies for grid connection agreement is to assess the energy environment and what is available in terms of grid capacity, and what is expected to come onstream over time. For example, proposed offshore wind projects are often competing for the same grid capacity. Mr Phillips noted that National Grid has to assess all of the applications and decide how to allocate grid capacity to them, an exercise it has done here, with the Applicant having

entered into a grid connection agreement to import and export. He noted that National Grid have been supportive and note the benefits of the project being in this location.

4.21 Mr Phillips added that flexibility was sought in the DCO to take advantage of technological advancement between now and when construction commences, by when there could have been significant improvement in technology. Mr Phillips noted that if the Applicant had elected for a particular form of currently deployable energy storage, there could be an argument that the technology could be obsolete in future, or not reflect best available technology or cost efficiency. Mr Phillips noted that National Grid are excited about the contribution of the project to the energy ecosystem.

4.22 Responding to GREAT regarding National Grid's view of the project, Mr Phillips highlighted that the grid connection agreement had been entered into in 2019. He mentioned that during consultation, as set out in the Consultation Report [APP-022] there had been meetings held with National Grid where support was shown for the project. He added that the Applicant had been working with National Grid in exploring future ideas. Mr Phillips noted that this discussion was around security of supply being achieved by diversity of generation. He noted that large scale solar has a part to play in that, and other technologies have a part too. Mr Phillips confirmed that the Applicant had deliberately set up the project to respond to innovation and the market when it is constructed.

4.23 Mr Phillips responded to a query from CPRE on the viability of the project without battery storage, stating that there has not been a fast deployment of storage in the UK, partly as there is no route to market or guaranteed income for that technology. In this regard, co-location is normal. Mr Phillips advised that there had been some examples of energy storage already constructed that is not co-located, but he confirmed that this tends to be where a large end user has already been identified, usually a large consumer of energy which needs storage. Mr Phillips advised in the absence of that, at the moment, the simple fact is that it is difficult to consider viability for energy storage alone. He pointed out that this is reflected in the BEIS recent consultation on changes to the planning system in terms of co-location of battery storage with other technology, because BEIS realised that the planning system does not serve co-locating or retro fitting battery storage, the way to bring it forward is to co-locate with another energy development, where there is already a tried and tested revenue stream. In terms of how the Applicant has approached the project, because everything in Environmental Statement is a worst case scenario, a similar approach to financial modelling has been taken, using solar technology absent the energy storage, with the worst case on the known technology and its costs. Mr Phillips noted that the viability case therefore can only be improved with energy storage. He noted that crucially storage is not being promoted on its own, rather the Applicant is approaching the application as a solar project, with known viability for solar with an energy storage facility that offers flexibility.

4.24 Following on regarding viability of co-location, Mr Gillett highlighted Table 5.5. of the Need Statement, which explains all of the benefits from a system and services integration perspective. Mr Gillett noted that the addition of energy storage facilities to the application has a positive effect in terms of the delivery of services that help power flow to homes, and power flowing to the continent and London, and keeps the transmission system in particular in the area around Cleve Hill operating as required. In this regard, storage is an add on benefit to the application.

4.25 In response to points made by GREAT, Mr Phillips stated that viability of the project does not turn on storage. He queried whether GREAT's case was that there shouldn't be any more projects including large scale battery storage until the technology is proven, and any developer of large-scale renewable energy should not include storage because it is not proven and there are doubts over viability. Mr Phillips contended that this is the natural progression of GREAT's argument, but was not consistent with policy or market indicators. Mr Phillips stated that the Applicant is

looking to address viability concerns by future proofing its consent with an opportunity to deliver energy storage in conjunction with a solar park where there is a proven viability. Mr Phillips stated that the view of the Applicant, and of BEIS is that in the absence of subsidy support, the way to achieve storage is co-locating it with energy generating systems which are better understood and tested. Mr Phillips highlighted that the next round of offshore wind farm projects are considering how to bring in large scale storage into the process. National Grid has mentioned in consultation meetings that storage can help them deliver in a construction deployment period of 9 months capacity that could take ten years to achieve in the procurement, design, and budgeting of substantial grid upgrades. Mr Phillips stated that this is the way the world is moving, and the Applicant does not see that it is any different or think that it is a bad thing to future proof the consent. Mr Phillips confirmed that it is accepted there are concerns on energy storage viability per se, but this is addressed by running viability on the solar element so the Applicant knows the project can be delivered.

