

FLINTSHIRE COUNTY COUNCIL

REPORT TO: **PLANNING AND DEVELOPMENT CONTROL COMMITTEE**

DATE: **23RD JULY 2014**

REPORT BY: **CHIEF OFFICER (PLANNING AND ENVIRONMENT)**

SUBJECT: **FULL APPLICATION - INSTALLATION OF GROUND MOUNTED PHOTOVOLTAIC (PV) SOLAR ARRAYS TO PROVIDE 45.7 MW GENERATION CAPACITY TOGETHER WITH TRANSFORMER STATIONS, INTERNAL ACCESS TRACK, ELECTRICITY SECURITY MEASURES, ACCESS GATE AND ANCILLARY INFRASTRUCTURE AT LAND NORTH OF WEIGHBRIDGE ROAD, SEALAND.**

APPLICATION NUMBER: **051772**

APPLICANT: **ATEM SOLAR LIMITED**

SITE: **LAND NORTH OF WEIGHBRIDGE ROAD, SEALAND, DEESIDE**

APPLICATION VALID DATE: **11/2/2014**

LOCAL MEMBERS: **CLLRS C. JONES & B. DUNN**

TOWN/COMMUNITY COUNCIL: **SEALAND COMMUNITY COUNCIL & CONNAHS QUAY TOWN COUNCIL**

REASON FOR COMMITTEE: **SCALE OF DEVELOPMENT**

SITE VISIT: **YES**

1.00 SUMMARY

- 1.01 The proposal is a full planning application for a photovoltaic solar farm and ancillary works on agricultural land adjacent to Weighbridge Road, Deeside. The site extends to approximately 109 hectares. The issues for consideration are the principle of development/planning policy context, impacts on visual amenity, impacts on residential

amenities, highways and ecology.

2.00 RECOMMENDATION: TO GRANT PLANNING PERMISSION, SUBJECT TO THE FOLLOWING:-

2.01 The proposed development is considered acceptable subject to the applicant entering into a Unilateral Undertaking in regards to securing the long term use of the generation of electricity to serve the needs of UPM Papermill with only any surplus supplied to the national grid prior to the issuing of the planning permission and subject to the following planning conditions,

1. Commencement of development within 2 years
2. Carried out in accordance with the submitted details
3. No generation of electricity hereby permitted shall take place after 25 years from the date on which electricity is first transmitted from the site, nor after electricity ceases to be generated for a continuous period of 6 months, whichever is the earlier.
4. No generation of electricity hereby permitted shall take place unless a monthly record is kept by the site operator of the amount of electricity generated that month; and that record shall be made available for inspection by the local planning authority
5. When electricity ceases as per the requirements of any of the circumstances in condition 3, within 12 months all plant/machinery/development to be removed and land restored to its agricultural use/condition with an agricultural report submitted confirming to the LPA the verification of such works carried out.
6. The supporting framework for the solar arrays shall not be concreted into place but shall be driven in using a "ground screw" or pile method.
7. Site developed in accordance with recommendations in Chapter 11 of the submitted FCA
8. No fencing or other structure erected within 7m from the banks of Shotwick Brook West
9. Access to the bank of Shotwick Brook West to be afforded to NRW for maintenance and emergency access
10. No land drainage run-off into the public sewerage system
11. No surface water to connect to the public sewerage system
12. Foul and surface water drainage drained separately from the site
13. Prior to the commencement of development the submission for approval of scheme for site access off the A548 roundabout
14. Prior to any other building works the forming of the site access shall be kerbed and completed to carriageway base course layer
15. Site access to have a gradient of a minimum distance of 10m

- shall be 1 in 24 and a maximum of 1 in 15.
16. Constructional/delivery times to be submitted for approval to the LPA
 17. No part of the solar panel or associated structure shall be higher than 2.8 metre above existing ground level
 18. Full details of the insulation to substation (s) and other equipment cabinets to be submitted to and approved by the Local Planning Authority prior to commencement of development.
 19. Full details of the security cameras and fencing to be submitted to and approved by the Local Planning Authority.
 20. Full details of both hard and soft landscaping works to be submitted to and approved by the Local Planning Authority.
 21. Drainage capture for construction compound to be submitted for LPA approval
 22. Prior to commencement of development, a detailed long-term Biodiversity, Habitat & Landscape Management Plan based on the biodiversity and landscape features in the "Environmental Statement" shall be submitted to and approved by the Local Planning Authority. The Management Plan shall in particular refer to a timescale for implementation, protected species mitigation measures and removal of shooting rights over the whole site edged in red. The approved Management Plan shall be reviewed every 3 years through written agreement with the LPA and continue for the lifetime of the planning permission for a 25-year period.
 23. No existing trees/hedges/bushes shall be cut down, uprooted or destroyed nor any tree pruned, topped or lopped other than in accordance with the approved landscape plans and particulars, without prior consent of the Local Planning Authority.
 24. No site clearance or removal of any trees, shrubs or other vegetation shall be carried out during the period 1 March to 31 August.
 25. No site clearance or removal of any trees, shrubs or other vegetation shall be carried out during the period 1 March to 31 August.

