Appendix 2 – Summary of applicants supporting information

Pre-application Consultation Report – This report provides an overview of the pre-application consultation activities undertaken by the applicant, including two drop in public events, and the subsequent changes made to the development. The report states as a result of the consultation activities the panel coverage of the site was reduced, amendments and additions were made to soft landscaping and alterations were made to internal access tracks.

Planning, Design and Access Statement – This provides a summary of the site context, the background to the proposal and the pre-application consultation and assesses the development in relation to the Angus Local Development Plan and National Planning Framework 3 (NPF3) approaches to renewable energy developments. As the application was submitted prior to the adoption of NPF4 the document also makes refence to relevant Scottish Planning Policy and TAYPlan tests but also refences the National Planning Framework 4 draft energy policy at that time. The document states that tilt panels would be lower than typical fixed panels and would be anti-reflective. It confirms no lighting is proposed in or around the site once operational and the site would be reinstated after the array had ceased operating, around 40 years after initial energy generation. The statement suggests no suitable brownfield land or buildings were identified in the site selection process and the development would contribute to achieving net zero by 2045 by increasing the amount of zero carbon renewable electricity generated and supplied to the National Grid. The statement considers the scheme would leave an enhanced landscape consistent with the objectives of development plan and National policy and would generally improve the sites biodiversity value. It concludes the proposal complies with both the Local Development Plan, and National Policy and that material considerations weigh in favour of the development as it will contribute to renewable energy generation and offers an opportunity to contribute to meeting the climate change emergency.

Landscape and Visual Impact Assessment (including appendix A and cumulative addendum) – This assessment considers the potential landscape and visual impacts associated with the development. Its states the development would introduce a new vertically low, medium-scale renewable energy feature into the rural landscape, at a relatively low, remote point to the north of Forfar. It indicates that at this point the landscape is defined by gently sloping landform to the east, relatively flat landform to the west and by larger scale, rectilinear, unenclosed arable fields. It suggests the area is reasonably typical of the defined character within the landscape character type. The assessment states the site is not located within, adjacent to or in close proximity to any landscape designations or any areas or features of high landscape or scenic value. It notes the proposal has been reduced in scale and extent through the design process, including the exclusion of panels from some fields within the site, increased separation from key boundaries and core paths and significant setbacks from higher sections of the site which would be more visible in views from the surrounding landscape. It states that the overall field texture would change but the scale that is characteristic of the site and the surrounding landscape would remain as is and as would ridgelines and skylines. It concludes the landscape and visual effects are relatively localised, with intermittent points of visibility likely from publicly accessible places generally within 0.2km and with potential for some isolated views from elevated location to the south at just over 2.5km. However, it indicates clear and open views are unlikely from other visual receptors in the surrounding landscape including settled areas within and around Forfar. The assessment indicates that in the medium to long-term, the proposed landscape mitigation planting would help to screen the large majority of the development, as well as integrate the development into the surrounding landscape, thus minimising adverse impacts on the local landscape. The assessment states potential cumulative effects with any other relevant developments are acceptable and at the end of the development's lifespan, the predicted

effects could be reversed as the land would be returned to its former agricultural use.

Noise Assessment (including addendum) – These documents consider the potential impact the proposal could have on nearby noise sensitive receptors. The original report states a noise propagation model in accordance with ISO 9613, based on candidate plant typical for this type of development was produced. It states the model does not include the use of specific mitigation measures, such as attenuated louvres, low noise plant or enclosures, and assumes that all plant will be operational at full capacity continuously and concurrently, which is unlikely to occur for the majority of the time. Accordingly, the document advises the noise assessment is inherently conservative. A quantitative assessment and a qualitive assessment were conducted in accordance with relevant building standards and concluded that noise levels would remain below the fixed guideline levels and the rating level does not exceed 5 dB above the background sound level. The Addendum was provided in response to a request from Angus Council to consider noise level limits using Noise Rating curves; internal limits of NR20 for night-time and NR 30 for daytime. It notes that without specific building information, such as the size, location and specifications of glazing, it was not possible to accurately predict the internal noise levels at individual receptors. However, an equivalent external limit was set, and an assessment of predicted levels were made against this. The addendum also presented a revised assessment against BS 8233 Guideline levels, using a reduced window attenuation value of 13 dB. The report states predicted levels were below the noise limits for both assessments in the addendum. The documents conclude, the proposed development will not have a significant adverse noise impact on the local area subject to appropriate noise limits.