4.26 On questions over financial viability and whether parties would investment in the project without the energy storage, Mr Phillips took instructions and then advised that such investment had come in the form of Wirsol Energy. He advised that the project was originally promoted alone by Hive Energy, a developer of solar parks across the country, who invited a number of businesses to join as a joint venture. Wirsol won the opportunity, and when they bid for project, this was on the basis of a solar park alone. Mr Phillips referred to the paragraph 92 of the Need Statement and section 5.4.2.4 of Chapter 5 of the Environmental Statement (Development Description Chapter) [APP-035] which confirmed that solar alone could be taken forward with panels being substituted for the storage element.

4.27 On Chapter 5 of GREAT's statement, and the question of the economic efficiency of the project over time Mr Gillett drew attention to tables 6.2 and 6.3 of the Need Statement which shows a top level analysis of various scenarios of developing the proposed installing capacity. Mr Gillett noted that in relation to the system costs related to a potential build, referencing table 6.2, system costs will apply equally across each scenario, due to them modelling the same capacity of solar generation, therefore effectively the same outturn and same profile therefore incurring (to a degree of tolerance in the modelling) the same system costs of integration.

4.28 Replying to comments from GREAT, Mr Gillett agreed that much of the analysis has to be assumption based. He confirmed that the purpose of analysis in the Need Statement is not about saying solar is the cheapest form of energy generation at a site but rather about analysis of options of different subdivisions of that generation technology and characteristics at that site. Therefore, Mr Gillett confirmed that the analysis looks at different scenarios with the same system costs.

4.29 Replying to GREAT comments on Chapter 6 of its report, and the 2018 Future Energy Scenarios document, Mr Gillett stated that the emphasis on decentralised generation should be understood in the context of having a national gird, with around 80GW of generation connected to the transmission network and around 25GW to the distribution network. Mr Gillett commented that all of the scenarios show that the distribution network connections will grow, and transmissions connections are likely to grow less or potentially shrink. Mr Gillett emphasised that it is important to look at the numbers and note the four scenarios all include future projections of significant capacities of generation to the transmission network from wind, carbon capture use and storage, potentially from nuclear, and from solar, biomass and other technologies. Mr Gillett confirmed that there is an emphasis on distribution growth, but that there remains a context of foreseeable requirement for connection at transmission level. Regarding GREAT's point that solar is an intermediary step, Mr Gillett stated that it can only be intermediary if we are convinced of future steps. Mr Gillett said that the "no regrets" policy position is a broad development of all forms of low carbon generation and integration technologies, (including storage and demand reduction) of which Cleve Hill Solar Park is one.

4.30 Regarding Chapter 7 of GREAT's report, Mr Phillips stated that the project had a transmission connection not a District Network Operator ("DNO") connection. He confirmed that the Applicant had had consultation with the local DNO, UKPN regarding undergrounding of a powerline to the south of the site, but the project would not connect through them. Mr Phillips noted that Chapter 7 seemed to focus on the difficulty associated with distribution network connection and UKPN's role, but UKPN does not have a relevant role in this project.

4.31 Mr Phillips noted GREAT's comments on this regarding the impact of the transmission connection on the distribution network, and highlighted that issues of this nature would have been considered by National Grid when considering the connection agreement.

4.32 Mr Gillett mentioned that National Grid are working closely with UKPN on their Power Potential project which aims to improve transmission to distribution and vice versa flows. Mr Gillett stated that in conversations with National Grid it was confirmed that the UKPN network is an area where innovation is being employed to solve problems that may alreadyhave occurred, and also to solve issues yet to occur. Mr Gillett stated that the response from National Grid in terms of the connection is entirely joined up with conversations they are having with UKPN. He confirmed that there had been no feedback from National Grid that there is a definite cause due to the project on network operability at lower voltage levels.