3.00 CONSULTATIONS

3.01 Local Members

Councillor C. Jones

Requests the application be referred to planning committee and a committee site visit takes place due to the siting/location of the development and its scale

Councillor B. Dunn

Requests application be referred to planning committee due to scale

Connah's Quay Town Council

Objects on the grounds of visual impact on open countryside, loss of

natural habitat, loss of agricultural land. The Council would prefer a development of this type to be sited on a “brownfield” area of which there are many on Deeside Industrial Park Estate.

Sealand Community Council

Objects on the grounds of loss of Grade 2 good quality agricultural land which is a vital commercial asset, would have a major detrimental impact on the general open landscape in Sealand, would have a negative impact on wildlife/wildfowl due to habitat loss and is too great an impact on the visual appearance of the rural area

Highways Development Control Manager

No objection subject conditions

Rights of Way

Public footpath 3 abuts the site but is unaffected by the development. The path must be protected and free from interference from the construction.

Civil Contingencies Manager

No objections/comments

Pollution Control Officer

No adverse comments

Economic Development

Green energy is part of the transformation of the Deeside Enterprise Zone. A large solar park will provide a source of sustainable, secure energy, a critical factor for many companies locally that are high consumers of power. The proposal will be a visible statement of the region's commitment to alternative energy and also provide a funding stream for a proposed North Wales Advanced Manufacturing Skills and Technology Centre. Strongly urges the Committee to support the application

Welsh Government Department for Natural Resources and Food

Objects to the proposal in the long term national agricultural interest. The loss of 109 hectares of Best and Most Versatile Land (BMV) is inconsistent with Welsh Government planning policy towards the conservation of BMV land

Welsh Water/Dwr Cymru

Request drainage conditions are attached to any grant of planning permission. Notes to applicant

Natural Resources Wales

No objections subject to conditions relating to flood risk management

Clwyd Powys Archaeologist Trust

No archaeological implications for the proposed development

National Grid
Notes to applicant

Campaign for the Protection of Rural Wales

The application should be refused as it fails to justify a need for the proposed development that would outweigh the loss of use of Grade 2 agricultural land and encroachment into the open countryside designated as a green Barrier

Royal Society for the Protection of Birds

Recommend shooting rights be removed for overall site and the need for a biodiversity monitoring programme as part of the ecological enhancement measures across the whole site.

Coal Authority

No observations

Liverpool John Lennon Airport

Will not impact on operations and therefore no objections to the application.

4.00 PUBLICITY

- 4.01 The proposed development has been advertised as a departure to the development plan by means of a press and site notice. Neighbour consultations have also taken place via letter.

There are 3 letters of support summarised as follows,

- The development of the solar park would appear to be a positive development linked to the ambitions for Advanced Manufacturing in the Deeside Enterprise Zone and the applicants intended financial contribution a further benefit that would help young people and communities in Flintshire
- Solar park is a key investment and improvement to the local grid as well as local jobs which will be created both in construction and on-going operations
- Is a positive proposal that will provide a very welcome boost to the local economy and is a welcome investment for the area
- Would provide an opportunity for Coleg Cambria to forge a link with the developer/the solar park and for students to gain first-hand experience of renewable energy and for land based/agricultural course via the biodiversity aspect of the scheme.
- Protects future energy requirements, generates sustainable

energy, provides employment and protects the environment.

Five letters of objection have been received summarised as follows,

- Any loss of high grade agricultural land will have an immediate impact upon the agricultural industry and result in loss of food production
- Will be detrimental to the existing farm business on the site and the site is critical to the future agricultural business on the site and threatens 160 jobs with serious consequences for the business if permitted
- The site is green barrier and it is not considered the most suitable site has been chosen
- Will have a severe ecological/wildlife impacts
- There is no power purchase agreement in place with UPM
- Older industrial land/brownfield land and grade 3 agricultural land should be used instead or roofs on the industrial estate
- Questions access rights to existing pump house

In addition to the above objections further objections have been received from Puddington & District Parish Council and Burton Residents Association which are summarised as follows,

Puddington & District Council

- Alternative brownfield site should be explored
- Would erode the percentage of high grade agricultural land and the impact that would have on those currently employed or benefitting commercially from the use of the site
- The site is located on Green Barrier and is adjacent to the Cheshire Green Belt
- Concerned about the future decommissioning of the land and the future use of the site after its proposed 25 year lifespan and may lead to further industrial development to the detriment of the Parish boundary in physical and visual terms
- Questions if the Parish will gain via community benefits due to visual impacts arising from the scheme

Burton Residents Association

- There is no legal contract between the applicant and UPM to supply energy needs and thus no guaranteed end user
- Questions if the rest of the land in the same ownership shall be developed
- The proposal should be refused as the benefits that would accrue from the proposal do not outweigh the harm. The proposed development would be contrary to the adopted Flintshire UDP and national guidance which states that development in Green Barrier land or on the best and most versatile agricultural land should only be allowed in very special circumstances which the applicant has failed to demonstrate

