#### **FLINTSHIRE COUNTY COUNCIL**

REPORT TO: PLANNING AND DEVELOPMENT CONTROL

COMMITTEE

DATE: WEDNESDAY 12<sup>TH</sup> DECEMBER 2012

REPORT BY: HEAD OF PLANNING

SUBJECT: FULL APPLICATION - ERECTION OF A FRAME

MOUNTED FUNNEL WHEEL WIND TURBINE AT "ALLTAMI DEPOT", MOLD ROAD, ALLTAMI,

**FLINTSHIRE** 

<u>APPLICATION</u>

**NUMBER:** 

050145

APPLICANT: FLINTSHIRE COUNTY COUNCIL

<u>SITE:</u> <u>"ALLTAMI DEPOT", MOLD ROAD, ALLTAMI,</u>

**FLINTSHIRE** 

<u>APPLICATION</u>

VALID DATE:

20.09.2012

LOCAL

**COUNCILLOR MRS C A ELLIS** 

**MEMBERS:** 

TOWN COUNCIL: BUCKLEY TOWN COUNCILL

REASON FOR

VISUAL IMPACT ON SURROUNDING AREA

COMMITTEE:

SITE VISIT: YES

## 1.00 SUMMARY

1.01 This full application seeks approval for the erection of a frame mounted funnel wheel wind turbine to a height of 12.76m from finished ground level that will be sited centrally and 1m away from the gable end wall of the existing maintenance building at the Council Depot Site at Alltami.

# 2.00 <u>RECOMMENDATION: TO GRANT PLANNING PERMISSION,</u> SUBJECT TO THE FOLLOWING:-

#### 2.01 Conditions

- 1. Time limit upon commencement.
- 2. Implementation as per approved plans.
- 3. Submission and agreement of all external finishing materials to structure hereby approved.
- 4. When the turbine is no longer used for the generation of electricity it shall be removed from the site and the land restored in accordance with details to be agreed.

## 3.00 CONSULTATIONS

#### 3.01 Local Member

#### Councillor Mrs C A Ellis

Requests Committee determination and site visit due to visual impact on surrounding area.

#### **Buckley Town Council**

Don't wish to recommend refusal but would wish the following points to be considered. In the Design and Access Statement it states "Noise - they are suitable for installation in Urban Environments". Alltami is a rural ward it is not correct to intimate that the installation is an urban environment whereas it is a rural Environment also the Council feels that aesthetically the structure does not lend itself to a rural environment. It is out of character with surrounding structures. They ask that actions are taken to mitigate the visual impact that the structure will have.

#### Head of Public Protection

No objections to the application.

#### **Head of Assets and Transportation**

No objections to the proposal.

#### **Environment Agency**

Standard advise applies and should be included in any consent as an informative

#### **Airbus**

The proposal does not conflict with Safeguarding Criteria. Accordingly they have no objections to the proposal.

#### CCW

No objections

#### Coal Authority

The application site falls within the defined Coal mining Development referral area. However, having considered the proposal they do not object to the proposal. They recommend the imposition of a condition

<u>Ministry of Defence - Defence Infrastructure Organisation (Wind Energy) Safeguard</u>

No response at time of writing report.

## 4.00 PUBLICITY

- 4.01 The application has been publicised by way of a site notice.
- 4.02 At the time of writing the report, no third party letters have been received in response to the publicity.

## 5.00 SITE HISTORY

#### 5.01 049845

Retention and expansion of facilities at existing street scene depot – committee 07.11.12 – Referred pending further information.

#### 038345

Change of use of stores building to vehicle maintenance workshop – Permitted 30.06.2005

## 038816

Installation of a 13.5m high salt dome – permitted 03.02.2005

#### 6.00 PLANNING POLICIES

#### 6.01 Planning Policy Wales

Policy GEN1 – General Requirements for Development

Policy EWP1 – Sustainable Energy Generation

Policy EWP4 – Wind Turbine Development

Policy EWP14 - Derelict and Contaminated Land

Policy EM3 – Development Zones and Principle Employment Areas

Technical Advice Note 8 – Renewable Energy

Planning Policy Wales.

## 7.00 PLANNING APPRAISAL

## 7.01 <u>Site Description</u>

The site is a 2.54 hectare area of land which is used as a Local Authority Highways, Environmental Services and Grounds Maintenance Depot the site is designated as a Principle Employment Areas under policy EM3 in the Adopted Flintshire Unitary Development Plan.

7.02 The site is level across both axis. The site boundaries consist of trees and hedgerows to the western boundary; the southern boundary abuts the A494 Trunk road and has a low fragmented hedgerow with intermittent trees. To the North is existing Commercial Activity with sparse screen vegetation marking the boundary? The eastern boundary abuts Pinfold Lane where access to the site is derived.