4.33 Mr Phillips noted that lots in GREAT's report makes sense and confirmed that the Applicant understood that there were many variables and factors to be considered. He stated however that what does not come out well is that these points are all presented as if they are tasks that the Applicant has not done, or which it should do, whereas some of the actions are for other parties such as the DNO, National Grid or others. Mr Phillips made the point that the fact remains that the Applicant has a grid offer and connection agreement, and is in discussion with UKPN and National Grid, who are also in discussion with each other. He noted that the enthusiasm for the project from National Grid for the project is related to its ability to learn from how it can be integrated into the grid and the innovation of the energy storage will factor in the future energy scenarios. Mr Phillips summed up that the points raised in GREAT's report are legitimate concerns, but they have all been taken and addressed, not necessarily by the Applicant, but by others such as National Grid. He advised that the Applicant will provide a response in writing to the GREAT report.

4.34 **The Applicant to address the need for the Proposed Development in the context of relevant policy;**

4.35 **The extent to which alternative renewable and other energy technologies and alternative sites and solutions are relevant to this Examination in relation to 'need'; and**

4.36 The ExA took the above two agenda items together.

4.37 Regarding the second item, Mr Phillips noted the phrasing and advised that there was no requirement to consider alternatives from a policy perspective, but there is from a legal perspective under the Environmental Impact Assessment regulations. Mr Phillips highlighted that the project's environmental statement had considered alternative sites and alternative technologies on the site.

4.38 **The Applicant to explain the process of consideration of alternative sites that was pursued prior to the application, including where the EIA Regulations requirement to report information on the environmental effects of alternatives that were considered.**

4.39 The ExA referred to its first written question 1.5.14, the answer for which explained how the sequential test was undertaken in terms of alternatives, and asked for this to be expanded upon, and how the Infrastructure Planning (Environmental Impact

Assessment) Regulations 2017 ("EIA regulations") have been addressed for alternatives.

4.40 Mike Bird stated that in addition to response to 1.5.14, the Applicant had considered alternative sites as set out in the Environmental Statement in Chapter 4 - Site Selection, Development Design and Consideration of Alternatives [APP-034]. Mr Bird noted that consideration of alternative sites was not included in the preliminary environmental information report, which was published for section 42 consultation, but it did include a description of the site selection process and characteristics of the site. Mr Bird stated that the responses to the Applicant's consultation were helpful, in particular in relation to alternative sites and technologies, and alternative ways to deploy the same technologies. He highlighted that there had been several suggestions of specific locations as alternative sites for consideration, and these had been considered in chapter 4 of the ES. Mr Bird confirmed that chapter 4 quotes the specific requirements of regulation 14(2)(d) of the EIA regulations, which requires an environmental statement to provide a description of reasonable alternatives and the reasons for the option chosen. Mr Bird stated that the information contained in chapter 4 addresses the regulation 14(2)(d) requirement in a few sections. Firstly, section 4.4.3, as referred to in the answer to question 1.5.14, which addresses alternative sites' ability to utilise the existing capacity at the Cleve Hill substation, and supported by Technical Appendix 4.1 [APP-201], which sets out the sequential test analysis of alternative sites within 5km of the existing Cleve Hill substation. Mr Bird clarified that the distance of 5km was determined through discussion and agreement with Xero Energy, the Applicant's grid consultants, who provided discussion as quoted in the sequential test report regarding the constraints on a developers' ability to connect this type of development to that specific point of connection and what might constitute a viable connection distance. Mr Bird stated that the 5km distance is not always as the crow flies, so distances can be slightly longer. In conclusion, Mr Bird stated that the analysis in the sequential test report shows that Cleve Hill is the most viable site available to connect to Cleve Hill substation in terms of size, environmental impact and other characteristics, also taking into account the need to connect another development into the same point of connection. Mr Bird stated that section 4.4.5 of chapter 4 considers the specific alternative sites provided in section 42 consultation, including Kingsnorth former power station, the Hoo Peninsular, the Isle of Grain, and Canvey Island. He highlighted that this section includes comment on the environmental effects of the alternatives, setting out in high level terms that there are environmental and planning considerations on all the specified sites, and it is not necessarily the case that a site can tick all the boxes on every characteristic which are desirable in terms of solar development. Mr Bird stated that examples of constraints include nature designations that apply to some of the brownfield sites, such as Kingsnorth, which is in similar proximity to nature designations as Cleve Hill. Mr Bird also highlighted that section 4.4.5 refers to the Need Statement, which states that if there is a potential for alternative sites to be used for renewable energy infrastructure, this should be as well as not instead of the Cleve Hill site.