- Any grant of planning permission may result in the 25 year lifespan being extended near the time when the permission is due to expire
- Solar park itself would not be a major employer and its financial and green energy benefits would cease after 25 years
- Would result in the loss of 6 employees along with seasonal workers and have an adverse effect on the existing farm business
- The temporary use of land for sheep and bee keeping is a gross under use of the natural capability of the land
- The 3 metre high security screening to the site will totally alter the character and appearance of the open landscape until 2040 which will negate the purpose of the Green Barrier designation and adversely impact on the Cheshire Green Belt. It would have the appearance of a very large industrial/storage complex
- Questions the need to generate electricity from the site especially when the nearby Scottish Interconnector will draw 2000 MW down from Scotland

Another response requests the applicant incorporates biodiversity into a mitigation plan and this be subject to a planning condition.

5.00 SITE HISTORY

5.01 Ref. 97/8/5/0638

An outline planning application was submitted by the former Welsh Development Agency (WDA) to Flintshire Council on 5th June 1997 and called in by the Secretary of State for Wales on 9th October 1997. The outline planning application proposed employment development on 80 ha. of a larger site that includes the site that is the subject of this planning application. At an inquiry in 2000/01 planning permission was refused. The scheme was dismissed due to the lack of need for the development and the absence of an end user and it concluded that the agricultural land should not be lost.

6.00 PLANNING POLICIES

6.01 Flintshire Unitary Development Plan

STR1 – New Development

STR7 – Natural Environment

STR10 – Resources

GEN1 – General Requirements for Development Control

GEN3 – Development in the Open Countryside

GEN4 – Green Barriers

D1 – Design Quality, Location and Layout

D2 – Design

D3 – Landscaping

TWH1 – Development Affecting Trees and Woodlands

TWH2 – Protection of Hedgerows

L1 - Landscape Character

WB1 – Species Protection
WB6 – Enchantment of Nature Conservation Interests
AC2 - Pedestrian Provision and Public Rights of Way
AC13 - Access and Traffic Impact
RE1 – Protection of Agricultural Land
CF7 – Development by Utilities
EWP1 – Sustainable Energy Generation
EWP5 – Other Forms of Renewable \Energy Generation

Planning Policy Wales (2014);
Technical Advice Note 5: Nature Conservation and Planning (January 2011);
Technical Advice Note 6: Planning for Sustainable Rural Communities (July 2010);
Technical Advice Note 8: Renewable Energy (July 2005);
Technical Advice Note 23: Economic Development (February 2014)

7.00 PLANNING APPRAISAL

7.01 The Proposed Development and Site Description

The proposed development is for a 45MW ground mounted solar park, set within an overall site of some 109 hectares (94.5 hectares of agricultural land to be used directly for the siting of solar equipment with the balance of the site consisting of an ecological mitigation area (approx.15 hectares). The proposed development was assessed under the Environmental Impact Regulations and deemed to require an Environmental Statement which has been duly submitted with the application for assessment. The proposals are further detailed as follows,

- The installation of Photovoltaic (PV) panels laid out in arrays (rows) running across the site. Each array will be mounted on a metal framework. The distance between arrays responds to the change in ground levels across the site and the need to eliminate overshadowing of panels. The metal frameworks that house the Photovoltaic (PV) cells will be supported at intervals by posts which are driven into the ground at a depth of between 1 to 1.5m. The solar panels will be installed at approximately 30 degrees from the horizontal facing south in order to maximise exposure to solar radiation. The panels would be mounted at around 0.6 metres from the ground at the lowest point (the southern edge). The maximum height of the arrays will respond to the site's topography and will be capped at 2.8m above ground level.
- Conduits, set at a depth of about 1m, running between the arrays to safely house the connecting cables. These will be linked to inverters and small cabins which house necessary equipment, which are located at intervals throughout the site.

- An electricity substation is to be positioned to the south and will connect by cables direct to UPM Papermill and another to the national grid via a different sub-station on Deeside Industrial Estate.
- With regards to site security and safety, fencing will be installed within the site. A variety of different types of fencing are proposed according to the security risk (e.g. distance to a vehicular access). The maximum height of the fences will be 2m. Thermal security cameras will be positioned at appropriate locations around the site on 8m high lattice towers. The cameras work in connection with the photoelectric beam sensors, which are located around the internal perimeter of the fencing.
- The development is expected to generate renewable energy for 25 years. After this time, the frame mounts can be 'pulled' out from the ground along with ancillary development such as cabling etc and the site restored to productive agricultural use.
- The existing field gate access is to the south of the site at the traffic island junction of the A548 and Tenth Avenue known as 'parkway roundabout' will be upgraded to allow HGV's and other vehicles associated with the construction of the development access/egress to the site. Post construction traffic will generally consist of non-HGV maintenance and repair vehicles. Access to the site will utilise an existing access to the north-west from Weighbridge Road, which also serves the sailing club.

