Nant y Moch Wind Farm

www.nantymochwindfarm.com

WELCOME TO OUR LAUNCH EVENT

Welcome to the launch event for the Nant y Moch wind farm. Members of our project team are available to discuss any questions you may have and explain details of our project.

ABOUT OUR PROPOSAL

In October 2007 SSE Renewables (previously known as Airtricity) was selected as preferred bidder by the Forestry Commission Wales to develop a wind farm on Forestry Commission managed land in the area known as Strategic Search Area (SSA) D.

The area now covered by the proposed Nant y Moch wind farm is within the boundary defined by the SSA which is made up of upland rotational forestry managed by Forestry Commission Wales and neighbouring areas of privately owned agricultural grazing land. The project involves over 20 private landowners, the majority of which are local hill farmers whose income from the project will support farming diversification and will represent a substantial investment into the local economy.

This launch event follows on from the initial public launch of the Nant y Moch wind farm proposal in June 2009 and the second public exhibition in June 2010.

SSE Renewables believes that following the extensive surveys of the site and consultation undertaken to date, the final layout presented here that has been developed in response to Welsh Assembly targets, takes into consideration all the technical and environmental constraints that have been identified and ensures that turbines and other infrastructure are positioned in locations where they minimise impacts on the environment. For further information on the layout design changes that have taken place please refer to the updated A4 information sheet available at today's event.

SSE RENEWABLES

In January 2010, Airtricity, the renewable energy development division of SSE became SSE Renewables.

In Wales, SSE supplies energy under the SWALEC brand name. SSE is the UK's largest generator of renewable energy with over 2,200MW of renewable electricity generation capacity (wind, hydro, and biomass) in the UK and Ireland, and a portfolio of over 15,000MW of renewable energy projects in construction, with consent or in development. SSE employs just under 2000 people in Wales and supplies 10 million customers in the country.

SSE Renewables is responsible for the development and construction of SSE's renewable energy projects in the UK and Ireland including onshore and offshore wind farms, hydro, marine, biomass, and solar projects.

www.sserenewables.com

TAN 8 POLICY

In 2005 the Welsh Assembly Government published Technical Advice Note (TAN) 8, their national policy statement on renewable energy, which included an 800MW onshore wind target to be achieved by 2010.

It was recognised that onshore wind power offers the greatest potential for an increase in the generation of electricity from renewable energy in the short to medium term*, and in order to try to meet the onshore wind target the Welsh Assembly Government identified seven Strategic Search Areas (SSAs) suitable for large scale projects.

** Technical Advice Note (TAN) 8: Planning for Renewable Energy, July 2005*

Strategic Search Area (SSA)	2010 Capacity Target
A Clocaenog Forest	140MW
B Carno North	290MW
C Newtown South	70MW
D Nant y Moch	140MW
E Pontardawe	100MW
F Coed Morgannwg	290MW
G Brechfa Forest	90MW
TOTAL	**1,120MW**

STRATEGIC SEARCH AREAS (SSAs)

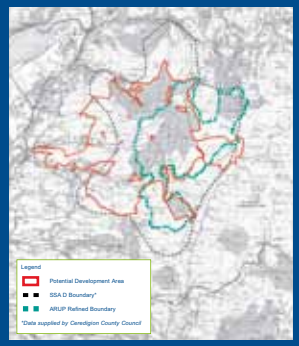
The SSAs were selected by the Welsh Assembly Government as having the potential for large scale onshore wind power developments as they have a good wind resource, are sparsely populated, have no aviation conflicts, have the ability to visually absorb large wind farms and are generally free of high level designations (e.g. National Parks, Areas of Outstanding Natural Beauty, ecological designations such as SSSI's and military low flying zones).

The SSAs, as identified, are largely broadbrush in nature and TAN 8 allows local authorities to refine these areas. In 2009, Ceredigion and Powys County Councils undertook local refinement of SSA D.* Nant y Moch which led to recommendations for a reduction in the available area of more than 60%*. Whilst the weight to be attributed to the local refinement exercise is uncertain, and despite the challenge in delivering the capacity target for the SSA on the basis of both local refinement and on-site constraints, SSE Renewables has taken account of the refinement exercise where possible in devising an acceptable scheme at Nant y Moch.