4.41 Mr Bird responded to an ExA question confirming that the Applicant is content that it has provided sufficient environmental information that was used during consideration of alternatives to satisfy the EIA regulations.

4.42 Responding to comments from the CPRE and GREAT, Mr Phillips noted that if one parcels the project up into particular angles of inquiry or topic of potential impact, it is possible to say on any given one that that another site is preferable. However, Mr Phillips advised that the project and each of these topics must be considered as a whole and the question of need plays into site selection, as if a project is to be delivered at a fair price to the consumer, a developer must look at finances. He noted that the costs of taking on a brownfield site, with land decontamination possibly being required to make it suitable for solar development, and with the potential issue of competing proposals for the site, this can be a reason not to use a brownfield site. These points, he advised, all get factored in to site selection. Mr Phillips explained that, as set out methodically in the Environmental Statement, when all the unique

scenarios are brought together if a good grid connection capacity is coupled with other factors such as low grade agricultural value land and good irradiation, Mr Phillips advised that the consideration quickly goes from a broad view of potential sites to a small group of potential sites. Further considerations of whether it is feasible to build on any particular the site follow, e.g., if the site is designated and certain ecology factors and impacts. The conclusion is then reached that this site works better than others.

4.43 Responding to comments from CPRE, Mr Phillips confirmed he did not have the costs of decontamination of the Kingsnorth site to hand, but that the site may have fallen from consideration for other reasons. He noted that there are government policies beyond those for use of brownfield land that are relevant, for example on sustainable development, and also as per the discussion on local plan policy DM20, it is accepted that in some circumstances building on greenfield land is acceptable. Mr Phillips advised that it does not necessarily follow that a brown field site is suitable in relation to all the other ecology factors that go with it.

4.44 In response to a question from GREAT, the Applicant can advise the reasons for not pursuing the Kingsnorth Site are set out in section 4.4.5.1 of Chapter 4 of the Environmental Statement. Paragraph 119 states that a solar park on this site would be "*unlikely to have the potential to reach the generation capacity achieved by Cleve Hill Solar Park due to environmental constraints*". These constraints are set out to be scattered residential properties, undulating topography, an extensive network of public rights of way across the area, and the proximity of the Medway Estuary and Marshes SPA and Ramsar site. The potential need for remediation is also highlighted in this paragraph.

5. **AGENDA ITEM 5 – The design of the Proposed Development, including novel aspects and the Applicant's experience**

5.1 **The Applicant to address this topic in the light of the issues and questions that have been raised by Interested Parties; to include the applicant's relevant project experience and design features such as the orientation of the panels, the density of panels, the height of the structures, and the relative immaturity of battery storage technologies on the proposed scale. The Applicant to explain the process of consideration of alternative technologies, designs and layouts that was pursued prior to the application.**

5.2 Hugh Brennan stated that he is a co-developer of the project and has been the Managing Director of Hive Energy in the UK for 6 years. Mr Brennan advised that Hive Energy was founded around ten years ago, and has developed over 300 MW of solar in the UK. In Hampshire in 2015, Hive built at that time the largest solar farm in the UK, which has a generation capacity of 48MW. Mr Brennan expressed his view that solar development is relatively straightforward, with the basic technical aspects being the same regardless of size of the project. Mr Brennan advised that Hive Energy continued to develop projects in the UK, and overseas for the last four years, including building, owning and operating 10MW of solar parks in Turkey, and currently building a 60MW plant in Cuba with other projects around world of several hundred megawatts in Spain and the Philippines. Mr Brennan advised that Hive Energy work with best in breed of technology and providers to deliver the projects, depending on their size and location, and this is how Wirsol came to be known to Hive, as a company which Hive has sold projects to in the past, with expertise in design and build.

5.3 Responding to an ExA question, Mr Brennan advised that Hive did not have experience of an east-west panel layout which is an emerging technology driven by the UK's new subsidy free environment, this environment has changed the dynamic on whether to have a peak power versus power spread over the course of the day. Mr Brennan noted that east-west layouts had been used in other sites over the world, highlighting that Wirsol were experienced in this area.