7.02 The site is on flat land to the north of Weighbridge Road (A458) and north of Deeside Industrial Park. The site is roughly rectangular in shape and is in agricultural use. The north east site boundary runs immediately adjacent and parallel to the boundary between Wales and England, beyond which gently rising ground lie agricultural fields and the villages of Puddington and Shotwick. The site area wraps around Shotwick Lake Sailing Club and agricultural land. A RPSB reserve lies to the northwest. The application site is adjacent to Weighbridge Road (A458) which is a dual carriageway beyond which is Deeside Industrial Park. A public right of way lies to the east of the site linking Shotwick with Deeside Industrial Park.

7.03 The applicant has also submitted the following information in support of the proposed development,

- Planning Statement
- Design & Access Statement
- Alternative Site Search Assessment
- Statement of Community Involvement
- Centre for Solar Energy Report from Glyndwr University

- 7.04 Within the Unitary Development Plan the site is located in open countryside and also within a designated green barrier.

The Principal Development Plan Policies and Government Advice

- 7.05 The Planning and Compulsory Purchase Act 2004 states at S. 38(6) that, “If regard is to be had to the development plan for the purpose of any determination to be made under the planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise”.
- 7.06 The development plan is therefore the starting point for the consideration of this application. The proposed development has been advertised as a departure to the adopted UDP because the site is not allocated in the UDP for any specified use nor is it within a settlement boundary.

Strategic Policies STR1, 7 & 10

- 7.07 There are a number of strategic policies to be found in the UDP which are of relevance to this proposal and I refer to each in turn. **STR1** New Development – should generally be located within existing settlement boundaries, allocations, development zones and principal employment areas and will only be permitted outside these areas where it is essential to have an open countryside location. Given the sheer scale of the development I have no doubt that the proposal in the broader sense satisfies criterion **a.** of STR1.

STR7 Natural Environment – the stated aim of this policy is to safeguard Flintshire’s natural environment by (inter alia) protecting the open character and appearance of strategic green barriers around and between settlements. The green barrier at this location is not around or between Flintshire settlements. Nevertheless it is a strategic planning designation where it abuts and compliments the West Cheshire Green Belt. In addition criterion **g** seeks to protect the quality of land, soil and air.

STR10 Resources – criterion **a** requires that new development must make the best use of resources through utilizing suitable brownfield land wherever practicable in preference to greenfield land or land with ecological, environment or recreational value. It is arguable that the proposal does not do this as it is a greenfield site and part of the sites intrinsic environmental value is it’s open character, however the policy refers to “*wherever practicable in preference to*” and in this instance there is an arguable case to be made that the proposal is policy compliant (considered later in this report). It is my view that the proposal is part compliant with criterion **e** of STR10 in that it clearly utilizes clean, renewable and sustainable energy generation.

Welsh Government Advice

- 7.08 The Welsh Government (WG) has clear priorities to reduce carbon

emissions, with one of the important ways of delivering this being through the continued development of renewable energy generating projects. TAN8 included a target of 4 Twh per annum of renewable energy production by 2010 and 7 Twh by 2020. The WG's most recent version of Planning Policy Wales (PPW) Edition 6 2014 has been drafted in the light of their Energy Policy Statement (2010) which sets out the sustainable renewable energy potential for a variety of different energy technologies.

7.09 PPW advises that the WG's aim is to secure an appropriate mix of energy provision for Wales, whilst avoiding, and where possible minimizing environmental, social and economic impacts. This will be achieved through action on energy efficiency and strengthening renewable energy production.

7.10 When considering planning applications for renewable energy schemes, WG advises that planning authorities should take into account:-

- "The contribution a proposal will play in meeting identified national, UK and European targets and potential for renewable energy.
- The wider environmental, social and economic benefits and opportunities from renewable energy and low carbon development.
- The impact on the national heritage, the coast and the historic environment.
- The need to minimize impacts on local communities, to safeguard quality of life for existing and future generations.
- To avoid, mitigate or compensate identified adverse impacts".

7.11 In addition to this there is a raft of further key documentation relevant to the proposal, for example, EU Energy Strategy 2020, Climate Change Strategy for Wales (2010), Energy Wales a Low Carbon Transition (2012), Planning implications of Renewable and Low Carbon Energy – Practice Guidance (Welsh Government, 2011) and Planning for Renewable and Low Carbon Energy – A Toolkit for Planners (Welsh Government, 2010)

7.12 The above paragraphs therefore set out the UDP's strategic approach to development in the County together with the national planning policy framework associated with renewable energy proposals.

Other Material UDP Policies

7.13 Before I turn to the more detailed policies of the UDP which are material to this planning application I would state that it is my view that

the main issues to be considered in relation to this application are the principle of development at this location having regards to the statutory development plan, the effects upon the visual appearance and character of the landscape, the loss of agricultural land and any other material considerations associated with the proposal i.e. the economic benefits, all of which are considered in the policies below.