However, in context with the above, SSE Renewables aims to optimise the capacity of SSA D due to the greater need for renewables identified in the Renewable Energy Strategy 2009 (64% of all electricity in the UK from renewables by 2020) and the aspiration of the Welsh Assembly, announced in March this year, to generate 4.5kWh per day for every person in Wales from Onshore Wind by 2015/17. It intends to deliver this by:

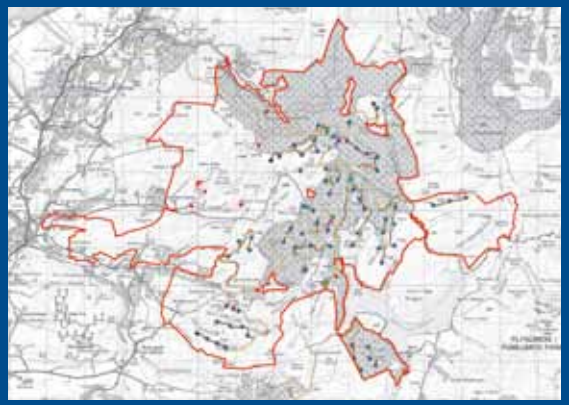
"optimising the use of the existing strategic search areas set out in Technical Advice Note (TAN) 8 on Planning for Renewable Energy and keeping the TAN under review in the light of progress towards these targets" **

** Figures based on boundary data for SSA D supplied by Ceredigion County Council*
*** A Low Carbon Revolution - Welsh Assembly Government Energy Policy Statement, March 2010*



FINAL LAYOUT (NOVEMBER 2010)

The final layout consists of 64 turbines which have been placed in locations which have been identified as being the least sensitive to development. Some of the principal matters influencing the design of the wind farm are described and presented on the updated A4 information sheet available at today's event.



ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

Developing the wind farm design and layout requires detailed consideration of a series of environmental and technical constraints. The term 'Environmental Impact Assessment' (EIA) describes a procedure that must be followed for certain types of project before they can be given 'development consent'. The procedure is a means of drawing together, in a systematic way, an assessment of a project's likely significant environmental effects. This helps to ensure that the importance of the predicted effects, and the scope for reducing them, are properly understood by the public and the relevant planning authority before it makes its decision.

In 2008, a full EIA commenced on the entire Nant y Moch site. Surveys and assessments required for the EIA are now complete and have helped define the final layout which is displayed at this exhibition.

These surveys and assessments have included:

- Ecology
- Archaeology
- Hydrology
- Peat
- Mining
- Forestry
- Noise
- Grid Connection
- Transport and Access
- Landscape & Visual Impact
- Communication Links and Aviation
- Footpaths and Public Rights of Way
- Socio Economics including Tourism

PROJECT TIMESCALES

- Launch Event
  November 2010
- Submission of Draft Planning Application to IPC
  Q4 2010
- Submission of Planning Application
  Quarter 1 2011
- Review of Planning Application and Environmental Statement by IPC
  2011
- Planning Decision
  2011-2012

SURVEY WORK

Since 2008, comprehensive surveys have taken place to determine site specific sensitivities. A database of design constraints is compiled to enable turbines to be sited in locations intended to have minimal impact on the immediate and surrounding environment.

Further detailed information on all the studies that have taken place can be found within the Environmental Statement (ES) which will be made publicly available shortly. There is a draft version of the Non Technical Summary (NTS) which will accompany the ES available at the exhibition which provides a summary of the studies that have taken place.

Information on specific survey work can also be found on the updated A4 information sheets which are available at the exhibition.

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TRANSPORT ASSESSMENT

Gaining access to the wind farm is one of the many factors considered during the design process. Various transport studies have already taken place as well as consultation with the Highways Authorities, Dyfed Powys Police and community councils.

WIND TURBINE DELIVERIES

Wind turbine components are normally delivered by sea to the nearest suitable port and then transported by road. SSE Renewables' preferred route for bringing turbine components to the Nant y Moch wind farm is by sea to Swansea and then along the route shown on the map below and to the right.

The large components required for each wind turbine will consist of approximately nine separate loads, depending on the turbine chosen. Deliveries are likely to be limited to one or two convoys per day, timed to avoid peak periods, in order to minimise inconvenience to other road users and would therefore take place over a period of approximately 10 months. All large wind turbine components would be moved with an escort, to ensure the safety of other road users.