5.4 Simon McCarthy advised that Wirsol are the other 50% of the joint venture behind the Applicant. He noted that whilst Hive Energy are typically developers, Wirsol are constructors. Mr McCarthy confirmed that Wirsol has built 1.9GW of renewable energy globally including wind and solar. In the UK, Wirsol has constructed 160 MW, with larger scale solar parks in Australia, where Wirsol has built 397MW of solar parks over 14,500 acres, with a value of £560m. Mr McCarthy advised that Wirsol has worked with the world's largest construction companies including Laing O'Rourke and Bouygues. Mr McCarthy advised that Wirsol has built a site in Holland with an east-west orientation, which the Applicant team visited inorder to gain a better understanding of the configuration, with a focus on any environmental impact. He confirmed that Wirsol graze sheep on all sites both for land management and to retain an agricultural land use.

5.5 Regarding points from CPRE on carbon sequestration, Mr Phillips advised that a response would be made in writing at Deadline 3 (see Document 11.5.5, Written Representation by the Applicant on CO2 Offset and Sequestration) taking in what would happen in a no scheme world, and the potential for managed realignment of the flood defence.

5.6 Turning to points on the east-west layout, Mr Phillips advised that a planning balance had to be struck, highlighting that with alternative scale and technologies the local impact broadly remains the same, e.g. a smaller scale solar park would still have moderate to major visual impacts due to the fact that the Saxon Shore Way is elevated and gives views of the site. Mr Phillips advised that the Applicant's view is, responding to planning policy and wider objectives, if one accepts that there will be local impacts, in order to make the planning balance work in favour of granting consent for the project, there must be secured the maximum public benefit of the project from power generation. Mr Phillips advised that there are some panel efficiencies in a south facing site compared to an east-west arrangement, but noted that there are also requirements of wider separation of panels in a south facing layout, which means there could be a power reduction of as much as one third for south facing panels compared to east-west, but impacts such as on landscape and visual impact would be the same or worse, as people on the Saxon Shore Way would be looking at the under croft of panels. Mr Phillips stated that the product of consultation was that different parts of site required different treatments, for example the view from residential properties differs, so there has been discussion on introducing screening, resulting in the moving back and shrinking of the proposed solar park from the first plan. To switch to a south facing layout, undermine this work because more of the site would be needed to generate power . Mr Phillips summarised that there was a whole range of factors to be considered, and that use of south facing panels is not a panacea as it may lead to higher impacts but for a lower power production.

5.7 Responding to a question from CPRE, Mr McCarthy advised that the east-west solar park in Holland is a 35MW project, which is not experimental.

5.8 Mr Brennan advised that solar panels used to be more expensive, so developers used a south facing, sharp angle, to maximise each costly panel's power output. Gradually, as panels become cheaper and have a higher efficiency, even south facing panels are positioned flatter, and more densely. Mr Brennan stated that building the park would not be fundamentally different, being simply DC electricity into an inverter, transformed into AC and exported out. He stated that now solar panels are less expensive, arrays can be built not in a perfect way, but to, overall, produce the most the most amount of lower cost energy. Mr Brennan noted that during the design process the Applicant has to be able to take advantage of the best products at the best price to produce the lowest price electricity to feed into the grid at the lowest cost. Mr Brennan stated that the east-west layout is a logical flow from the cost reduction of panels.

5.9 Mr McCarthy responded to a question from CPRE on water guttering from panels, stating that the panels would not be like an apex of a roof, as light can fall within the array. He confirmed that sheep actively graze under many east-west arranged sites.

Responding to an ExA question, Mr McCarthy stated that the site in Holland had a similar density and corridors between arrays as proposed for this project.

5.10 Mr Phillips emphasised the simplicity of the technology, being simply metal stanchions with panel on top. He noted that this has been developed at a commercial grade, as a 35MW scheme is large in the UK, and it does work. Mr Phillips highlighted that Hive and Wirsol can draw on the experiences of large construction companies mentioned, such as Laing O'Rourke who also have highly experienced teams to call upon. He confirmed that no developer would build a solar park if it were not financially viable and given that it is a multi-million pound project to deliver, construction would not even be procured unless there is a sound financial basis to proceed. Mr Phillips also referred to the strict enforcement procedures under the Planning Act 2008, including criminal penalties, which give SBC strong powers to control the situation if there is any issue that needs correction.