Policy GEN1

- 7.14 UDP Policy GEN1 sets out the general requirements to be met by all new development. It states that development that requires planning permission and is in accordance with the Plan's other policies should satisfy a list of criteria. By virtue of its sheer scale I consider that the development would pose difficulties when harmonising with the site and its surroundings – discussed later in this report. Other criterion require the development to not have a significant impact on (amongst other things) wildlife species and other landscape features. Whilst the site is not a designated landscape it is undoubtedly a landscape feature in its own right by virtue of its openness and therefore the development of the scale proposed will undoubtedly have visual impact on the landscape – this aspect of the proposal is assessed later in the report.

GEN1 Criteria K and the Loss of Agricultural Land

- 7.15 In addition criterion **k** states that the development should not result in the permanent loss of the best and most versatile agricultural land where either suitable previously developed land or land in lower agricultural grade is available. The application site is grade 2 agricultural land. The applicants contend that its loss would not be permanent on the basis that once the arrays of panels are in situ sheep grazing can take place underneath them. Welsh Government Department for Natural Resources and Food object to the proposed development because it is not in the long term national interest to lose 109 hectares of the best and most versatile agricultural land. Objections received as part of the consultation process for the proposal have raised similar issues regarding the loss of such high quality agricultural land.
- 7.16 The land clearly falls within the best and most versatile agricultural land, however when assessing the proposal against criteria K of GEN1 it is important to note that reference is made to the "*permanent loss*". The safeguarding of the best and most versatile agricultural land is reinforced in UDP Policy RE1 and Paragraph 4.10 in PPW. Whilst I am conscious of the high quality agricultural land that is to be developed I am also conscious of the fact that the site would not be lost to agriculture in the long term since the proposal is limited to a period of 25 years with the reinstatement of the land to agricultural use at the end of that period – this is **critical** in the assessment of the proposal i.e. reversibility of the scheme. Furthermore in the interim the site would have a degree of agricultural value for the grazing of sheep. The national asset of Grade 2 is not being permanently lost as a result

of any grant of planning permission, however the intensity of that agricultural use would undoubtedly be diminished, but in my opinion not to such a degree as to override the need in national policy for renewable energy development and the other economic benefits that would also accrue (considered later in this report).

Policies GEN3 & GEN4 and Site Selection in Open Countryside/Green Barrier Location

- 7.17 **GEN3** sets out those instances where development will be permitted in the open countryside and criterion j refers to other development which is appropriate to the open countryside and where it is essential to have an open countryside location rather than being sited elsewhere. I have stated earlier that a proposal of this size and scale does require an open countryside location. But in terms of the principle of this type of development it could also be accommodated on brownfield sites, land allocated for employment uses or in the Plan's Principal Employment Areas. However as regards other potential use of allocated employment sites, the use of a 109 hectare site would prove impractical as it would represent some 42% of the allocated sites in Policy EM1 of the UDP. The loss of so much allocated employment land to the proposed solar farm would significantly harm the plan portfolio of employment sites in terms of being able to meet present and future employment needs. Although there are brown field sites within the county they are not of the scale of the proposal and many such sites are in areas of flood risk.
- 7.18 Whilst the site is open countryside it is also designated green barrier. **GEN4** deals with development in these locations and the proposal does not constitute any of the uses referred to in criteria (a) to (f). Criterion g refers to other appropriate rural uses for which a rural location is essential. Notwithstanding these circumstances the policy also goes on to state that development should only be permitted provided that it would not contribute to the coalescence of settlements and unacceptably harm the open character and appearance of the green barrier. Objections have been received relating to the detrimental impact of the proposed development on the designated Green Barrier.
- 7.19 A core element of the Plan's spatial strategy is the designation of green barriers to ensure the protection of important areas of open land. This is certainly the case in this instance as the site sits within a larger swathe of green barrier number 16 Sealand – Cheshire Border (N River Dee) where it abuts the West Cheshire green belt designation in England. The character of the site is in complete contrast to the industrial estate located to the south. Indeed the A548 provides a logical, firm and defensive boundary to the limits of built development on the Deeside Industrial Park. In essence the green barrier designations are intended to perform the same basic functions as green belts albeit without the same level of permanence. The

reasons and explanations to Policy GEN4 sets out the intentions at paragraph 4.15 of the Written Statement. In this case the land has been designated as it comprises an extensive area of flat and open agricultural land.

7.20 The site is on flat land to the north of Weighbridge Road (A458) and north of Deeside Industrial Park. The site is roughly rectangular in shape and is in agricultural use. The north east site boundary runs immediately adjacent and parallel to the boundary between Wales and England, beyond which gently rising ground lie agricultural fields and the villages of Puddington and Shotwick. The site area wraps around Shotwick Lake Sailing Club and agricultural land. A RPSB reserve lies to the northwest. The application site is adjacent to Weighbridge Rd (A458) which is a dual carriageway beyond which is Deeside Industrial Park. A public right of way lies to the south of the site linking Shotwick with Deeside Industrial Park. Residential properties are located sporadically on the rising land to the east. The proposed arrays would face away from the land to the north-east and face southerly towards the Deeside Industrial Park and as stated previously would extend to a maximum height of 2.8 metres. The proposed substation to serve the development would be located to the south east boundary in proximity to the Deeside Industrial Park. A 2m security fence would extend to the site's boundary. Generally any views of the site would indicate arable farmland interspersed by hedging.