Glint and Glare Study

This study considers the potential glit and glare impacts the proposal could have on sensitive receptors. The study concludes that the modelling indicates solar reflections are geometrically possible towards a 1.9km section of the B9128 and a 0.6km section of the A926. The study suggests that worst-case impacts on key road users would be low due to the reflections occurring from outside of the primary horizontal field of view, significant clearance distance and the screening proposed around panel areas. In terms of likely impacts upon residential receptors, the study states modelling indicates solar reflections are geometrically possible towards 109 of the 110 dwelling locations assessed. It states 68 dwelling locations will receive no impacts in practice due to the presence of significant screening in the form of intervening terrain, buildings and/or vegetation. A low impact is predicted on 41 dwelling locations but no further mitigation is recommended due to the significant clearance distance and screening proposed around panel areas which is expected to obstruct views once sufficiently matured. The study concludes that there are no unacceptable glint and glare impacts predicted on surrounding road safety and residential amenity which would require further mitigation [than that already proposed].

Flood Risk Assessment

This assessment considers the potential implications of flood risk upon and as a result of the development. The assessment states surface water flooding is present within the site boundary along the Lemno Water to the north of the development and associated with topographic low points to the south of development. It recommends the solar infrastructure has principally avoided these areas, with the more vulnerable infrastructure including the battery storage system and transformer stations avoiding areas of potential surface water flooding. It notes solar panels are considered to be less vulnerable and water compatible within areas of shallow surface water flooding. It states that in area 4 where localised surface water flooding is noted, the panels will be raised or limited to a reduced tilt such that they will have a minimum 600mm above the surface water flood level. It states the flood levels are currently indicated to be 0.3m and therefore the affected panels will have a minimum ground

clearance of 0.9m. The assessment concludes that when factoring the land use vulnerability of the development and the location of more vulnerable elements of the development, the development is assessed to not be at unacceptable risk from surface water flooding. New impermeable and semi-impervious areas are proposed however, the report states these comprise less than 0.5% of the site area and would have a very limited effect on runoff rates therefore no formal drainage is proposed. The panels direct rainfall to the ground to infiltrate below the panel and therefore don't affect existing run off rates or flow pathways. The report concludes the proposal would not result in unacceptable levels of flood risk.

Ecological Assessment

This assessment considers the existence of various habitats and evidence of protected mammal species across the site. It states the entire site consists of arable fields with scattered trees along the northeast and southern boundaries and that no evidence of any protected species was recorded on site. It states that as the site is used for agricultural activities it is not anticipated that any protected species would occur within the boundary and the site has limited suitability to support breeding bird species listed on Schedule 1 of the Wildlife and Countryside Act. It states the trees identified were classed as having a low bat roosting potential. It considers that the site may be utilised by birds such as Pink-footed geese and Greylag Geese for foraging but states the displacement of foraging birds is unlikely to significantly affect the population of these species. The assessment concludes that there are no ecological constraints identified but lists a small number of precautionary mitigation measures such as a final ecological walkover if the works are to be undertaken during the bird breading season and the monitoring of ditches with running water around the site for new burrows.

Biodiversity Net Gain (BNG) Assessment

This assessment provides a habitat condition assessment as per the 'The Biodiversity Metric 3.1 – Technical Supplement (Natural England, 2021) and a BNG assessment as per the 'The Biodiversity Metric 3.1 – Technical Supplement – Beta Test'. The report notes the metric tool used was developed by Natural England and is primarily designed for use in England. It highlights that this has some repercussions when using the metric in Scotland as a main factor of a habitats given unit value, is its "Distinctiveness" and the rarer a habitat the higher its "Distinctiveness" and overall biodiversity unit. Certain habitats are more common in Scotland than they are in England, and it suggests this should be kept in mind when reviewing the scores for the proposal as biodiversity values may be overestimated in some cases. Notwithstanding this the assessment recommends that all existing habitats recorded at the site were of 'poor' condition, as such, proposed and further recommended mitigation and enhancement measures were considered likely to have a positive effect on biodiversity. It recommends trees, shrubs and hedgerows should be planted and wildflower meadows created in and round the site, as well as the installation of a small number of bat and bird nest boxes.

Geological Desk Study and Agricultural Land Classification

This study considers the geological setting, geohazards and the current agricultural land classification of the site. It states the site is listed as Class 3.2, described as land capable of supporting mixed agriculture, on Scotland's Soils web-based application. [This is believed to be the lesser resolution version of the soils map]. The report states that mixed agricultural land makes up approximately 20% of Scotland's agricultural land and is suitable for a moderate range of crops such as barley, forage crops and grass. It suggests that further consideration of the soil type based on the Soil Information for Scottish Soils mapping system suggests that the land is suitable for a moderate range of crops and that most of the site is well drained. Therefore, the report recommends that for planning purposes the site be

considered as Class 3.2 and the land is not considered to be the “best and most versatile” of agricultural land.