SSE Renewables assessed the options for access of wind components on to the wind farm and can confirm that an additional access point at Nant yr Arian is their agreed option for Abnormal Indivisible Load (AIL) deliveries only.

Discussions with Forestry Commission Wales (FCW) have taken place to agree enhancement measures which will compensate for short term disruption to the visitor centre during wind farm construction and improve the facilities there in the long term.

These include:

- An upgrade and refit of the existing visitor centre
- Relocation of and improvements to a children's play area with sustainable design
- An upgrade of the existing mountain bike routes and provision of a new improved technical route
- An increase to car park size to allow for more visitors

Map above showing preferred transport route for wind turbine deliveries

Map above showing all construction traffic access points

OTHER CONSTRUCTION TRAFFIC

General construction traffic including HGVs and smaller vehicles carrying personnel and deliveries to the site will use the two other routes. The first route is from the A44 at Pontenwyd and the second is via the Forestry Commission track haul road from the A487 near Furnace.

This approach is designed to distribute construction traffic across the local public road network, reducing impacts on other road users and local residents.

Based on current estimates of the directions in which construction traffic is likely to approach the site, the percentage increase in HGV traffic at the busiest locations on the A44 and A487 during the busiest month of construction are projected to be approximately 8%.

OPERATION AND MAINTENANCE

Once the wind farm is running, operation and maintenance crews will be required to regularly access the site, generally by van. For a wind farm of the size proposed, the level of traffic would normally be in the region of six vehicle movements per day.

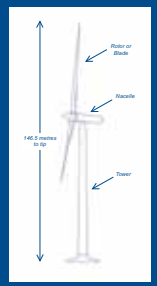
Please refer to the updated A4 Transport and Access information sheet for further detailed information.

Hadyard Hill Wind Farm, South Ayrshire, Size of Turbines 111m to tip

PROJECT SUMMARY

TURBINE DETAILS

The turbines will be three bladed machines with a typical rated capacity of between 2 and 2.5 megawatts. Each turbine will have an indicative hub height of 100 metres (80m at selected locations) and an indicative rotor diameter of 93 metres. The overall tip height of the turbine will be no more than 146.5 metres.



TURBINE FOUNDATIONS

The turbine foundations are constructed out of reinforced concrete and, dependant on ground conditions, will be approximately 20 x 20 metres across and 1.5 metre thick at the edge, with the base buried to 3.5 metres below ground level. The total volume of concrete required for each base is expected to be approximately 650m3. Further illustrations and diagrams are available at the exhibition, please ask a member of our team for further details.

ON-SITE ACCESS TRACKS

The construction of the wind farm will require on site access tracks and underground electrical cabling. Where possible the access tracks will follow existing forestry and farm tracks thereby reducing the need for new tracks. Tracks will have a running width of approximately six metres with additional width as required at bends and junctions. The tracks will be built in a similar manner to the existing forestry tracks and we expect to use stone sourced on the site.

PERMANENT WIND MONITORING MASTS

In order to verify the performance of the wind farm during operation, it will be necessary to erect three permanent meteorological masts ('met masts' are used for monitoring wind conditions). The masts will typically be of a steel lattice construction and 100 metres in height.

CRANE PADS / HARDSTANDINGS

At the base of each turbine are hardstanding areas which are required during construction for the cranes, and for the turbine components. The exact size and shape of these areas will depend on the location and on the turbine used. Typically two hardstandings are required: one for the main crane, triangular in plan view and approximately 56m long and 32m wide and a second for the 'tailing crane', 50m long and 10m wide. These will remain in situ for the lifetime of the wind farm for maintenance purposes.

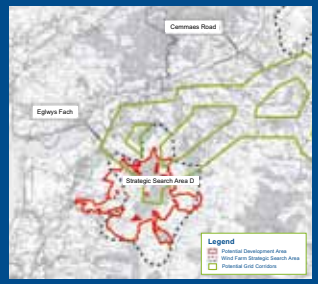
TEMPORARY CONSTRUCTION COMPOUNDS AND LAYDOWN SPACE

During the construction period, temporary compounds will be required to house the contractor's main office, self contained welfare facilities, storage and parking. These will consist of a fenced area with a temporary hardcore surface containing portacabins and would be fully reinstated after construction.