7.21 In broad terms Policies GEN3 & 4 refer use of land in open countryside/green barrier only where it is appropriate and essential with other brownfield sites being preferential. The applicant has submitted an alternative site search assessment detailed below.

Alternative Site Search

7.22 The applicant has submitted a series of sites as part of their alternative site search to locate the development elsewhere which was based on the following criteria:-

- Site size (capability of accommodating circa 45MW of solar panels);
- Topography (flat or gently sloping sites);
- Land availability and ownership;
- Capability of grid connection;
- Proximity to road network (a suitable location which is served by appropriate highway infrastructure);
- Site Specific Allocation;
- Flood Risk;
- Landscape and Visual Considerations;
- Sensitive areas as defined by EIA Regulations; and
- Previously developed land.

The chosen sites were as follows:-

- Land north of Deeside Industrial Estate (The Application Site)
- Land north of UPM paper mill
- Land north of Tata steel
- Land west of Tata steel
- Land adjacent to Toyota
- Land South of Deeside Industrial Estate
- Connah's Quay Power Station
- Land Between the A494 and Chester
- Hawarden Airport
- Land at Rake Lane Farm
- Land east of Queensferry
- Land around Bilberry Wood
- Land south of Connah's Quay
- Land Between Connah's Quay and Flint
- Land north of Connah's Quay

7.23 The application site was judged to best meet the criteria referred to above. The other sites were discounted due to issues such as visual impacts, area of land, allocation for another use in the UDP, prohibitive connection costs, and orientation to ensure maximum solar gain. It is considered the applicant's alternative site assessment reasonably justifies the development of the proposed application site as the most sequentially preferable in an open countryside/green barrier location as opposed to somewhere else such as brownfield land. Critically the applicant maintains the current site is in close proximity to the end user i.e. UPM Papermill which allows for the provision of a marked reduction in the cost of supplying the infrastructure needed to supply electricity to UPM. In simple terms, the further the customer is away from the source of power generation the greater the cost to the end user. The applicant states there will be a direct connection to UPM thereby allowing them to enter into a private agreement with UPM which would result in a supply of discounted electricity at approx. 5% to the business (in affect they cut out the "middle man"). With UPM's spend on energy being well over £2 million a month the savings would make a considerable difference to their operations over the lifetime of the development. A separate connection would feed any excess or surplus electricity into the national grid. From a global and sustainable perspective when UPM is drawing down electricity from the solar power this in effect creates additional capacity in the rest of the grid thereby improving long-term energy security. On a general point related to the power supply, the applicant will have to build a new substation at a cost of £300,000 which will not only deal with the electricity generated by the development but also be available for the use of businesses on the adjacent Deeside Industrial Park.

Visual Impacts of the Proposed Development in Regards to GEN3 & 4 and Effects on "Openness"

7.24 The proposed development has been accompanied by an

Environmental Statement which amongst other issues has assessed the visual effects of the proposed development from various vantage points around the site. These vantage points have been assessed from close (500m), medium (upto 2 Km) and long range views (beyond 2 Km). I visited the site at a time of the year when the native planting has little foliage so the site was at its most visible. However, when existing trees and vegetation are taken into account, the visibility of the site in close views is significantly reduced by the presence of existing trees and vegetation to the site boundaries and those in the wider landscape. Despite benefiting from the filtering effect of existing vegetation, at close range there would be clear views of the site which are unlikely to benefit much from any proposed mitigation by way of landscaping, however these views when compared along with the medium and long term visual impacts are not considered unduly unacceptable in visual terms. The application details include visual mitigation by way of landscaping screening in the form of native species hedgerows and tree planting to the field boundaries to augment and reinforce those already existing.

- 7.25 Green barriers should also only be designated where there is significant development pressure, however in the case of the proposed development it is temporary in nature, reversible and still open to a degree of agricultural use. The applicants argue that the site does not have any particular landscape value however it should be noted that green barrier designations need not have any intrinsic inherent quality (landscape or nature conservation) although it would add further weight to the reason for designation. In short a key purpose is to retain openness.
- 7.26 Given the flat and open nature of the landscape I conclude that development would be particularly visible on this site to the north of Weighbridge/Shotwick Road and this is particularly the case also when viewing the site from a public footpath which is situated to the eastern boundary of the application site where there are uninterrupted views across the whole of the site up to the boating lake. There is no doubt the site's development would inevitably change the character of the field it is in, erode its rural quality and diminish the open nature of the green barrier designation, however, there would be little change to the topography of the actual field and it is proposed to reinforce the existing field boundaries with new planting and to locate the arrays marginally away from the field boundaries which should allow for increased growth of hedging and trees. The increase in hedging and trees around the site would be in accordance with the rural characteristics associated with the area. The views apparent from the public footpath running to the east of the site would benefit from the enhanced landscaping which to the immediate observer would greatly enhance screening of the site from view and it is arguable due to the low lying nature of the proposed development still give an appearance of openness.