Archaeological Desk Based Assessment

This submission assesses the impact the proposal could have on built heritage matters. It considers a 1km study zone for designated heritage assets and a 500m study area for non-designated heritage assets as measured from the site boundary. It indicates there are no designated heritage assets within the site, with one Scheduled Monument, nine Listed Buildings and one Conservation Area within the 1km study area. It states there are seven non-designated heritage assets within the site which comprise of the extant remains of one farmstead, the sites of a cottage, well, farmstead and pottery scatter, an undated pit identified on aerial photography and cropmarks associated with a Roman temporary camp. The assessment considers the proposal would not result in any unacceptable direct or indirect impacts upon designated sites and that there is a low-medium potential for previously unknown remains of non-designated features to exist in the site. Therefore, it suggests that subject to a programme of trial trenching to establish the presence and condition of any previously unknown archaeological remains, the proposals would not conflict with relevant legislation or national or local planning policies seeking to protect such assets.

Construction Traffic Management Plan

This document considers the route, nature and volume of traffic anticipated in connection with the proposed development. It states for the construction phase the site will utilise an existing agricultural vehicular access taken directly from the B9128 at the Forfar Golf Driving Range junction. A temporary construction access is then proposed between the existing track and the main site. The plan indicates the construction of the solar farm would take place over approximately a six-month period, where during this period traffic associated with the site will be attributed to the construction workforce and deliveries. The solar panels and associated infrastructure will be delivered using HGV lorries with this traffic entering and exiting the site via the specific temporary construction access. By utilising this access it states, larger construction vehicles will be able to easily access the site from the A90 to the north, ensuring little to no disturbance to the road network within the main town. Most deliveries are to be concentrated in a 4-month period, resulting in a daily average throughout this period of five to six deliveries a day (or ten to twelve two-way movements). The peak construction period is expected to occur in weeks 4-6 of the construction programme, with an average of nine deliveries a day. 24 car parking spaces will be provided on site within the compound for the construction workforce. Once the site is built and operational the temporary construction route will be removed, and all access will be via a small standard field access on the northern side of Suttieside Road. Once operational, the solar farm will be unmanned with the exception of limited monthly trips associated with maintenance. The document concludes the number of construction workers and delivery vehicles is low and will mainly occur outside the traditional network peak hours and therefore the construction phase will not lead to an unacceptable adverse impact of the safety and efficiency of the local highway network. It states access to the site, is safe and appropriate for the construction and operational phases of the solar farm and the operational phase will result in a negligible impact given the small number of movements required.

Fire Safety Information

This document provides details of fire safety measures relating to the proposed battery energy storage system (BESS). It indicates the types of safety systems available on the market at present, along with risk reduction barriers which are likely to be incorporated into the installed system. It states separation distances would be applied to minimise the chance

of fire spread and equipment would be selected to be fire limiting and installed and maintained in accordance with international guidance, good practice, and related standards. It states cell failure leading to thermal runaway is the main cause to date of BESS fire incidents (although this has been incredibly rare in occurrence). It advises this happens when an individual cell within the BESS fails and heats up over a period of around half an hour, during which time it is still possible to prevent a resulting fire. The document indicates that the issue with older sites was that they only had a single line of defence, consisting of smoke particle and heat detection, to detect the cell failures. These older systems are no longer used and new systems are based on the detection of gases from failed cells. Failed cells release tiny levels (measured in parts per million) of gas which modern gas detection systems can recognise. This happens within the first few seconds of a failure occurring and at a point where there is barely any thermal effect. A two phase second line of defence is then also employed which uses a fire-retardant powder to remove oxygen from the system and a water spray system to flood the chamber to cool the batteries. The document states an emergency plan will also be produced by site operators and shared with the Fire and Rescue Service prior to the site becoming operational. It concludes the applicant is committed to developing a safe BESS that will provide a dependable and safe operation and that it is in everyone's interest for the selected BESS technology to be operated safely. The document also states that outside of the planning process it is important to emphasise the site would not be granted any drawdown of construction finance without appropriate fire safety protocols being in place and an insurance company being prepared to underwrite and insure the site from fire risk.

Response to Matters Raised in Representation

This document was provided by the agent in response to a number of points raised in the submitted letters of representation. It notes the submitted Planning, Design and Access statement covers the site selection process and glint and glare impacts are assessed in the dedicated study. It suggests that solar development is not a threat to local or national food security and that sites can still be productively grazed and provide important zones for pollinators and other ecosystem services that support farming, while adding much needed income for farms and providing long term energy security. It indicates the proposal would help reach the Scottish Governments target of 'net zero' by 2045 whilst halting a decline in biodiversity. It also details the diversification opportunities the proposal would provide for farming businesses and the security it would provide those operations. It confirms the proposal would not impact upon infrastructure or health. In terms of panel efficiency, the statement indicates the application site is located in an area that receives up to 90% of the maximum solar energy that the UK can benefit from. The statement advised that the panels are designed to be pile driven into the ground and can take at least 200% more load than maximum wind load (which is based on hurricane force winds).