

FLINTSHIRE COUNTY COUNCIL

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

DATE: **11TH DECEMBER 2013**

REPORT BY: **HEAD OF PLANNING**

SUBJECT: **FULL APPLICATION – INSTALLATION OF GROUND MOUNTED SOLAR PANELS UP TO 3.80 MWP (PEAK), POWER GENERATION CAPACITY AND ANCILLARY EQUIPMENT INCLUDING TWO SUBSTATIONS AND ASSOCIATED CABLING AT TOYOTA MOTOR MANUFACTURING UK, ZONE 3, TENTH AVENUE, DEESIDE INDUSTRIAL PARK, DEESIDE.**

APPLICATION NUMBER: **051425**

APPLICANT: **TOYOTA MANUFACTURING (UK) LTD.**

SITE: **TOYOTA MOTOR MANUFACTURING PARK, DEESIDE.**

APPLICATION VALID DATE: **30TH OCTOBER 2013**

LOCAL MEMBERS: **COUNCILLOR MS C.M. JONES**

TOWN/COMMUNITY COUNCIL: **SEALAND COMMUNITY COUNCIL**

REASON FOR COMMITTEE: **MEMBER REQUEST & SIZE & SCALE OF DEVELOPMENT**

SITE VISIT: **YES.**

1.00 SUMMARY

- 1.01 This application is for the installation of ground mounted solar panels and ancillary equipment at the Toyota Manufacturing plant on Zone 3 of the Deeside Industrial Park.
- 1.02 The main issues to be considered within the determination of the application are the principle of the development in planning policy

terms, the effects upon the visual appearance and character of the area, the highway implications, the effects upon the amenities of the existing occupiers, the flood and contamination risks arising from the development and the effects upon the ecology and economy of the area.

1.03 Given that the loss of employment land has been suitably justified, will not have a significant detrimental impact upon the landscape or the highway, ecology, amenities of adjoining occupiers, and will not have a contamination risk, the proposals are considered acceptable. The proposals will, it is considered, have significant environmental and economic benefits and are thus to be welcomed.

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

- 2.01
1. Time limit on commencement.
 2. In accord with approved detail.

3.00 CONSULTATIONS

3.01 Local Member

Councillor Ms C.M. Jones

Requests the application be referred to Planning Committee and a Committee site visit. This is because of the size and scale of the development and Members should be aware of the location.

Sealand Community Council

No objections.

Head of Assets and Transportation

No observations to make.

Head of Public Protection

No adverse comments to make on the proposal.

Head of Regeneration & Economic Development

Application is in keeping with Deeside Industrial Park as an energy zone is being developed in the neighbouring Zone 4. The electricity generated through the solar array will support Toyota operational costs.

Located within Deeside Enterprise Zone, this site is of strategic importance for Welsh Government to encourage commercial investment and will be a flagship development for North Wales.

Welsh Water/Dwr Cymru

No response received to date.

Natural Resources Wales

Site lies in Zone C1 and shown on Welsh Government's Development Advice Map (DAM). Therefore recommends production of a limited Flood Consequences Assessment so risks of flooding can be fully understood.

Considers that the controlled waters are of low environmental sensitivity. Therefore not providing detailed site specific advice or comments in terms of land contamination.

Not considered possible effects on all local or regional interests. Should seek further advice from the Authority's internal ecological advisor.

Network Rail

Objects to the proposal. Concern that the solar panels could be directly facing the railway. To mitigate the risk of glare affecting the train drivers sight of signals etc. the developer should carry out and submit to Network Rail for approval, a risk assessment of this potential danger.

SP Energy Networks

Have plant and apparatus within the area. Developer advised of the need to take appropriate steps to avoid any potential danger that may arise during their works.

Wales & West Utilities

Have plant and apparatus within the area. Developer advised of the need to take appropriate steps to avoid any danger that may arise during their works.

CPRW

Supports application subject to compliance with planning policies. This is because as the site is contained in a brownfield location in an industrial complex it is an appropriate location. Its impact will, therefore, be limited by being integrated within the existing industrial landscape of the area.

4.00 PUBLICITY

- 4.01 Press Notice, Site Notice, Neighbour Notification
No responses received to date.

5.00 SITE HISTORY

- 5.01 **48307** – Proposed importation, storage and processing of waste metal for the manufacturing casting of engines as part of the existing engine manufacturing operations – 11th May 2011.

45574 – Renewal of planning permission Ref: 43955 to allow the erection of a temporary 60 m wind monitoring mast – Granted 1st

December 2008.

45316 – Expansion of existing manufacturing facilities to allow for proposed new toilet blocks, extensions, car parking and hardstandings – Granted 6th October 2008.

43955 – Erection of a temporary 60 m wind monitoring mast – Granted 21st November 2007.