- 7.27 Therefore it is considered bearing in mind the above in regards to Policies GEN3 & 4 that on a finely balanced assessment the proposed development would comply with the policies i.e. in sequential terms the site is acceptable, it does not prejudice the green barrier designation nor the future long term use of the land for agriculture i.e. it will have some degree of impact on open countryside and openness of the green barrier but not to the extent that it is unacceptable given the temporary nature of development and that the landscape can be relatively simply returned to its original condition.
- 7.28 The UDP recognizes that the use of renewable energy, as opposed to conventional sources of power will help offset the use of finite resources and will assist in limiting the release of greenhouse gases into the atmosphere thereby contributing to addressing climate change. As such the Plan strongly encourages the generation of energy from renewable sources where its location and operation is environmentally acceptable. Policy EWP1 therefore presumes in favour of renewable energy schemes subject to them meeting the other relevant requirements of the Plan and more detailed criteria are contained in **EWP5** – Other Forms of Renewable Energy. The proposed development is considered to broadly accord with these policies.

Economic Case

- 7.29 The applicant maintains the supply of cheaper electricity to UPM will assist in retaining a local business in the locality. The development would also result in a new substation being built which would serve not only the site but also the wider Deeside Business Park. The Council's Economic Development Section strongly urges support of the proposed development. The applicant maintains the development will safeguard upto 500 jobs in the region such as those at TATA and other supply chain companies during construction and in the maintenance/management of the solar park once operational. There is also the less tangibly measured benefits of supplying cheaper electricity to UPM which is likely to assist that company and thereby in the long term assist employment stability within the area. Set against this is the loss of 6 employees along with seasonal workers attributed to the current tenanted farmer on the site and a partner sub tenant who maintain 160 jobs with them would be at threat by the proposed development. Both business concerns highlight the importance to the site to their business, however, the land in question is not the only land that both business farm from.
- 7.30 It is necessary at this stage to consider a wider sub-regional role of this part of the country. The Deeside area is seen by the Welsh Government as an economic driver in North East Wales and is key to the Council's economic development programmes and aspirations for the county. Progress is being made in bringing forward the Northern Gateway development and the area has also been designated as an Enterprise Zone. A key focus of the Enterprise Zone is to attract

advance manufacturing with an emphasis on renewable energy generation. In this wider context of a vibrant and forward moving economic hub, the proposal has the potential to make a contribution. The supply of cheaper electricity to a major local employer and the wider infrastructural improvements to the network capacity at Deeside Industrial Park have to be weighed against the existing use of the site in economic/employment terms. In locational terms it is imperative that the site is as close to UPM Papermill as possible due to cost implications. Bearing in mind the physical restraints on siting further away from the UPM and the fact that any electricity will be fed direct to UPM and controlled via a Unilateral Undertaking, then on balance there is likely to be a greater benefit to the local economy as a result of the proposed development as opposed to the retention of the existing use.

Impact on Residential Amenities

- 7.31 The proposal is located some distance away from residential properties with the closest being located on higher ground to the east near to the villages of Shotwick and Puddington (approximate distances ranging from 0.5-1.0 Km). Potential noise impacts would be limited to the construction phase and thereafter once operational there is the potential for noise from the sub-stations which would be insulated. The PV arrays do not generate noise. The Council's Pollution Control Officer has no objections to the proposed development on noise grounds. Due to the relatively remote nature of the development relative to residential development and its location relative to Deeside Industrial Park to the east it is considered noise generated against background levels would not be such as to create a nuisance.
- 7.32 As regards the issue of solar reflection/glare the applicant maintains As regard the issue of solar reflection/glare, the applicant maintains that reflection of sunlight from PV panels is unwanted as it leads to less production of electricity and therefore PV manufacturers use anti-reflective coating in the glass that changes the reflectivity from a specular distribution to a diffuse distribution. The applicant states reflection of sunlight will be minimal with very little glare. The applicant states that the intensity of glare from PV panels would be less than other surfaces including that of grass. Based on submitted details it is considered unlikely the proposed development would be detrimental residential amenity especially when the bulk of potentially affected properties are located to the north/east of the site i.e. behind the direction at which the PV panels would face.
- 7.33 A planning condition should be attached restricting hours of construction as detailed in paragraph 2.01 of this report and also to condition that any substations are insulated to mitigate against any potential for noise.

Highways/Traffic Considerations

- 7.34 The existing field gate access is to the south of the site at the traffic island junction of the A548 and Tenth Avenue known as 'parkway roundabout' will be upgraded to allow HGV's and other vehicles associated with the construction of the development access/egress to the site. Post construction traffic will generally consist of non-HGV maintenance and repair vehicles. It is envisaged the proposed development would result in relatively few vehicle trips during its operational phase and these will access the site via an existing access to the north west from Weighbridge Road, which also serves the sailing club.
- 7.35 The planning application was supported by a Construction Traffic Management Plan. The Council's Highways Development Control Manager has raised no objections to the proposed development subject to conditions referred to at paragraph 2.01 of this report relating to improvements to the proposed access from the A548 roundabout.