5.11 Mr Gillett referred to points by GREAT regarding a Sheffield University study on east-west aligned solar farms. He agreed that the study shows that on a per panel basis more generation can be achieved by a south facing versus east-west facing panel arrangement, however he noted that an east-west orientation allows more panels within the geography, thereby generating more total energy than from a purely south facing array. Mr Gillett advised that an east-west array has an intrinsic ability to reduce its impact on the energy system around it given an east and west panel would collect more energy in both the early morning and evening than a south facing panel arrangement, which is more in line with the natural patterns of electricity demand through the day in GB. The south facing generation profile is towards the middle of the day which could cause system operability issues with production typically at a less useful time of the day.

5.12 Regarding an ExA question on progress of battery energy storage technology, Mr Gillett stated that battery energy storage within the UK context is, at scale, at a relatively early stage versus other technologies. He noted that the first significant battery storage facilities were enabled through a National Grid competition with tenders awarded in 2016, with approximately 200MW of storage built out in a number of locations across the country, some at transmission level, and some at distribution level up to 50MW. Mr Gillett advised that there is therefore experience of energy storage in operation for a number of years in the UK. Internationally, Mr Gillett advised that the two main geographies for the development of energy storage are in China and the US. He highlighted four recent announcements of projects in the US, namely a Tennessee Valley Authority (TVA) projects totalling 14GW solar and 5.3GW of storage, a PNM gas, solar and storage facility broadly comparable to this project being developed to replace a 100MW coal plant, Nevada Energy 1.2GW solar and 2.3GWh storage projects, and at least a further 2.7GW of batteries in plan in the southern states of the US. Mr Gillett summarised that although battery technology is at the forefront of technology in UK, globally it is not.

5.13 Regarding the remoteness of the locations, in answer to a question from the ExA, the Applicant advises that:

5.13.1 TVA's plans are across a multi-year horizon, with up to 2.4 GW by 2028 and 5.3 GW by 2038. Additions may be a combination of utility (remote) and distributed local scale

5.13.2 PNM is a co-located plan with batteries necessarily located close to other industrial equipment but not close to a town

5.13.3 Nevada projects are proposed across 3 locations, all remote from significant towns but within 20 miles of Las Vegas

5.13.4 Of the remaining portfolio, of particular note are: the Alamitos, 400 MWh project under construction at Alamitos, Long Beach, California – a

densely populated area close to Los Angeles; the Hummingbird 75 MW / 300 MWh battery storage project within close reach of domestic properties in Metcalf near San Jose; and the 300 MW / 1,200 MWh battery storage project at Moss Landing, within close reach of a commercial and leisure harbour area in the Monterey Bay area, California.

5.13.5 Closer to home, Ørsted operate a 20 MW battery at Carnegie Road, Liverpool, in close proximity to commercial and residential properties. A 50 MW / 50 MWh battery has been built in close proximity to residential and commercial properties in Swindon; a 49 MW battery at Roosecote, Cumbria, in close proximity to residential properties; and a 49 MW battery at Pelham, Herts, built in close proximity to commercial and residential properties.

5.14 Answering a question from CPRE, Mr McCarthy stated Wirsol had built the largest co-located solar and battery facility in Australia, which was a 25MW Tesla battery. He also confirmed that Wirsol had not built a battery storage facility on flood plain.

5.15 Mr Gillett stated that the US sites were a broad mix of projects in relation to their location (and has provided additional detail in 5.13 above), but there are many built out and operating particularly in California, but also in the UK for over 2 years.

5.16 Responding to an ExA question on battery safety, Mr McCarthy advised that the Applicant is engaged with the world leading suppliers of batteries, who would advise on the best technology.

5.17 Regarding an ExA question on the safety of technology deployed in the recent past, Mr McCarthy confirmed that all solutions being considered have internal fire suppression systems within each battery container. He noted that there had been nervousness around batteries with some hastily and poorly built battery installations in Korea. Mr McCarthy advised that the all the designs being evaluated for Cleve Hill are from world leading companies with exemplary safety records.

5.18 Responding to an ExA question on the legislation around fire safety, Mr McCarthy advised that the Applicant is liaising with the Fire Brigade and would share battery installation designs with them.