74214 – Extension to existing manufacturing facilities – Granted 6th February 2007.

41113 – Proposed extension of existing manufacturing facilities – Granted 30th June 2006.

6.00 PLANNING POLICIES

6.01 Flintshire Unitary Development Plan

STR1 – New Development.

STR3 – Employment.

STR7 – Natural Environment.

GEN1 – General Requirements for Development.

D1 – Design Quality, Location & Layout.

D2 – Design.

D3 – Landscaping.

L1 – Landscape Character.

WB1 – Species Protection.

WB5 – Undesignated Wildlife Habitats.

AC13 – Access & Traffic Impact.

EM3 – Development Zones & Principal Employment Areas.

EM5 – Expansion of Existing Concerns.

EM6 – Protection of Employment Land.

MIN8 – Protection of Mineral Interests.

EWP1 – Sustainable Energy Generation.

EWP5 – Other Forms of Renewable Energy Generation.

EWP12 – Pollution.

EWP13 – Nuisance.

EWP14 – Derelict & Contaminated Land.

EWP17 – Flood Risk.

National Policy

Planning Policy Wales (Edition 5, November 2012).

Technical Advice Note 5 Nature Conservation & Planning.

Technical Advice Note 8 Renewable Energy.

Technical Advice Note 12 Design.

Technical Advice Note 15 Development & Flood Risk.

In terms of the National Policy context, it is clear that there is a positive approach taken by the Welsh Government to renewable energy having regard to the issue of global warming and climate

change. The clear message of both Planning Policy Wales and the Flintshire Unitary Development Plan is that renewable energy proposals should be permitted unless there are unacceptable impacts on landscape, nature conservation and amenity etc.

In relation to the loss of employment land this has been justified, and it is considered therefore that the proposals are acceptable in terms of the Policy in the Flintshire Unitary Development Plan, in principle.

7.00 PLANNING APPRAISAL

7.01 Site Description & Proposals

The site comprises of approximately 69,500 m² of flat, open, poorly vegetated brownfield land within the existing boundaries of the Toyota Motor manufacturing plant.

7.02 It is located immediately south of the existing main manufacturing building and west of the existing casting building.

7.03 The Toyota Motor manufacturing plant in turn is located off Tenth Avenue within Zone 3 of the Deeside Industrial Park.

7.04 It is proposed to install an array of photovoltaic solar panels on the site within rows, to convert daylight into electricity. The PV panels will have an energy generation capacity of approximately 3.8 mw, which will potentially produce 3,475 mwh per year of electricity. The energy generated will be fed directly into Toyota's 33/11 kv existing grid connection.

7.05 The proposed solar array will comprise the following components:-

Solar Panels

An array of approximately 12,680 pv panels. The panel dimensions will be approximately 1.95 m x 0.991 m, with a depth of approximately 0.05 m.

Mounting Frames

The panels will be attached to mounting frames at an angle of between 20° – 25° degrees, to optimise daylight capture. The panels are fixed in place and will not 'track' the sun throughout the day. Therefore there will be no moving parts. The arrays will have a maximum height of 2.8 m above ground level.

Inverters

The panels generate direct current (DC) electricity which must be converted into Alternating Current (AC) before being fed into the plants electricity grid network. The panels are inter connected into strings which terminate into DC combiner boxes mounted on the back of the array frames.

The proposed installation also includes the siting of two central inverters which are housed in painted steel containers (the colour of which will match the existing main Toyota buildings) and by approximately 3 m high x 10 m long x 3 m wide. Included within these containers will be the HV transformers. These will be mounted on concrete pads – these will be the only area of hard surfacing introduced to the site.

Security

A 2 m high welded wire mesh security fence will be installed around the perimeter of the site and motion sensors erected around the site perimeter on poles.

A 10 m high galvanised steel modular tower will also be erected with a security camera on top of it to the north of the site.

7.06 Issues

The main issues to consider within the determination of this planning application are the principle of the development in planning policy terms, the effects upon the visual appearance and character of the area, the highway implications, the effects upon the amenities of adjoining occupiers, the flood and contamination risks arising from the development and the effects upon ecology and the economy of the area.

7.07 Principle of Development

The site lies within the Deeside Development Zone in the adopted Flintshire Unitary Development Plan. As such Policy EM6 – Protection of Employment Land applies. This policy states that any proposal which leads to a loss of employment land needs to be justified.

7.08 Provided the proposal is suitably justified, then Policy EWP1 – Sustainable Energy Generation and EWP5 – Other Forms of Renewable Energy Generation (Other Than Wind Turbines) apply. Both these policies provide a presumption in favour of renewable energy schemes such as solar, subject to them meeting the detailed matters of them not having an unacceptable effect on their surroundings in terms of landscape, nature conservation, highways amenities of adjoining occupiers etc.