In addition to these compounds, laydown space for the temporary storage of wind turbine components (blades, tower sections etc) will be required on site. This will consist of a temporary hardcore surface which would be fully reinstated after construction.

BORROW PITS

We expect stone for use in construction of the tracks to be sourced from a number of borrow pits (small quarries). Nine suitable locations have been identified across the site in order to minimise the distances over which road stone is transported. In most cases stone will be excavated mechanically, but certain locations where the stone is of better quality may require occasional blasting. Following construction of the wind farm the faces of the excavation would be blended in with the existing topography and the final surface reinstated to allow natural re-vegetation. The use of stone obtained on site will substantially reduce the number of lorries needing to access the site during construction.



Map above showing potential grid route corridors

BATCHING PLANT

In order to reduce the intensity of construction traffic accessing the site, it is proposed to mix concrete for wind turbine bases at an on site batching plant. The plant will be located in an area that is also proposed to be used as a borrow pit, and will be entirely removed following construction of the wind farm.

SUBSTATION, CONTROL BUILDING AND SWITCHGEAR FACILITY

The substation and control building is expected to be of concrete block construction with a pitched roof to be rendered and finished in a neutral colour to blend in with the surrounding landscape. The building would be located in a compound which will also contain a substationwith transformers which will convert the electricity generated by the wind farm from 33kV to 132kV ready to export to the grid. The total area of the substation compound will be approximately 65m x 65m.

GRID CONNECTION

The turbines at Nant y Moch wind farm will be connected by underground cables to a substation within the wind farm (as described above). The power will be exported from the substation via an overhead line,the height of these poles is approximately 14 metres.

The overhead line from the wind farm will connect to a substation owned by National Grid (NGC). The NGC substation is being designed to take power from the wind farms located in the Mid Wales Strategic Search Areas, but its location is still to be determined. SSE Renewables cannot finalise the route for the overhead line from the wind farm to the NGC substation until this end point is decided. However, it is likely that the wind farm power line will be travel in a north easterly direction from the Nant y Moch wind farm.

The planning consent required for this 132kV overhead power line will be the subject of a separate planning and public consultation process by SSE Power Distribution who will build and operate the line.

CONSTRUCTION, OPERATION AND DECOMMISSIONING

If the planning application is approved, construction work would be scheduled so that the wind farm is completed by the time a grid connection becomes available in 2016-2017. It is likely that construction will take approximately 30 months.

Felling and clearance of forestry areas in which construction is to take place would be necessary prior to the works commencing. Felling required specifically for the wind farm is expected to take place over approximately 12 months.

SSE Renewables will be contractually required to decommission the wind farm at the end of the operating period. Planning consent would permit a maximum operating period of 25 years.

IPC AND THE PLANNING APPLICATION

At an expected installed capacity range of 128-160MW, the wind farm development at Nant y Moch is a nationally significant infrastructure project under the Planning Act 2008 and therefore is likely to be determined by the recently constituted Infrastructure Planning Commission (IPC) *

The new development consent and consultation system introduced by the Planning Act and administered by the IPC will ensure that local communities, the public, local authorities and interest groups are given ample opportunities to make their views known and thereby influence the development process. For further details please go to http://infrastructure.independent.gov.uk

** SSE Renewables is aware that a newly proposed Planning Bill by the new government may shift this decision making responsibility to the Planning Inspectorate.*