5.19 Mr Phillips advised that there are regulations to cover fire safety, but there are also duties under the Health and Safety at Work Act to protect others around site, not just employees. The Applicant has subsequently prepared a written representation on this point (see Document 11.5.1, Written Representation by the Applicant on Electrical Safety) of the Deadline 3 submission. Mr Phillips also flagged that under the DCO requirement, when a final design has been chosen, it would require approval of SBC. Therefore, when discharging the requirement it is up to SBC to have regard to safety issues. Mr Phillips noted that SBC are bound to follow the environmental statement parameters, but SBC can insist on a safety requirement and can consult with fire service.

5.20 Responding to a comment from Faversham Society, Mr Phillips advised that the DCO is broadly an outline permission, with parameters that take their lead from the envelope of design from the environmental statement. Mr Phillips stated that the hearings were about the ExA being able to form a recommendation to the Secretary of State. If the Secretary of State grants consent, at that point the involvement of the Secretary of State and PINS broadly ends, as any requirements will be administered by SBC, whilst anything offshore is for the MMO to administer. Mr Phillips advised that once the DCO is granted, the final design solutions will be worked up, including taking a steer from the supply chain, and having regard to any emerging policy and regulations, as well as the view of consultees, to give the discharge application the best chance of approval. When SBC receive a discharge application, Mr Phillips noted, there are a series of statutory consultees to have regard to, but SBC also has discretion to seek views from elsewhere. Mr Phillips noted SBC could chose to go to

HSE, the fire service or any other party, in their discretion for advice. If SBC receive advice that there is a concern, the Applicant would have to deal with it.

5.21 Mr Phillips replied to comments from the CPRE that if there is no approval of requirement discharges, there is a right of appeal to the Secretary of State. He confirmed that the requirements set out what needs to be done for delivery, and the Applicant can build in a need to include safety proposals if concerns are raised.

5.22 Mr Phillips responded to comments from Faversham Society regarding Kent and Medway Fire Authority's involvement in the examination, stating that the Applicant had made contact. He outlined that the fire authority had sought to become an interested party, but were advised that they don't qualify. He confirmed that the Applicant has held discussions with the fire authority in any event and sought their initial views.

5.23 Mr Bird confirmed that the Applicant had consulted with the fire authority in the initial consultation, but had received no response. He understood that the fire authority had become aware earlier in June in the project, and were interested in learning and understanding battery storage, as the fire authority is expecting further deployment across its area. Mr Bird stated that the fire authority is interested in learning how it could account for such project in the event of an emergency situation. Mr Bird added that the fire authority is aware of battery technology in a domestic setting, and electric vehicles, and were aware and involved and open to dialogue to learn. He confirmed that the Applicant was also willing to work to understand the constraints the fire authority work in, and account for these in the final design.

5.24 Replying to a question on the Rochdale envelope, and points made by SBC, Mr Phillips confirmed there was a maximum height, but it was not the same across the scheme. Mr Phillips advised that the Applicant had produced a "heat map" style plan showing the height of panels [AS-026], which shows what heights will be in each of the development zones.

5.25 On the Rochdale Envelope point, Mr Phillips stated that when an applicant produces its environmental statement, if it knows an element of the project will be built in a particular way, it can set out precise measurements of those components. However, where flexibility is needed, the Rochdale envelope allows a range of parameters to be assessed with the worst-case scenario being used for assessment. Therefore, if a larger development is proposed which has not been assessed, the starting position is that it has not been assessed. However, if a smaller design was proposed, the starting point is that it is acceptable. Mr Phillips stated that when preparing an environmental statement, for each topic the applicant needs to say what is the worst case is for delivering project, for example, there may be lower traffic over a longer period, whilst some provided higher traffic over a shorter period. Mr Phillips advised that an applicant needs to consult on the worst case for each aspect so the public would see the worst the development can be. He noted that the Environmental Statement sets out the worst case in each chapter and for the Secretary of State to determine the application, it needs to capture parameters as worst case scenario in the DCO. Mr Phillips clarified that height of panels would be conditioned, but there is no need to set out parameters such as panel angle, because that has no impact on the worst-case scenario as the angle has no demonstrable difference in the landscape and visual impact assessment.