Drainage

- 7.36 The application was accompanied by Flood Consequences Assessment (FCA) which conclude that the development is not at risk from flooding and will not cause flood risk elsewhere. Welsh Water has suggested the inclusion of standard land drainage conditions referred to at 2.1 of this report. Natural Resource Wales having reviewed the submitted FCA are of the opinion the risks and consequences of flooding can be acceptably managed subject to conditions referred to at paragraph 2.01 of this report.

Ecology

- 7.37 The application has been supported with a Desk Study and Extended Phase 1 Habitat Survey Report. The site does not benefit from any statutory nature conservation designation. There are two non-statutory designated sites within a 2Km area of the site i.e. the Burton Mere Wetlands RSPB reserve and the Shotton Steel Local Wildlife Site. The desk and field studies for the site indicate it is dominated by agricultural habitats with smaller areas of species poor semi improved grassland/ditch drainage habitat and hedgerows. Species recorded on the site included Berwick's and Whooper Swans. A single Badger sett was recorded off-site at approximately 50 metres away. The site also is subject to visits from other over wintering birds.
- 7.38 An area approximating to 14 hectares of the overall site is proposed to be managed habitat with particular benefit for swans. The land will be managed via a Biodiversity Management Plan. In addition the 9 metre wide buffer strips between each row of arrays is to be seeded with farmland bird seed mixes (to be included within the Habitat Management plan) to encourage insects, seed and grassland nesting habitats such as the Corn Bunting which has been sighted in the locality in the not too distant past.

- 7.39 The Council's Ecologist has no objections to the proposal subject to the imposition of planning conditions relating to the submission/approval of the Biodiversity Management Plan for the whole site, removal of shooting rights of the overall site, timing of construction works and drainage capture in regards to the construction compound – all of which are referred to at paragraph 2.01 of this report.
- 7.40 Whilst the site does afford a degree of over wintering land to migrating fowl it nonetheless has limited ecological value due to its agricultural use. The proposed mitigation of managed habitat land in addition to the rest of the site being seeded in an ecologically friendly way to the Council's approval would clearly enhance the ecological value of the site. In addition, the removal of shooting rights from the land would minimise disturbance of birds within the site and on the adjacent RSPB Reserve.

Archaeology

- 7.41 The application is supported by a Heritage Assessment which in summary states the proposal would not affect any designated assets given the separation to the closest listed building. Within the wider locality there are a number of listed buildings most notably the Church of St. Michael at Shotwick which is Grade 1 and within a designated conservation area that covers the village. The nearby village of Puddington has a number of listed properties in addition to being a conservation area. There are a number of Scheduled Ancient Monuments, Registered Park and other sites of archaeological interest in the wider area.
- 7.42 The Clwyd Powys Archaeologist Trust states there are no archaeological implications for the proposed development.
- 7.43 The proposed development is considered sufficiently distant from any potential sites of archaeological interest and therefore not considered detrimental to those interests.

8.00 CONCLUSION

- 8.01 The principal considerations in terms of the overall planning balance are considered to be as follows:

The matters which weigh in favour of the proposal:

- The strong national support for renewable energy in order to tackle the effects of climate change is a significant factor in favour of the proposal, and carries substantial weight in addition to the adopted development plan policies to promote renewable energy are considerations of significant weight
- The ecological enhancements that would be provided with the scheme are of considerable weight
- Visually the scheme would be mitigated via existing and

proposed landscaping

- The economic gains provided via supplying reduced energy for a major local employer over 25 years and the upgrade of electrical plant which would serve all of the Deeside Industrial Park carries significant weight

The matters which weigh against the proposal (the harm):

- It is arguable the development constitutes inappropriate development in the Green Barrier affecting its reason for designation, which carries significant weight
- The character and appearance of the landscape would undergo a marked change. This is of considerable weight
- Loss of Grade 2 land for a period of 25 years to intensive agricultural use is significant
- Loss of current agricultural jobs

8.02 The case for renewable energy at national, regional and local level has significant weight and alongside the economic benefits arising from the development, is considered to provide the very special circumstance necessary to justify this development in the Green Barrier and on Grade Two agricultural land. Furthermore, the proposal is not a permanent development within the landscape and can be easily reversed and would allow grazing of sheep, which maintains an element of the land's original purpose. The proposal would provide enhancements to the local ecology via the reserved mitigation land.

8.03 Therefore, on finely balanced decision, the proposal is considered to be broadly in line with the adopted UDP and having regard to national planning guidance, a recommendation of approval is made subject to the signing of the unilateral undertaking and imposition of conditions referred to at paragraph 2.01 of this report.

8.04 In considering this planning application the Council has acted in accordance with the Human Rights Act 1998 including Article 8 of the Convention and in a manner which is necessary in a democratic society in furtherance of the legitimate aims of the Act and the Convention.

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