- **Pre-Application:** Once the IPC is made aware of the proposed application, it is registered on their website, which will include all project related information in the public realm. Early stage information of the proposal is expected to be made available in local media and public places -this is the current stage of the Nant y Moch project
- **Acceptance by the IPC:** Once the project is submitted formally, the IPC has 28 days to decide whether there has been effective consultation and whether the application meets the required standards. We anticipate this will take place in early 2011
- **Pre-examination:** If the application is accepted as above all members of the public can then register as an interested party and will be kept informed of progress and further opportunities to get involved. After 28 days all the relevant information will be published on to a specific project web page by the IPC. There will then be 21 days for comments to be received on these which will be published on the IPC website
- **Examination:** During this period members of the public and communities can submit comments in writing to the IPC. The timetable for events at the examination stage is then confirmed. Registered parties have 28 days from the start of this stage to submit their detailed representations which will be published on the IPC website. Anyone can then make comments on these and will have 21 days to do so. Thereafter, the comments will be made available online next to the detailed representations to which they refer.
  A Local Impact Report (LIR) will be produced by the relevant local authority or authorities, which is a report on the likely effects of the proposed development on their area. The LIR is submitted to the IPC no later than 42 days after the start of the Examination stage. Thereafter, it will be uploaded to the IPC website. You will then have 21 days to comment on the LIR through the website
- **Decision:** The Commissioner(s) has 3 months in which to come to a decision or recommendation which will be issued with a Statement of Reasons on the IPC website
- **Post Decision:** The Planning Act 2008 allows for legal challenges of decisions on applications for orders granting development consent. The claim must be lodged within 6 weeks of the decision

To speak to a member of the IPC about the proposal you can telephone their helpline 0303 444 5000.

CONSULTATION REPORT

SSE Renewables has already conducted lengthy and detailed consultations with statutory bodies, community councils, interested parties and the public in relation to this development.
A Statement of Community Consultation (SoCC) was developed in consultation with Ceredigion and Powys County Council. This document outlined our intentions in the consultation process with members of the public, statutory and non statutory consultees.

Our pre-application consultation programme has been undertaken in three general stages:

1. **Stage One:** We initially consulted with the community in line with the Community Engagement Plan (CEP) in which we set out our broad plans for the new wind farm and associated development, in which we sought local opinion. ✓
2. **Stage Two:** We then consulted on our updated proposals and options requesting public comment on our preferred proposals and highlighting options on which we were seeking views. ✓
3. **Stage Three:** Having considered the response to the public consultation on our Proposals and Options', we have now published a draft Consultation Report. This Launch Event is the final element of Stage 3. ✓

The draft Consultation Report details all the consultation and engagement that has taken place to date and provides results of all surveys undertaken. A copy of the report is available at this exhibition and further copies can be obtained from SSE Renewables directly or downloaded from the project website. The final Consultation Report will be updated following the launch event and submitted along with the planning application in 2011.

BENEFITS TO THE LOCAL COMMUNITY

As part of SSE Renewables' Forestry Commission Wales land agreement, we are committed to implementing a wide ranging Community Impact Strategy (CIS) that will include a community benefit fund.

The fund, in line with SSE Renewables' policy throughout Great Britain will include:

- An early release, one-off payment prior to commissioning of £3,000 per MW
- Payments throughout the life of the wind farm of £2,000 per MW per annum
- Additional annual payments throughout the life of the wind farm of 2.5% of the ROC recycle income
- The funding will be payable throughout the operational life of the wind farm. As the installed capacity of the wind farm is expected to be at least 128MW, this equates to a one-off payment of at least £384,000 and at least £256,000 in Community Benefit funding per annum thereafter.

The total community benefit package equates to at least £6.8 million over the lifetime of the wind farm and the exact nature of benefits will be agreed and finalised with the local communities, should consent for development be granted.

WIDER ECONOMIC BENEFITS

SSE Renewables is committed to seeking to maximise the use of products and services sourced from Welsh suppliers where possible.

- The development of the Nant y Moch wind farm offers significant employment, investment and income potential to the region.
- SSE Renewables has already invested over £3 million to date into the local and Welsh economy and this investment is set to continue.
- The wider economic benefits to the community and economy include capital expenditure investment, annual rateable valuation contributions to local authorities, local direct and indirect investment and of course employment.
- The mobilisation on-site will require local construction contracting, locally-sourced civil materials and raw materials, and local services from shops, hotels, restaurants, and business service providers among many other local business types.
- SSE Renewables has appointed a local Welsh-speaking Community Liaison Officer and employs Wales-based ecologists and other consultants, such as Dulas, where possible.
- SSE Renewables has also contracted the services of Melin Cyf (a subsidiary of local public relations consultancy Strata Matrix).

A Socio-economic study has been undertaken by ECOTEC which has identified and assessed the effects of the proposed development on the region and local economy to include tourism, educational and leisure activities and the road transport infrastructure. This report will be included in the Environment Statement.