7.09 In terms of Policy EM6, given that

1. Sufficient land exists for further expansion of the current plant of up to three times its current size without making use of the land which will be occupied by the proposed solar array.

2. By installing the solar array, the competitiveness and sustainability of the existing plant is strengthened as the electricity generated from the installation will reduce the ongoing running costs of the

manufacturing operation, securing the present 592 jobs and increase the potential for further investment in the future.

3. In the very unlikely that the land was required for operational use in the future, Toyota retains the right, under the agreement with the developer of the array, to cancel the agreement and, with financial penalty, de-install and remove the array from the company's land.

4. The site is not available to develop the site for employment purposes.

it is considered that the site is suitably justified for the development of a non employment use.

Given the above, it is considered that the development is acceptable in principle in planning policy terms.

7.10 Visual Appearance & Character of the Area

Whilst the solar array will cover a large area, with them being sited on flat land, only approximately 2.8 m in height, adjacent to existing large buildings and in an industrial area, it is considered that they will not have a significant detrimental impact upon the visual appearance and character of the area.

7.11 Highway Implications

The PV-system will require little maintenance, with post-construction activity limited to occasional visits to clean, check and repair the installation by personnel using small vehicles (4x4 or transit van type). The ground around and beneath the arrays will be managed by occasional mowing. Except for maintenance visits, the site will be an unmanned passive installation in an existing industrial estate. Given this the Head of Assets & Transportation has no observations to make on highway grounds.

7.12 Amenities of Existing Adjacent Occupiers

The site is located within the boundaries of an existing large manufacturing plant in an industrial area where there are no residential properties and is surrounded by other existing large industrial units. However, the PV panels will not generate any perceptible noise with the solar park not involving any moving components either, there will be no potential for any vibrational impact and thus there will be no significant detrimental impact upon the amenities of the occupiers of the adjacent industrial units.

7.13 The development will not result in any emissions or waste. To the contrary it will in fact help to reduce the level of CO² emissions in the UK associated with electricity generation.

7.14 In terms of glare from proposals affecting the safety of trains upon the adjoining railway, the applicant's are preparing a risk assessment as

requested by Network Rail. To date, this has not been received. Members will be updated at the meeting as to whether or not this has been received and considered acceptable.

7.15 Flood Risk

The site lies in Zone C1 as defined by TAN15 Development and Flood Risk (July 2004) and shown on the Welsh Government's Development Advice Map (DAM). The site is also within Natural Resources Wales 0.5 % (1 in 200) annual change tidal flood outline.

7.16 As a result Natural Resources Wales have requested a limited Flood Consequences Assessment. To date, this has not been received and subsequently assessed. Members will be advised at the meeting whether this has been received and assessed.

7.17 Contamination Risk

The site is located on a secondary A aquifer, in a heavily industrialised area within close proximity to a principle aquifer north of the site. However, given the minimal ground works required for the proposed installation of the ground mounted solar panels (only 1.5 m depth below ground), it is likely the works will have a minimal effect in terms of contamination risk.

7.18 Ecology

The site is located a good distance away from any statutory designated areas (SSSI's, SPAs and SACs) in terms of wildlife. It comprises short, poorly vegetated land.

7.19 Given the above, it is considered that the proposals will not have a significant detrimental impact upon any wildlife interests.

7.20 With regard to increasing the biodiversity of the site, the vegetation beneath and around the solar array will be left to regenerate naturally to encourage wildflowers, butterflies and other insects/wildlife.

7.21 Elsewhere on the site, Toyota do work with North Wales Wildlife Trust in the following ways to increase biodiversity by:

1. Establishment of a 'natural heritage' orchard (as part of a regional project to re-introduce fruit trees).
2. Promotion of a 'Sustainable Manufacturing Site'.
3. Conducting of site surveys so that there is a clear understanding of the biodiversity on their land.

7.22 Socio-Economic/Environmental Benefits

Once the proposals are operational, the competitiveness and sustainability of the existing Toyota plant will be strengthened as the electricity generated from the installation will reduce their ongoing running costs of the manufacturing operation, securing the present 592 jobs and increase the potential for further investment in the future.

This will also have a wider benefit upon the economy of Flintshire.

- 7.23 The solar array will have a generation capacity of approximately 3.8 megawatts, which will potentially generate 3,475 MWh per year, and save approximately 1,838 tonnes of CO₂ emissions per annum.

8.00 CONCLUSION

- 8.01 It is considered that the proposals will have a positive benefit upon the environment and economy of the area and are thus to be welcomed.

- 8.02 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.

Contact Officer: Alan Wells
Telephone: (01352) 703255
Email: Alan.Wells@flintshire.gov.uk