- 7.03 The site is made up predominantly of hard standings with buildings and structures associated with the operations outlined above.
- 7.04 The Funnel Wheel turbine has been designed for grid-connected electricity generation and is to be located at the south west end of the main garage/workshop and will be constructed to a maximum height of 12.76M. This is slightly lower than the height of the Salt Dome which is 13.85M.
- 7.05 The Funnel wheel turbine is fundamentally different in design to any other wind turbine currently being manufactured, as all rotating parts are enclosed within a boxed shaped housing. The design is simple in context, ensuring that wind power is continually applied to the horizontal turbine blades increasing its efficiency significantly over all other turbine makes. The turbine is to be connected to the national grid to enable any surplus energy generated to be fed onto the grid however; the vast majority of energy generated will be used within the Alltami depot.

## 7.06 Background

Kenning Global Energy Technology (KGET) is a multi national company based in Texas, America, but is looking to expand its manufacturing base to Deeside Enterprise Zone so as to capture some of the European market in this undeveloped area of renewable energy, i.e. a turbine that can be installed in close proximity to the end user.

- 7.07 This proposed installed capacity will also help to contribute towards Flintshire's Carbon Reduction target for renewable energy generation for 2021. The turbine has been specifically designed for low noise operation as it has no gearing, and exceptional performance for its size. The turbine has also been designed to withstand hurricane force winds. The supporting structure and turbine can be painted any colour required, but they have suggested it is painted to match surrounding buildings as near as possible.
- 7.08 Should planning consent for the funnel wheel turbine at Alltami be given it is intended to be used as a demonstration for potential customers visiting KGET's manufacturing premises on the Deeside Enterprise Zone. KGET intend to manage and closely monitor the Turbine performance under all conditions and fine tune its performance.
- 7.09 The proposed turbine is to contribute to the energy needs of the site as detailed in the report and it will help create a renewable source of electricity and it will also enable carbon emissions of the site to be reduced.

## 7.10 Principle of Development

The most relevant policies in the Unitary Development Plan (UDP) are EWP 1 Sustainable Energy Generation; EWP4 Wind Turbine

Development and EM3 – Development Zones and Principle Employment Areas. It should be noted that policy EM3 also refers to Development Zones as well as Principle Employment Areas, this site is not covered by policy in terms of the Development Zone issues. The proposed wind turbine would provide a source of renewable energy for the operational depot. The relevant Development Plan polices and national planning advice seeks to promote sustainable energy whenever reasonably possible.

- 7.11 Planning Policy Wales states that local planning authorities should facilitate the development of all forms of renewable and low carbon energy and ensure that development control decisions are consistent with national and international climate change obligations, including contributions to renewable energy targets and aspirations. This though needs to be balanced against ensuring that international and national statutory obligations to protect designated areas, species and habitats and the historic environment are observed.
- 7.12 Policy EWP4 of the Unitary Development Plan refers to the cumulative impact of wind turbines. As far as I am aware there are no other wind turbines (proposed or existing) in the near vicinity of the application site.

## 7.13 Natural Resources

The applicants have stated that data from the British Wind Energy Agency Web site shows that Alltami depot has higher than average wind speeds, and with increases in energy costs it is important that natural resources are framed to reduce both the financial impact and to reduce potential damage to the environment. In a typical year with average wind speeds it is expected that the turbine at Alltami should generate in excess of 70,000kWh of electricity or £7,000 in revenue terms per annum. This would be the equivalent of approximately 38 tonnes of carbon dioxide being saved each year.

The turbine has been designed with an anticipated life of 40 years.

## 7.14 Amenity and visual Impact

The site currently operates as a depot for the departments of the Council as detailed in the report and is located in a Principle Employment Areas as designated in the Adopted Flintshire Unitary Development Plan. Given this, and the very nature of the site as being commercial having buildings and structures of large scale the introduction of a further structure may raise concerns. However, the structure that is proposed is lower in height than the adjacent salt dome building or the tallest element of the existing office buildings upon site and when viewed by from the highway the projected site lines clearly show that the structure would not be visible from this carriageway. Concern has been raised by the local member with regards to the impact on the surrounding area and she has requested that members visit the site to assess this for themselves. Concerns have also been expressed by Buckley Town Council in relation to the

design and siting in a rural area together with any noise issues.

- 7.15 The applicants have indicated that because of its construction and design it is virtually silent in operation. Attempts to measure noise from the turbine have failed as background noise drowned out any readings of turbine noise, making it ideal for use in commercial and /or industrial settings where alterative turbines would not be considered for reasons such as fall heights.
- 7.16 It would be my intention to condition the agreement of samples of the proposed finish materials in respect of the proposed external finish, prior to the use of such materials.
- The Council's Head of Public Protection has been consulted on the proposal and raises no objection having studied the manufacturer's reference material and the information on noise emissions for this and other wind turbines. As all the information indicates that wind turbines of this design, size and position will not be audible at any neighbouring property and therefore does not objection to the proposals as submitted.

#### 8.00 CONCLUSION

8.01 Having considered all matters in regard to this application the proposed Funnel Wheel Wind Turbine is considered to be acceptable in this location in principle and design subject to appropriately worded conditions.

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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